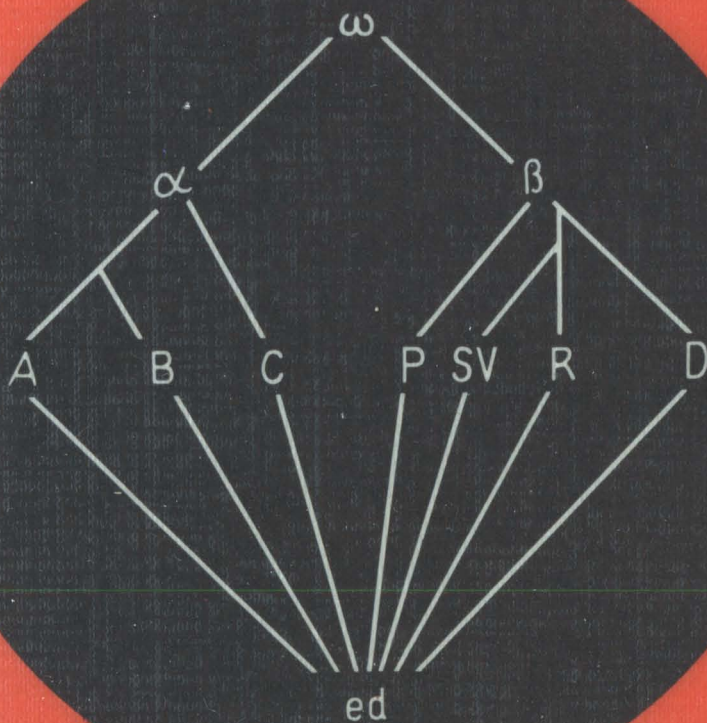


M.L. West

Textual Criticism and Editorial Technique



Deubner Studienbücher
Philologie



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Textual Criticism and Editorial Technique

applicable to Greek and Latin texts

By Martin L. West

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BIBLIOGRAPHICAL NOTE

This book was written at the invitation of the publishers, who wanted a replacement for Paul Maas's *Textkritik* (3rd ed., 1957) and O. Stählin's *Editionstechnik* (2nd ed., 1914). Stählin's work, the only detailed treatment of editorial method, was excellent in its day, but many of its recommendations have been left behind by fashion. Maas's work will not date in the same way, for the canons of textual criticism have long been established, and fashion can only bring aberrations or alternative formulations; but it is too one-sided to be satisfactory as a general introduction. It emphasizes the stemmatic aspect of textual analysis, and treats contamination as a regrettable deviation about which nothing can be done, instead of as a normal state of affairs. I have tried in Part I of the present manual to redress the balance, and given some practical advice on dealing with contaminated traditions, which I think is new. Otherwise there is little here that cannot be found in other works on textual criticism, of which there are plenty.

I could draw up a formidable list of such works if I thought the student ought to read them. But textual criticism is not something to be learned by reading as much as possible about it. Once the basic principles have been apprehended, what is needed is observation and practice, not research into the further ramifications of theory. I therefore offer no formal bibliography, but content myself with the mention of three books that will be referred to several times in what follows.

1. Havet, *Manuel de critique verbale appliquée aux textes latins* (Paris 1911).

- G. Pasquali, *Storia della tradizione e critica del testo* (2nd ed., Firenze 1952).
- H. Fränkel, *Einleitung zur kritischen Ausgabe der Argonautika des Apollonios* (Abh. d. Akad. d. Wiss. in Göttingen, Phil.-hist. Kl., Folge 3, Nr. 55, 1964).
- Any of these may be read with considerable profit, especially Pasquali's wise opus.

1. Habent sua fata libelli

Eduard Fraenkel in his introduction to Leo's *Ausgewählte kleine Schriften* recounts the following traumatic experience which he had as a young student:

“I had by then read the greater part of Aristophanes, and I began to rave about it to Leo, and to wax eloquent on the magic of this poetry, the beauty of the choral odes, and so on and so forth. Leo let me have my say, perhaps ten minutes in all, without showing any sign of disapproval or impatience. When I was finished, he asked: “In which edition do you read Aristophanes?” I thought: has he not been listening? What has his question got to do with what I have been telling him? After a moment's ruffled hesitation I answered: “The Teubner”. Leo: “Oh, you read Aristophanes without a critical apparatus.” He said it quite calmly, without any sharpness, without a whiff of sarcasm, just sincerely taken aback that it was possible for a tolerably intelligent young man to do such a thing. I looked at the lawn nearby and had a single, overwhelming sensation: *νῦν μοι γάνοι εὐρεῖα γλῶν*. Later it seemed to me that in that moment I had understood the meaning of real scholarship.”

Textual criticism is not the be-all and end-all of classical scholarship, which is the study of a civilization. But it is an indispensable part of it. By far the greater part of our knowledge of that civilization comes to us from what the ancients wrote. In almost all cases those writings have survived, if they have

survived at all, only in copies many stages removed from the originals, copies of which not a single one is free from error. Often the errors are so great that it is no longer possible to tell what the author meant to say. It follows that anyone who wants to make serious use of ancient texts must pay attention to the uncertainties of the transmission; even the beauty of the choral odes that he admires so much may turn out to have an admixture of editorial guesswork in it, and if he is not interested in the authenticity and dependability of details, he may be a true lover of beauty, but he is no serious student of antiquity. The dangers are obviously more far-reaching if the text is being used as a source for historical events, ancient life and manners, Greek or Latin linguistic usage, or whatever it may be.

But the practice of textual criticism is more than a prophylactic against deception. It brings benefits which go beyond its immediate aims of ascertaining as exactly as possible what the authors wrote and defining the areas of uncertainty. When scholars argue about whether Aristophanes wrote $\delta\acute{\epsilon}$ or $\tau\epsilon$ in such-and-such a passage, the debate may seem trivial to the point of absurdity, and indeed the sense may not be affected in the least. But by asking the question "which in fact did the poet write?", scholars may be led to inquire into the usage of the particles and the habits of Aristophanes more closely than it would ever have occurred to them to do otherwise. In the same way, by asking such questions all the way through the text, they learn all kinds of things that they did not know and never wondered about, sometimes things that were not known to anybody. So our understanding of the languages, metres, and styles of the Greeks and Romans has been continually refined by the observations of clever critics. That in turn helps us to form correct judgments about passages where the sense is affected. This is to say nothing of the interest and value that the study of such matters as the proclivities of scribes, and the processes governing the spread of texts at different periods, has in its own right.

Students have sometimes said to me that they recognize the neces-

sity of textual criticism, but they are content to leave it to the editor of the text they are reading and to trust in his superior knowledge. Unfortunately editors are not always people who can be trusted, and critical apparatuses are provided so that readers are not dependent upon them. Though the reader lacks the editor's long acquaintance with the text and its problems, he may nevertheless surpass him in his feeling for the language or in ordinary common sense, and he should be prepared to consider the facts presented in the apparatus and exercise his own judgment on them. He *must* do so in places where the text is important to him for some further purpose. This book, therefore, is not intended solely for editors, but for anyone who reads Greek and Latin and desires some guidance on how to approach textual questions. Textual criticism cannot be reduced to a set of rules: each new problem calls for new thought. But there are general principles which are useful and not always self-evident, and these I shall try to explain.

Types of source

Most classical authors come to us in parchment or paper manuscripts which are seldom earlier than the ninth century and often as late as the sixteenth. Some authors and works are preserved in only one manuscript, in other cases the number may run into hundreds. There are also a few cases in which early printed editions serve as the only source, the manuscript(s) from which they were made having since been lost. Sometimes different works by the same author, or even different parts of the same work, are contained in different manuscripts. Most classical manuscripts are now in European libraries or museum collections, but some are in monasteries (particularly in Greece) or private ownership, and some are in such places as Istanbul or Jerusalem, or in American libraries. Among the larger collections may be mentioned those of the Vatican library, the Biblioteca Medicea Laurenziana in Florence, the Ambrosiana in Milan, the Marciana in Venice,

the Österreichische Nationalbibliothek in Vienna, the Bibliothèque Nationale in Paris, and the British Museum in London.

For many Greek authors (and a few Latin) we possess also, or only, remnants of ancient copies on papyrus or parchment, often very small remnants but occasionally substantial. These continue to be published year by year. They are very rarely older than 300 B. C. and never older than about 350. The largest number date from the second and third centuries A. D., but they continue into the sixth and seventh.

Apart from straightforward copies of complete works there may exist excerpts in anthologies, epitomes, paraphrases, or translations, e. g. of Greek works into Latin or Arabic. In some cases these are the only sources extant, and even when they are not, they may be of use as evidence for the text from which they were made - which is not, of course, necessarily the true text, but may well be an older text than that of surviving manuscripts. Ancient or medieval commentaries and scholia hold out the same promise. Their evidence about the text is of three kinds. First, there are the actual quotations from the text, known as lemmata, which serve as headings to sections of the commentary. Second, there may be explicit statements of variant readings. Third, there is the interpretation offered, which may presuppose a particular version of the text. Unfortunately scholia are not usually documents with a definite date. They are added to as well as shortened or altered in the course of time, and are liable to contain a mixture of material of very different dates. At best they can inform us of Alexandrian scholars' readings, at worst they testify only to the obtuseness or perverse ingenuity of some medieval reader. It is also worth noting that as they are usually transmitted together with the text, the lemmata are liable to be adjusted to fit the accompanying text, which may cause a discrepancy between lemma and interpretation.

The evidence of ancient quotations, more surprisingly, is also affected by this interaction with the direct manuscript tradition of the author quoted. It might be thought that when one ancient

author quoted a passage from another, that passage would from then on be preserved in a manuscript tradition quite independent of the main one, so that agreement with the main one or with part of it would take us back to the time of the quoting author. But in practice it often happens that both traditions, that of the quoted author and that of the quoting, show similar sets of variants. In some cases these are such as could have arisen independently in the two traditions, in others it is necessary to assume interaction¹). A well-known instance is the quotation of Virgil, Ecl. 4,62, by Quintilian 9,3,8. Virgil must have written *qui non risere parenti, nec deus hunc mensa, dea nec dignata cubili est*, and Quintilian's comment on the change from plural to singular proves that he quoted it in that form. But his manuscripts, like those of Virgil, give *cui non risere parentes*, which must be an importation by a copyist familiar with the already corrupted Virgil. A more dramatic example of the possibilities of cross-contamination occurs in the Byzantine historian Nicetas Choniata (p. 772 Bekker), who quotes some lines of Solon that had earlier been quoted by Plutarch and in a rather different form by Diogenes Laertius. One of the manuscripts follows Plutarch's version, the other Diogenes'. Nicetas must have taken the quotation from one of the two authors, but a copyist who knew the other has seen fit to write it in – first no doubt as a marginal variant, but subsequently put into the text. More will have to be said presently on the limitations of quotations as evidence for the text.

Imitations and parodies are occasionally of use, especially in the case of verse texts. For example, in Iliad 1,4–5, where the main tradition gives *αὐτοὺς δὲ ἐλώρια τεῦχε κύνεσσιν οἰωνοῦσί τε πᾶσι*, Athenaeus records that the pioneer of Alexandrian scholarship, Zenodotus, read the more forceful *δαῖτα* instead of *πᾶσι*: it has been observed that this is supported by the echo in Aeschylus, Suppl. 800f. *κυσὶν δ' ἔπειθ' ἔλωρα κάπιχωρίοις | ὄρνισι δεῖπνον*. (But

¹) See E. R. Dodds, Plato: Gorgias, p. 64; W. S. Barrett, Euripides: Hippolytos, pp. 429f.; my Hesiod: Theogony, p. 69 n. 1.

the imitation could not have been used to infer a reading δαῖτα if its existence had not been recorded.) The text of an imitation, of course, may in its turn have light thrown upon it by comparison of the model. Thus in the case of Catullus 4 and the early parody in Catalepton 10 of the Appendix Vergiliana, each poem is partly restored from a corrupt manuscript tradition with the help of the other.

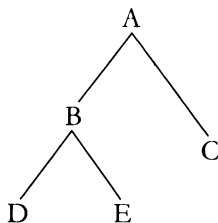
The nature of manuscript transmission

Whenever a manuscript is copied, some mistakes will almost certainly be made. But manuscript transmission is not simply a mechanical process of cumulative error. The scribe may notice errors in the exemplar before him and be able to correct them, even without recourse to another copy; so it is quite possible for his copy, the apograph, to be on balance more accurate than the exemplar. On the other hand, the number of errors corrected must always be less than the number made, and the overall trend will necessarily be towards a less correct text. Besides, some of the scribe's 'corrections' may themselves be mistaken, and this kind of corruption is often more insidious than inadvertent miscopying, being less easily detected afterwards.

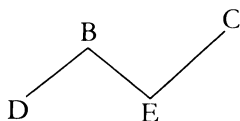
The fact that errors occur in copying, and that the comparison of different manuscripts brings variant readings to light, is no modern discovery. It was well known in antiquity, as well as in the Middle Ages, and the precaution was sometimes taken of checking a newly-made copy not only against its immediate exemplar but against another manuscript. When a variant was noticed, it might be introduced into the new copy by correction, or it might be noted in the margin or between the lines, preceded by some such expression as ἐν ἄλλῳ (κεῖται), ἐν ἄλλοις, ἦ, γρ. (= γράφεται), *al.* (= *alibi* or *aliter*), *vel.* When a copy furnished with this kind of primitive critical apparatus served in its turn as an exemplar to another scribe, he might do any of four things. He might preserve both the variant in the text (t) and the marginal variant (v) in their

places; he might retain *t* and omit *v*; he might adopt *v* in place of *t*, without mention of *t*; or he might put *v* in the text and *t* in the margin.

This confluence of readings from more than one exemplar is known as *contamination*. When it is not present, the relationship of copies to exemplars can be represented by diverging lines. For example the diagram



expresses the fact that B and C were copied from A, and D and E from B. But if the scribe of E mingled readings from B and C, this calls for converging lines:



It is to be noted, however, that the line BE now represents a different relationship from the line BD, namely a *selection* from the readings that characterize B, instead of a more or less complete reproduction of them.

If we were in a position to see the whole tradition of any ancient author, that is to say if we had knowledge of every copy ever made, and knew in each case which other copies the scribe used, and if we had the patience and ingenuity (and a large enough sheet of paper) to set out their relationships in the way just illustrated, we could expect to see a complex system of lines ramifying from the point representing the author's original. Most of the lines would be diverging, and there might be considerable areas of the diagram where they were all diverging, corresponding to periods

at which cross-checking was not customary, whether from scarcity of copies or lack of awareness of the advantages. In other areas, there would be much convergence. There would also be many lines that came to a stop, corresponding to all the manuscripts from which no copies were made. These would become increasingly frequent as we approached the end of antiquity. In the case of some authors the transmission would here peter out altogether; for others it would be reduced to a single line, others again would be a little luckier. Then, from the late eighth or ninth century onward, the stream would begin to broaden out once more, though it would never recover its former dimensions, and might again run dry or be reduced to a trickle before the final salvation of the Renaissance.

That is the sort of picture that must be held in mind. But of all the manuscripts that existed, only a small fraction have survived, and often they all belong to the same small corner of the whole diagram that we have imagined. If they happen to come from an area where the lines are all diverging, we shall have what is called a closed recension, that is, it will be possible to construct a self-contained diagram (known as a stemma) which represents the historical relationship of the manuscripts accurately enough for useful conclusions to be drawn about the antiquity of individual readings. The principles on which this is done are explained in the next chapter. If the extant manuscripts do not come from such a straightforward area of the tradition, they may still appear to, if not enough of them are extant to reveal the complexity of their true relationships; or it may be apparent that no stemma can do justice to the situation, and we shall realize that we are faced with an open recension²).

²) The term and its opposite were invented by Pasquali, who also speaks of 'horizontal' as opposed to 'vertical' transmission when cross-contamination is involved. Note that if only two manuscripts are preserved from a contaminated area of the tradition, there will be nothing to show that it is contaminated: whatever errors they share can be attributed to a common exemplar. It needs a third copy to show that things are more complicated.

But it is only if the number of extant manuscripts is rather small that the recension is likely to be completely open or completely closed. If there are twenty or so, it will probably turn out that some of them are related simply and without contamination and others not. If the older manuscripts can be fitted into a stemma, the promiscuity of the younger ones should be easy to establish and may be unimportant. If the relationship of the older manuscripts resists analysis, it may still be possible to identify sub-groups whose structure can be stemmatized.

Various causes of textual discrepancy

Miscopying is far from being the only cause of textual variation, and misreading is far from being the only cause of miscopying. I conclude this chapter with a survey – which in the nature of things cannot be exhaustive – of the variety of ways in which a text may suffer change.

The first way is that the author himself may change it, after copies have already gone into circulation. Aristophanes revised his *Clouds* after its production in 424/3, and both versions survived into Hellenistic times (we have the revision)³). The scholia to Apollonius Rhodius' *Argonautica* are able to quote from an 'earlier edition' (προέκδοσις) of the poem, which differed here and there from the current version⁴). We have it on Ovid's own authority that his *Metamorphoses* got into circulation before he had fully revised it (*Tristia* 1,7,13ff.), and our manuscripts of the poem offer alternative versions of certain passages⁵). The traditions of several other ancient works have been shown or alleged to betray the effects of issue at different stages of completion⁶),

³) See K. J. Dover's larger edition of the play, pp. lxxx–xcviii.

⁴) See H. Fränkel, *Einleitung* . . . , pp. 7–11.

⁵) See, most recently, the brief but judicious remarks of A. S. Hollis, *Ovid: Metamorphoses Book VIII*, pp. x–xi. xxvii. 102–4. 117–8. 123–4.

⁶) See Pasquali, *Storia* . . . , pp. 397–465; H. Emonds, *Zweite Auflage im Altertum* (Leipzig 1941); further bibliography in M. D. Reeve, *Proceedings of the Cambridge Philological Society* 15, 1969, 75 n. 1.

sometimes on the ground of doublets standing side by side in the text, sometimes on the ground of major divergences between different branches of the tradition, if both versions convince the connoisseur of their authenticity. In such a case it is not necessary to assume that the two branches of the tradition have come down quite independently of each other from the time of the author⁷).

There are others besides the author who may take it upon themselves to improve the composition. Greek tragedies suffered extensively from interpolations by actors (or at any rate for their use), probably more in the fourth century B.C. than at any later time⁸); the plays of Plautus may have undergone something of the sort on a smaller scale in the second century, but the evidence is less clear⁹). The embellishment of the Homeric poems by rhapsodes is a similar phenomenon. It seems to show itself in quotations by authors of the fourth century B.C., and in the earlier papyri, which are characterized by additional lines of an inorganic nature (often borrowed from other contexts) and some other divergences from the vulgate¹⁰).

Some kinds of text were always subject to alteration. Commentaries, lexica and other works of a grammatical nature were rightly regarded as collections of material to be pruned, adapted or added to, rather than as sacrosanct literary entities. When the rewriting becomes more than superficial, or when rearrangement is involved, one must speak of a new recension of the work, if not of a new work altogether. The various Byzantine Etymologica,

⁷) See W. Bühler, *Philologus* 109, 1965, 121–33, on Tertullian's *Apologeticus*.

⁸) See D. L. Page, *Actors' Interpolations in Greek Tragedy* (Oxford 1934).

⁹) See F. Leo, *Plautinische Forschungen* (1912²; Darmstadt 1966), pp. 29ff. The activity of later scribes may be involved, cf. C. C. Coulter, *Retractatio in the Ambrosian and Palatine Recensions of Plautus* (Bryn Mawr, Pa. 1911). At some date a second ending was composed for Terence's *Andria*; it does not appear in all manuscripts, and did not appear in all those known to Donatus in the fourth century.

¹⁰) See Stephanie West, *The Ptolemaic Papyri of Homer* (Köln & Opladen 1967).

the treatises *περὶ συζημάτων* and *περὶ τρόπων*, the proverb collections, or any body of ancient scholia, will serve as examples¹¹). The divergences between the two primary manuscripts of Longus' *Daphnis* and *Chloe* show that copyists of this type of work too felt themselves at liberty to change the wording as they went along. In this case one cannot properly speak of different recensions; but it is otherwise with the so-called *Alexander Romance*, which exists in six different versions dated between 300 and 700 A. D., to say nothing of medieval and modern adaptations¹²). The two *Lives of Aesop* belong in the same category, and the various collections of *Aesopic fables*. Again, at least parts of the *Hippocratic corpus* were subject to revision or rearrangement. Some of the idiosyncrasies of an *Ambrosian manuscript* of the *Oath* have now been proved ancient by *P. Oxy. 2547*; it does not follow that the medieval alternatives are not also ancient. Another text of a technical nature, *Aratus' Phaenomena*, was rewritten in places by *Maximus Planudes* (c. 1255–1305; see *Bekker's apparatus* at lines 481–96, 502–6, 515–24); and as late as 1704 an editor of *Dionysius Periegetes' geographical poem* thought it permissible, in the interests of students, to omit and transpose certain passages and to add new sections dealing with *Muscovy, Tartary, America*, etc.

Changes of a less drastic but nevertheless dangerous kind may arise when a passage is the subject of quotation. The main cause is inaccurate memory, as it was the practice of most ancient writers (apart from grammarians, who hunted for their examples in texts as a rule) to quote short passages as they remembered them instead of laboriously looking them up without the aid of numbered chap-

¹¹) See *R. Reitzenstein, Geschichte der griechischen Etymologika* (Leipzig 1897); *M. L. West, 'Tryphon, De Tropis', Classical Quarterly* n. s. 15, 1965, 230ff.

¹²) See *K. Mitsakis, Der byzantinische Alexanderroman nach dem Codex Vindob. Theol. gr. 244* (München 1967), pp. 5ff., and *Ancient Macedonia* (First International Symposium, Thessaloniki 1970), pp. 376ff. The related work of *Palladius on the peoples of India and the Brahmins* survives in two recensions; see the edition by *W. Berghoff* (Meisenheim am Glan 1967).

ters or verses. (These are not the only alternatives: very often a quotation is remembered or copied from another author who has used it, or from an anthology. Hence a whole series of quotations can appear in two or three different writers, with the same distortions in each.) It was easy to make mistakes, to substitute or transpose words, or to conflate the passage with some other similar one. Quotations particularly tend to trail off inaccurately at the end, as the quoter's memory fails. Another thing to beware of is that he may deliberately adapt the construction or some other aspect of the quotation to suit his own purposes. One type of adaptation characteristic of anthology excerpts (which can be treated as a sort of quotation) consists in making the passage more self-contained; for example *τοί* has been substituted for *γάρ* at the beginning of at least two excerpts from Solon in the Theognidea (153. 315), and a number of excerpts that cannot be checked from fuller sources seem to have been altered at the end to fill out the verse.

Christian zeal occasionally affected texts, as in the Vienna manuscript of Ps.-Hippocrates *περὶ διαίτης*, where the names of Greek gods have in places been effaced, and *θεοί* replaced by *θεός*. There are cases of scribes bowdlerizing a text, that is, suppressing obscenity, though it is surprisingly rare. Herodotus' chapter on sacred prostitution, 1,199, is passed over by one group of manuscripts; one copyist of Martial toned down the vocabulary somewhat, substituting e.g. *adulter* for *fututor* and *turpes* for *cunnos* in 1,90,6–7; and we know of ancient critics who, shocked by Phoenix's admission that he seduced his father's mistress at his mother's instigation, altered *τῆ πιθόμην καὶ ἔρξα* to *τῆ οὐ πιθόμην οὐδ' ἔρξα* (Il. 9,453).

Early Greek and early Latin texts underwent a natural process of orthographical modernization in the course of time. The early Ionians wrote the contraction of *ε* and *ο* as *εο*, but the texts of their works usually show the later spelling *ευ*; and many a *quoi* and *quom* has given way to *cui* and *cum*. But there was also a contrary tendency, probably starting in late Hellenistic times, to try

to preserve or restore original dialect forms. The effect was to introduce quantities of pseudo-Ionic forms into the traditions of Herodotus and the Hippocratica, and pseudo-Doric into that of the bucolic poets. Otherwise it is difficult to point to examples of systematic change prompted by grammatical theory; but Planudes and his disciples regularly replaced γίνομαι, γινώσκω in the texts they copied by γίγνομαι, γιγνώσκω, and indulged one or two other private preferences¹³). Mention may be made here of the phenomenon that a certain manuscript or group of manuscripts will sometimes consistently deviate in a fixed direction in a series of places, not always for any apparent reason; for instance, one late copy of Apollonius Rhodius, Casanatensis 408, substitutes νόμφη for κόυρη in 3,886. 1025 and 1098.

It is a general truth that emendation by scholars and scribes is much more evident to us in the Middle Ages and Renaissance than in antiquity, and at the same time that it constitutes a more serious problem. The conjectures of ancient critics are sometimes recorded in scholia and similar sources, but seldom appear to have affected the textual tradition. The contribution of any individual must usually have been as evanescent as a pee into the river. It was different in the Middle Ages when copies were few and corruption rife: emendation was at once more often called for and more likely to colour the whole stream, or a conspicuous branch of it. Scribes emended what they could not read or were unable to understand, and sometimes what was or seemed unmetrical. For instance, in the Homeric Hymn 10,4–5,

γαῖρε θεὰ Σαλαμῖνος εὐκτιμένης μεδέουσα
καὶ πάσης Κύπρου,

the words underlined were not legible in the damaged copy from which the oldest manuscript M is derived, and μάκαιρα Κυθήρης. . . εἰναλίης τε have been supplied instead, not altogether metrically. In Lucretius 3,1,

¹³) See my commentary on Hes. Th. 190. 480. 491.

E tenebris tantis tam clarum extollere lumen,

the scribe of the copy from which all our manuscripts descend left the initial *E* to be done more ornamentally in red, but, as often in such cases, the rubricator never got round to the job. Of the two extant ninth-century copies, one reproduces the omission, the other supplies *O*; some later copies supply *A*; another again hits upon the correct *E*. In Juvenal 8,148,

ipse rotam adstringit sufflamine mulio consul,

we can see the corruption of *mulio* to *multo* leading to the metrical 'correction' *multo sufflamine*¹⁴). Scribes' understanding of metre, however, is seldom more than rudimentary, and often less. An outstanding exception is Demetrius Triclinius (c. 1280–1340), who had read Hephaestion's metrical treatise, and broke quite fresh ground by venturing metrical emendations in Pindar and the choruses of Greek drama on the basis of the strophic responsion. Admittedly he made many mistakes even in the simplest metres¹⁵).

We may now turn to the consideration of semi-conscious and unconscious changes made by scribes in copying. It must be emphasized that many of these are not visual but phonetic or psychological in origin. When one is writing (whether one is copying or not, but especially if one is), one tends to say the words over to oneself. One may then find oneself writing down a word that sounds the same as the one intended. Hence we find, for example, ἐπεὶ as a variant for αὐτὸ in Mimnermus 9,1 (the Byzantine pronunciation of the two words being identical), and similarly εὔρον for Ἐβρον in Theocritus 7,112 (*évron*). (The constant writing of *e* for *ae* in Latin texts, and *v* for *b* (less often the converse), is not really the same thing; most cases belong under

¹⁴) Other examples from Latin poets are collected by A. E. Housman, *M. Manili Astronomicon liber primus*, pp. lix–lxi.

¹⁵) For a study of his emendations in Hesiod's *Theogony* see *Class. Quart.* n. s. 14, 1964, 181 f. (Add 94 ἐκ γὰρ Μουσάων for ἐκ γὰρ τοῦ Μουσάων.) For those of a slightly earlier, Planudean manuscript see *ibid.* 176 f.

the heading of modernized spelling. But the implications for the textual critic are similar.) Spoonerisms are not infrequent, i.e. confusions like βαλών for λαβών, *suscipit* for *suspicit*. There is a tendency to simplify consonant clusters, and to write e.g. ἔκλαξεν for ἔκλαγξεν, or *astersi* for *abstersti*.

The substitution of one word for another can be brought about by mental associations of a non-phonetic nature; e.g. πύλαι and θύραι are often variants. A word that plays little part in a monk's life may be mistaken for one that plays a greater part, e.g. καθολικήν for καθολικὴν. (Some examples from the tradition of Livy are collected by R. M. Ogilvie, *Greece & Rome* n. s. 18, 1971, 32–34; other Latin examples in Havet, *Manuel...*, pp. 263–264.) The scribe may be reminded of a similar word or phrase that he has copied earlier, it may be many pages earlier. Thus for χρυσοπέδιλον in Hes. Th. 454 the writer of B gives χρυσοστέφανον, a compound which has occurred in 17 and 136. At Ovid *Met.* 12,103 *inritamina cornu* is corrupted to *inritamenta malorum* through reminiscence of 1,140. Memories of particularly well-known authors like Homer and Virgil were liable to intrude even without recent copying being involved. The ends of verses or sentences suffer most from this kind of error, because they regularly coincide with the end of the piece of text that the scribe carries in his head while his pen is in motion.

Because he carries a block of text in his head, at least a whole phrase or half a line, he may unwittingly alter the order of the words. One special type of transposition that occurs in Greek tragic texts is the so-called *v i t i u m B y z a n t i n u m*, by which a paroxytone word is moved to the end of the iambic trimeter to make it sound more like a Byzantine dodecasyllable. Parallel to this is a type found for example in one family of Plutarch manuscripts, by which the rhythm at the end of a sentence is adapted to Byzantine habits (on which see P. Maas, *Greek Metre*, 1962, para. 23). Another type aims to avoid hiatus in prose: a Ptolemaic papyrus of Xenophon's *Memorabilia* (P. Heidelberg 206) reveals that the medieval tradition has suffered from this kind of refinement. But a much more

general cause which operates in all kinds of text is the instinct to simplify. Bacchylides 15,47 wrote Μοῦσα, τίς πρῶτος λόγων ἄρχεν δικαίων; but in the London papyrus the last three words stand unmetrically in the more straightforward order ἄρχεν λόγων δικαίων. Ovid Am. 1,14,1 wrote *dicebam* ‘*medicare tuos desiste capillos*’; in some manuscripts this has become *dicebam* ‘*desiste tuos medicare capillos*’. Examples could be multiplied indefinitely¹⁶).

This simplification of word order is only one manifestation of the tendency to banalize, to erode away the unusual form or expression in favour of the everyday. ὅσσοισι becomes ὅσοις, ἀντείνας becomes ἀνατείνας, *dein* becomes *deinde*, *laudarit* becomes *laudauerit*. Asyndeton is eliminated by the addition of a connecting particle. Things that the author left to be understood are made explicit. Constructions that look incomplete are supplemented. It is often difficult to say how far these processes are conscious. Perhaps the copyist thinks he may as well make the text a bit easier to read. Perhaps he genuinely thinks a mistake has been made. Perhaps he writes down what he expects to see, without thinking. He may be misled by notes inserted in the margin or between the lines of his exemplar to aid understanding, and take them as part of the text or as corrective of it.

The best-known species of this genus is the gloss, that is, a word or phrase that explains a word or phrase in the text. Glosses may intrude into the text, either in place of what they were meant to explain or in addition to it. For example, in Hipponax fr. 72,7 ἀπηναρίσθη Ῥῆσος Αἰνειῶν πάλμυς, the rare word πάλμυς survives only in one manuscript (in the corrupt form παλαμάς), while the others give βασιλεύς instead. In fr. 66 of the same poet, transmitted as κούκ ὡς κύων κρυφιοδάκτης λάθαργος ὕστερον τρώγει, the gloss κρυφιοδάκτης has got in without displacing λα(ι)θαργος. Another example, which will illustrate a different kind of gloss,

¹⁶) See W. Headlam, *Classical Review* 16, 1902, 243ff.; W. Rönsch, *Cur et quomodo librarii verborum collocationem in Ciceronis orationibus commutaverint*, Diss. Leipzig 1914; Havet, *Manuel* . . . , pp. 242–6.

is Petronius 36, *quo facto uidemus infra {scilicet in altero ferculo} altitia et sumina*. A gloss that resembles the word explained is particularly liable to be mistaken for a correction; e. g. ἀγγέλου has ousted ἀγγάρου in the manuscripts of Aeschylus Ag. 282, and πλήσσωσιν has ousted ῥήσσωσιν at Callimachus Hymn. 3,243. A particularly common type of gloss consists of a proper name supplied where the author used a circumlocution, as in the Panegyric of Messalla (Corpus Tibull. 3,7) 56 *Aetnaeae Neptunius incola rupis*, where the gloss *Cyclops* has intruded into the line above¹⁷).

When, however, a scribe writes γὰρ above δὲ (Hes. Th. 161 L), this cannot strictly be called a gloss; nor is it meant as a correction or variant. It is advice to the reader on how to interpret the sequence of thought. The writing of *o* over vocatives in some Latin manuscripts is not dissimilar¹⁸). In these cases too, as with glosses in the proper sense, incorporation in the text will have a banalizing effect. There are also kinds of marginal note which are not glosses but can enter the text. The most important consists of a quotation of some other passage that a reader has been reminded of. So at Aeschylus Persae 253, the somewhat similar verse Sophocles Ant. 277 is written in the margin of M; copies made from M have incorporated it in the text.

There are several ways in which an individual word may be miswritten without having been misread. By far the commonest way is partial assimilation to some other word nearby. Endings are particularly liable to be assimilated, bringing confusion to the syntax. The following examples occur in a hundred lines of Euripides' Heracles: 364 τὰν τ' ὀρεινόμων ἀγρίων Κενταύρων ποτὲ γένναν (for ὀρεινόμον, assisted by phonetic equivalence); 372 γέρας πληροῦντας (for πληροῦντες); 396 χρυσεῶν πετάλων ἄπο μηλοφόρον χερὶ καρπὸν (for χρύσειον . . . μηλοφόρων?); 398 ἄπλατον ἀμφελικτὸν ἔλικ'

¹⁷) A number of examples, and references to other discussions of the phenomenon, are given by R. Merkelbach, *Zeitschrift für Papyrologie und Epigraphik* 1, 1967, 100–2.

¹⁸) See G. P. Goold, *Phoenix* 23, 1969, 198; Havet, *Manuel* . . . , p. 291.

ἐφρούρει (for ἀμφελικτός); 412 ἀγορῶν ἀλίσας φίλων (for ἄγορον); 441 τᾶς εὐδαίμονας ἦβας (for εὐδαίμονος); 456 ὦ μοῖρα δυστάλαιν' ἐμῶν τε καὶ τέκνων (for ἐμή). Medial assimilation is well illustrated by the inscription on a sixth-century vase (Berlin F 1794): one side has the correct ΧΣΕΝΟΚΛΕΣ: ΕΠΙΟΙΕΣΕΝ, the other has ΧΣΕΝΟΚΛΕΣ: ΕΠΙΟΚΛΕΣΕΝ. No copying is involved here, which proves that the error is entirely mental, not visual; and in a batch of examination scripts which I had to mark in 1967 I noted no less than 77 slips of the pen of the assimilative type, e. g. 'a critique of the Roman of his time and of human nature in general' ('Rome' assimilated to the coming 'human'); 'an excellent example of the rhetoric of Gorgias'; 'bread, not oxen was the only food known to Dicaeopolis which was put into an oxen' (for 'an oven').

Other standard types of psychological error are haplography, dittography, and simple omission. Haplography means writing once what ought to be written twice, e. g. *defendum* instead of *defendendum*; dittography is the opposite, reduplication of a syllable, word, or longer unit. My examination scripts produced fourteen examples of dittography ('renonown' for 'renown', etc., but more often doubling of a short word like 'be' or 'of'), only three of haplography. Omission too is especially liable to occur with short words, insofar as it results from lack of coordination between mind and hand. There is, however, another kind of omission which may be of any length, and here we must make the transition to error by misreading.

I refer to omissions committed by the scribe because he fails to notice a portion of the text before him. Often the oversight has a mechanical cause: similar words or phrases appear twice on the same page, and the scribe, after copying as far as the first, mistakes the second for the place he has reached, and so omits what comes in between. This is the so-called *saut du même au même*. For instance, in Seneca epist. 74,8 *modo in hanc partem, modo in illam respicimus*, one group of manuscripts omits the first phrase, while in 113,17 repetition of the phrase *ergo non sunt animalia* has caused the omission of six sentences. In verse the

scribe's copying unit tends to be the line or half-line, so that verbal similarities at line-end (homoeoteleuton) or line-beginning (homoearchon)¹⁹) are particularly likely to mislead him. In general it may be said of these mechanical omissions that they affect short passages of a line or two much more frequently than long ones, because the scribe usually remembers approximately where he has got to on the page.

Simple misreading of words is not uncommon. Letters could be mistaken for other letters singly or in combination. The particular errors liable to occur naturally varies according to the different styles of writing current at different times. Familiarity with these can only be acquired by examining manuscripts or facsimiles, preferably with the guidance of an expert teacher²⁰). But it will be in place here to list the standard letter-confusions.

Greek uncials (from 300 B.C.): A = Δ = Λ. Γ = T. € = Θ = O = C. H = €I. H = N = K = IC. ΛΛ = M. AI = N. T = Y.

Greek minuscule (from the ninth century, at first concurrent with capitals): α = αυ. α = εI. α = ευ. β = χ = μ. ε = ευ. η = χ. μ = ν. ν = ρ. π = σσ.

Latin capitals (down to the sixth century): B = R. C = P. C = G = O. D = O. E = F. H = N. I = L = T. M = NI. N = AI. O = Q. P = T.

¹⁹) The terms are applicable to any pair of words or phrases, not only to lines of verse. For 'homoearchon' some use the equally correct formation 'homoearcton'. 'Homoeomeson', coined by Housman, has established itself as a useful addition to the group.

²⁰) A useful start can be made from E. Maunde Thompson, *Introduction to Greek and Latin Palaeography* (Oxford 1912); C. H. Roberts, *Greek Literary Hands* (Oxford 1955); E. G. Turner, *Greek Manuscripts of the Ancient World* (Oxford 1971); P. F. de' Cavaleri and J. Lietzmann, *Specimina Codicum Graecorum Vaticanorum* (Bonn 1910); F. Ehrle and P. Liebaert, *Specimina Codicum Latinorum* (Berlin & Leipzig 1927, repr. 1967); R. Merkelbach and H. van Thiel, *Griechisches Leseheft* (Göttingen 1965), *Lateinisches Leseheft* (Göttingen 1969), where further bibliography.

Latin uncials (third to eighth century): B = R. C = € = G = O. CI = U. D = O = U. F = P = R. I = L = T. M = CO. N = AI. O = Q.

Latin minuscule (from the eighth century): a = u. b = h. c = e. cl = d. c = t. f = s. in = m = ui. n = u.

It should be understood that this classification greatly oversimplifies, particularly with regard to Latin script: there were several transitional forms between uncial and minuscule, and some very different types of minuscule. In all the categories it is the case that individual hands vary, some allowing more ambiguity than others.

As long as a scribe finds his exemplar reasonably intelligible, he does not read it letter by letter but takes in a whole word or phrase at one glance. His misreadings are therefore not always analysable in terms of individual letters: the aspect of the word as a whole may deceive him if he happens to combine the strokes he sees in the wrong way. This is especially easy in Latin minuscule, where slightly sinuous uprights play an important part in the formation of several letters. For example **fiunt** (*finit*) in Manilius 3,229 is misread as **sunt** (*sunt*); **mucius** (*Mucius*) in 4,31 as **iuueni** (*iuuenis*).

Texts were written without word-division down to the end of antiquity, and even later the division is sometimes incomplete or inconspicuous. Many mistakes result from a copyist seeing part of one word as part of another, or one word as two, etc.; e.g. τὸ δὲ σαφανὲς in Pindar Ol. 10,55 appears in some manuscripts as τὸ δ' ἐς ἀφανὲς. The rare word was hard to recognize. Similarly in Propertius 2,32,5 *deportant esseda Tibur*, where N has made *deportantes sed abitur*. Obscure words and proper names frequently baffle the scribes. Catullus' *annales Volusi* (36,1) becomes *annuale suo lusi* – totally meaningless, but Latin words²¹). Copyists grasp at indications that they are writing the required

²¹) Further examples in Havet, Manuel..., pp. 206–7.

language even if they cannot quite follow its meaning, and it is not often that they abandon all pretence of articulacy. That happens in the Medicean manuscript of Aeschylus' *Supplikes*, where the scribe had a single damaged uncial exemplar before him and was often baffled by the difficult text. It happens most surely when a Latin copyist who does not know Greek suddenly finds himself faced with a Greek phrase or quotation: then he is reduced to imitating the shapes of unknown letters, and gibberish soon results, leaving the critic with beautiful examples of purely visual corruptions unspoiled by other factors: ΛΙΔΕΟΜΑΙΒΑCΑΗΛ-ΠΟΛΧΡΥCΟΙΟΜΥΙCΗΝΗC (αἰδέομαι βασιλῆα πολυχρῶσιοι Μυκή-νης. Gramm. Lat. 6,505 Keil).

The use of abbreviations is a common source of error. In antiquity abbreviation was little used except in documents and texts of a sub-literary nature such as commentaries. The only abbreviations common in literary texts are the numeral signs; a stroke above the last vowel of the line, indicating final *ν* in Greek, *n* or *m* in Latin; and *b*, *q*, for *-bus*, *-que*. Later, when Christian scribes appear on the scene, we find the so-called *nomina sacra* abbreviated in the style Θ̄C̄ for θεός, D̄S̄ for *deus*; declined, acc. Θ̄N̄, D̄M̄, gen. Θ̄Ȳ, D̄Ī, dat. Θ̄Ō, D̄Ō. In time these abbreviations came to be used in pagan texts too, and it is worth noting the ones likely to be encountered there: Θ̄C̄ = θεός, K̄C̄ = κύριος, ȲC̄ = υἱός, C̄T̄C̄ = σταυρός, ANOC̄ = ἄνθρωπος, OYNOC̄ = οὐρανός, ΠHP̄ = πατήρ (voc. ΠEP̄, acc. ΠPĀ, gen. ΠPC̄, dat. ΠPĪ, nom. pl. ΠPEC̄ etc.), MHP̄ = μήτηρ, C̄OP̄ = σωτήρ, ΠN̄Ā = πνεῦμα (gen. ΠNC̄, dat. ΠNĪ, pl. ΠNATĀ etc.). D̄S̄ = *deus*, SP̄S̄ = *spiritus*, D̄NS̄ = *dominus*, SCS̄ = *sanctus*, NR̄ = *noster* (NRĀ, NRĪ, etc.), VR̄ = *vester*²²). Derivatives can be formed from these, e. g. σ̄ννισ̄ = οὐράνιος, π̄ρ̄οκλέης = Πατροκλέης. It is this type of

²²) There are numerous variations. The classic study is L. Traube, *Nomina Sacra* (München 1907); more recent evidence in A. H. R. E. Paap, *Nomina Sacra in the Greek Papyri of the first five centuries A. D.* (Leyden 1959).

abbreviation that is responsible for such confusions as $\pi\alpha\tau\rho\acute{\iota}$ for $\pi\rho\acute{\iota}\nu$, $\acute{\alpha}\lambda\lambda\omega$ for $\acute{\alpha}\nu\theta\rho\acute{\omega}\pi\omega$, *domini* for *diu* (Catullus 61,125).

The rise of minuscule script, with its cursive ancestry, brought a much wider range of abbreviations into use, and no attempt can be made here to give an account of them. Many of them involve the replacement of letters (particularly in terminations) by shorthand symbols. Valuable works of reference exist on the subject²³), but there is no substitute for experience with manuscripts if the critic is to handle it with real skill. However, it is possible to exaggerate its importance: abbreviations are not actually misread as often as some ingenious emenders think.

A type of error that involves visual misinterpretation but not actual misreading occurs when the copyist refers a marginal or interlinear correction to the wrong place in the text. At Hesiod Th. 239, for instance, L gives $\epsilon\rho\iota\beta\acute{\iota}\eta\nu$ at the beginning of the line instead of $\epsilon\upsilon\rho\upsilon\beta\acute{\iota}\eta\nu$, but in the margin the scribe has written $\epsilon\upsilon\rho\upsilon$: in one of the apographa this has been added to $\Gamma\acute{\alpha}\lambda\eta$ in 240, making $\epsilon\upsilon\rho\upsilon\gamma\acute{\alpha}\lambda\eta$. It is much the same when an intrusive gloss displaces, not the word being glossed, but another nearby (an example was given on p. 23). It may also happen that a gloss or variant written between the lines becomes conflated with the word below or above, producing a mixture of the two which may be bizarre. Thus at Hesiod Th. 355 the lost copy k must have had $\delta\iota\acute{\omega}\nu\eta$ at the end, mistakenly repeated from 353, with the correction $\beta\omicron\tilde{\omega}\pi\iota\varsigma$ above it. The apographa K and u preserved this arrangement, but in the next generation the Mosquensis 462 (copied from K) produced $\beta\omicron\gamma\tilde{\omega}\pi\omicron\varsigma$, and U (copied from u) $\beta\omicron\delta\iota\acute{\omega}\nu\eta$. Again, if a phrase or line is accidentally omitted and then restored in the margin, the next copyist may insert it in the wrong place in the text: this is the cause of many transpositions.

²³) See E. Maunde Thompson, *Introduction to Greek and Latin Palaeography*, 79 ff.; W. M. Lindsay, *Notae Latinae* (Cambridge 1915); Doris Bains, *A Supplement to Notae Latinae* (Cambridge 1936); A. Cappelli, *Dizionario di abbreviature latine ed italiane* (Milano 1929); A. Pelzer, *Abréviations latines médiévales* (Louvain & Paris 1964) (supplements Cappelli).

Finally it must be noted that one corruption often leads to another, some effort of interpretation on the part of the scribe being usually involved. E.g. at Aristophanes Ach. 832 ἀλλ' ἄμιν was wrongly divided as ἀλλὰ μιν (R), and then μιν became μῆν or μέν. Under this heading belongs the whole large class of scribal emendations that are prompted by a corrupt reading and are themselves mistaken. Multi-stage corruption of a purely graphic kind is rare: where non-adjacent letters in a word or phrase have been misread, as at Thucydides 6,74,2 ΟΡΙΑ ΚΑΙ became ΘΡΑ(Ι)-ΚΑΚ, or as at Plato Gorg. 467b CXΕΤΑΙΑ became ΕΧΕΤΑΙΑ, it is often easier to assume that they were misread simultaneously. In emendation, accordingly, one should not go too far in postulating multiple misreading.

The main causes of textual discrepancy have now been surveyed, and it will be seen how various they are. They are not all equally operative in any given text²⁴). On the other hand the critic must keep in mind all those that are or may be operative in the text he is dealing with, and not follow a one-sided approach. How he may best set about his task is the subject of the next two chapters.

2. Organizing the data

The spade-work of collecting information about the readings of the manuscripts and other sources is more likely to be done by an editor than by anyone else, and I will deal with it in Part II. For the moment I will assume that the critic has a body of such information at his disposal.

His first job is to make an assessment of the quality of the different sources, which is in part a question of their relationships

²⁴) I may mention here the copious collections of examples in Douglas Young's articles 'Some Types of Error in Manuscripts of Aeschylus' *Oresteia*' (*Greek, Roman and Byzantine Studies* 5, 1964, 85–99) and 'Some Types of Scribal Error in Manuscripts of Pindar' (*ibid.* 6, 1965, 247–73); W. Wyse, *The Speeches of Isaeus* (Cambridge 1904), pp. xxxvi–xlvi; C. Austin, *Menandri Aspis et Samia I* (Berlin 1969), pp. 59–65; H. Frankel, *Einleitung* . . . , pp. 22–47.

to one another. Suppose there are, besides a medieval manuscript tradition, some fragments of a papyrus a thousand years older than any of the complete manuscripts, and a few ancient quotations. Can connexions be seen between the text of the papyrus and that of the later copies? Are there any cases where the same corruption is present in both? Are there cases where the papyrus offers an inferior reading? Does it ever share an inferior reading with part of the later tradition, and if so, does it side consistently with a particular group of manuscripts? How were the quotations made, from direct knowledge or at second hand? From memory or from a book? How scrupulous was the quoting author, and how good was the text known to him? How reliable are the manuscripts in which he is preserved, and do they give the quotation in the form in which he made it? Suppose again there is a translation. When was it made? How accurate was it, and how accurately has it been transmitted? Then there is the main manuscript tradition itself. Are any of the manuscripts directly descended from other extant copies? Is it possible to recognize groups of closely related copies, or to construct a stemma? What are the habits of the individual scribes?

The inquiry proceeds on two fronts, from external and from internal evidence. It may be known from an external source who made the translation, for instance. Manuscripts may contain dates or signatures; if not, a palaeographer will be able to tell approximately at what periods they were written, and sometimes where (in the case of Latin manuscripts, the regional varieties of Latin script being firmly identified) or by whom. In dating paper manuscripts watermarks can be a useful guide to the date of manufacture¹). Or there may be a record of a manuscript's original pro-

¹) See C. M. Briquet, *Les filigranes. Dictionnaire historique des marques du papier dès leur apparition vers 1282 jusqu'en 1600*. T. 1-4 (Leipzig 1923²). - *Opuscula*, (Hilversum 1955); *The Briquet Album. A miscellany on watermarks, supplementing Dr. Briquet's Les filigranes*, (Hilversum 1952). (= *Monumenta chartae papyraceae historiam illustrantia*, ed. by E. J. Labarre. Vol. 4 and 2.)

venance. Such data can be combined with what is known of the general historical conditions that governed the transmission of classical texts at different times²⁾, as well as with more particular facts such as the movements of individual known scribes, or the presence of the author in a medieval catalogue pertaining to an identified library.

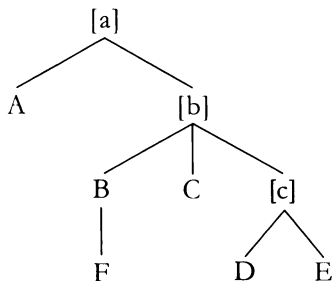
Upon this historical backcloth we project the more exact information derived from internal evidence, in particular the inter-relationships of the copies as inferred from comparison of their readings. How far they can be inferred, and how it is done, are the questions that they will occupy us for the rest of this chapter. I am conscious of committing a *hysteron proteron* here, in leaving for the next chapter the subject of the evaluation of variants. Although this evaluation – which involves deciding not only which variants are true and which false, but also which are scribes' emendations – becomes easier after the character and relationships of the sources have been defined, it is necessary, in order that they can be defined, to carry out as much of it as possible beforehand. I think it will be better, nevertheless, if I postpone discussing its principles till later, and for the present simply assume possession of the evaluative faculty.

Dealing with a closed recension

Whenever there are two or more manuscripts available, the attempt must be made to determine their historical relationship, so that this can be taken into account, together with other considerations, in the evaluation of their variants. The attempt will succeed approximately in proportion to the freedom of the tradition from contamination: 'the tradition', of course, means in this context that area of the tradition which is represented by the extant manuscripts.

²⁾ For a good brief survey see L. D. Reynolds & N. G. Wilson, *Scribes and Scholars* (Oxford 1968).

In the absence of contamination, each copy will contain the same errors that were in the exemplar from which it was made, minus those that the scribe has seen and corrected, plus some additional ones (unless, perhaps, the text is very short). This axiom is the basis of stemmatic analysis. Suppose there are six extant manuscripts, ABCDEF, related as follows ([a][b][c] denote non-extant copies):



It will be possible to deduce their relationship from the pattern of agreements and disagreements among them; only it is important to realize that what is significant for this purpose is not agreement in true readings inherited from more ancient tradition, but agreement in readings of secondary origin, viz. corruptions and emendations, provided that they are not such as might have been produced by two scribes independently. The argument will run like this:

There are some errors³⁾ common to all six manuscripts, therefore they all descend from a copy in which all these readings were present, unless one of the six is itself the source from which the other five descend; but this is not the case, because each of them has other errors which are not reproduced in the rest. The archetype (defined as the lowest common ancestor of the known manuscripts) is therefore a lost copy [a].

³⁾ In what follows 'errors' should be understood as a convenient abbreviation for 'readings of secondary origin' as just defined.

There are further errors common to BCDEF but avoided by A, therefore they have their own 'hyparchetype'. As A has errors of its own, this hyparchetype is not derived from A but independently from [a]. As BCDEF each have some errors which are not shared by the whole group, none of them is identical with the hyparchetype and we must assume another lost copy, [b].

BF share some further errors from which CDE are free. But there are no errors in B which are not also in F, while F has some errors peculiar to itself. Therefore F is directly descended from B⁴).

DE share errors from which BCF are free. Each also has peculiar errors, so neither is derived from the other, but both are dependent upon another hyparchetype [c].

Of the three copies of [b], namely B, C, and [c] as reconstructed from DE, no two agree in error where the third has the correct reading and could not have got it by conjecture. No two of them, therefore, are dependent upon one another or on a further hyparchetype: all three come independently from [b].

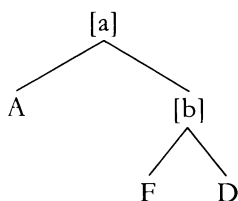
Having established the stemma, we can use it to eliminate some of the variants by showing that they originated in such-and-such a manuscript and were not inherited from the earlier tradition. Our aim will be to discover as far as possible what was in [a]. We shall ignore F, since we have found its exemplar; it can only be of use to us as a source of emendations, or in a place where B's text has become obscured or damaged since F was copied from it. From the agreement of D with E (in good readings as well as bad) we can infer what was in [c]. If D and E disagree, it will be possible to decide which of them is faithful to [c] on the basis of agreement with B and/or C, provided that [c] reproduces the reading of [b]; and even where it does not, it will often be

⁴) In practice it is easy to mistake an apograph for a closer congener and vice versa. The assumption of direct dependence is more certain if it is possible to point to some physical feature of the exemplar which accounts for the reading of the apograph: a lost or torn page, words obscured by damp or written in a way that invited misreading.

easy to decide which of the variants in DE must have arisen first (in [c]) and which second. Next, from comparison of B, C and [c], we shall usually be able to tell what was in [b], because it will be seldom that more than one of them will diverge from [b] at the same time, and then the agreement of any one of the three with A would give the reading of both [b] and [a].

We attain our goal, knowledge of the reading of [a], whenever we find A in agreement with [b], i. e. with BCDE, BCD, BCE, BC, CDE, CD, CE, BDE, BD or BE; or even with a single one of these manuscripts where two copies of [b] have admitted innovations independently. We can then treat this as the sole transmitted reading (to be judged on its merits), and disregard the other variants. But what if A and [b] disagree? In some cases it may be clear which reading was the source of the other. Otherwise the question must be left open⁵).

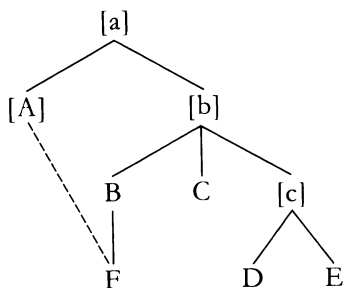
Now that the principle has been explained, it is necessary to point out some possible complications that were deliberately excluded from the hypothetical situation given above. Suppose that of the nine manuscripts in the system only three were extant instead of six, namely A, F and D. Comparison of their readings would give us the following stemma:



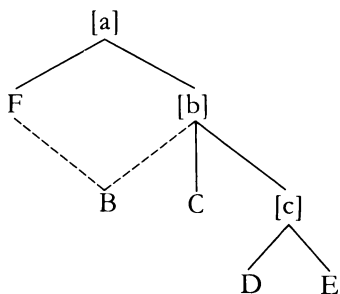
⁵) Sometimes the condition of an archetype allows deductions about earlier copies. The Lucretius archetype, for instance, contained some errors caused by misreading of Rustic capitals, others caused by misreading of insular minuscule, so that two 'proarchetypes' are conjured up.

We would judge FD to be two copies of [b], and so removed two steps from [a]. We would not be able to tell that there were in fact intermediate copies between [b] and F and between [b] and D, unless we found corruptions such as could only have occurred in two stages. Any stemma that we construct for the manuscripts of a classical author is liable in the same way to be an oversimplification of the historical reality. However, it will not be a serious falsification, provided that our reasoning has been careful, and provided that contamination is not present in the system. We shall get the readings of [a] in nearly all cases from AFD as surely as we would from ABCDE. Even if only AF are extant, their agreement will still give us [a], though we shall be worse off in that they will disagree more often than A and [b] did, and so leave us more often in doubt.

If contamination is present we may be seriously misled. Suppose that the scribe of F, besides copying B, kept an eye on A and borrowed some readings from there, and suppose then that A was lost. The true stemma would now be:



We would observe that F sometimes avoided errors common to the rest, and that B sometimes sided with C and [c], sometimes with F. We would construct this stemma:

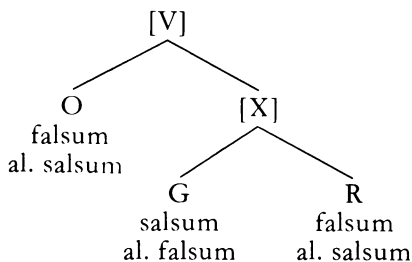


We would discard B as a contaminated manuscript offering nothing that was not to be found in the other sources, and we would treat the peculiar readings of F as being as likely as those of [b] to be those of the archetype. Insofar as they were drawn from A, this would be correct, but insofar as they were errors made by B, or in copying from B, it would be false. If a codicologist told us that B was in fact written earlier than F, we would merely postulate an intermediary between [a] and F, and adjust our dotted lines.

Such misapprehensions no doubt occur, and there is no infallible way of avoiding them. The best one can do is opt for the hypothesis that fits the facts most straightforwardly, taking great care that it does fit them. If contamination is present in more than a slight degree, it will be found that no stemmatic hypothesis is satisfactory. Before we consider what to do in those circumstances, let us notice one other kind of complication that may affect a closed recension.

Suppose that the archetype [a] (in our original, uncontaminated system) contained marginal variants or corrections, so that the scribes of A and [b] were faced with the various choices listed on pp. 12f. We might find as a consequence an inferior variant shared by A with *one* of the three copies of [b], something that could not happen, except by coincidence, with the simple form of lineal descent that we began by envisaging. If we found that it had happened, there would be two explanations available: (i) that

there were variants in [a], reproduced in [b], and the scribe of C (let us say) made the same choice as the scribe of A; (ii) that the link between A and C is the result of cross-contamination, C having consulted A or a copy closely related to A, or vice versa. There is a good chance that if (i) is the case, one or two of the extant manuscripts will still give both variants. At Catullus 12,4, for instance, the primary manuscripts, being related as shown, give:



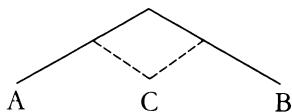
V must have had the variants; the agreement of OR does not show that it had *falsum* in the text. Whenever several manuscripts sporadically or simultaneously record each other's readings as variants, this is a probable sign of variants in their exemplars. When on the other hand a single manuscript offers a series of marginal variants which correspond to those known from another manuscript or family, it is a sign of contamination.

Dealing with an open recension

Besides OGR there are many later, derivative manuscripts of Catullus whose affinities cannot be reduced to a stemma. But because the three primary manuscripts permit us to reconstruct the archetype, it is possible to concentrate on them and treat the tradition as a closed one. The situation is similar with, for example, Lucretius and Theognis. We speak of an open recension when the older manuscripts, or more strictly all those manuscripts in

which worthwhile variants (other than emendations) appear for the first time, are not related perspicuously and do not allow us to construct an archetype.

Different kinds of situation may be involved here. Firstly, the contamination may not be as total as it seems at first sight: some of the manuscripts do descend from an archetype directly enough for it to be reconstructed, and it is only the eclecticism of the others that confuses the picture. In its simplest form this situation may be represented thus:



Secondly, there may be an archetype from which all the extant copies are indirectly descended, but with cross-contamination making intermittent links between all the branches of the tradition, so that their agreements are never reliable indications of what was in the archetype. Thirdly, it may be that there was no archetype at all, apart from the author's original, because two or more unrelated ancient copies survived into the Middle Ages to become independent fountain-heads.

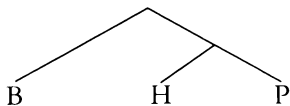
How is the critic to discover which of these situations he is facing? There is no infallible way, but certain criteria are applicable. Suppose the first case is true, the one illustrated by the stemma above. It is easy to see that whereas AC will sometimes agree in error against B, and BC against A, AB will never agree in error against C⁶). Here lies a criterion. If we tabulate the combinations in which the manuscripts err, and fill in the number of agreements in significant error not shared by the whole tradition, thus⁷):

⁶) I must refer again to p. 32 n. 3.

⁷) The table cannot show agreements of three or more manuscripts, but that is unnecessary for the present purpose. There are quicker ways of doing the job.

	B	C	D	E	F	G
A	6	14	16	7	19	8
B		12	6	7	3	9
C			27	25	8	11
D				22	7	10
E					9	8
F						20,

it will soon be seen whether there are any manuscripts that never err together where another part of the tradition preserves the truth. (Any very low figures will deserve closer investigation.) It should be possible to put any such manuscripts in a serviceable stemmatic relationship. For instance, if B never errs with H or P, though H and P often err with each other, we can extract the stemma

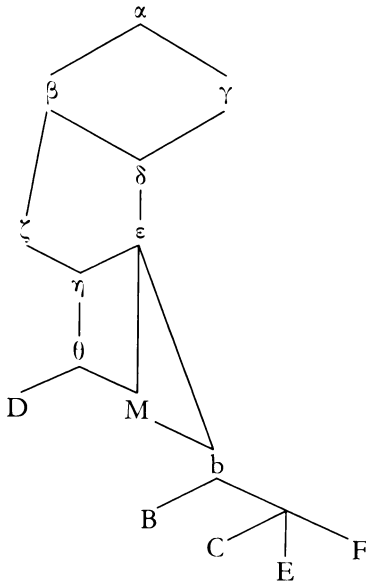


and discard all the other manuscripts, which have no better readings to offer (ex hypothesi) and merely confuse matters.

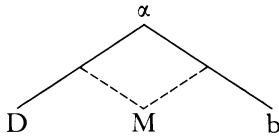
I spoke of a 'serviceable' stemmatic relationship, meaning 'not necessarily historically exact'. Suppose we have six manuscripts BCDEFM, actually related as in the stemma overleaf.

When their readings are compared it is obvious that BCEF form a close-knit group; further inspection reveals its structure, and we can now quote b instead of the individual copies. What is its

Instead of entering numbers, one may simply tick the spaces as the various agreements are established (more care must then be taken to see that they are significant). Or, if it is once established that C alone preserves such-and-such a true reading, it only remains to show that each of the other manuscripts is somewhere in error with C. If each of three sources is somewhere the only one to preserve the truth, the question is answered.



relationship to D and M? We observe that DM sometimes agree in error against b, and M b at other times against D; but never D b against M, for M cannot preserve the truth by itself. If it got it from ζ - η - θ it would also be in D, and if it got it from ϵ it would also be in b (which has no choice when ϵ and M agree). We will infer a stemma of the form



Now this is clearly rather more than an oversimplification of the true state of affairs. But it expresses correctly the basic truth that readings from α which survive in extant manuscripts must have followed one of two routes, and, barring two independent corruptions, must appear in D or b.

By the use of the tabulation method, then, we can determine whether there are lines of tradition that have remained more or less independent of each other throughout. It does not tell us, however, whether there was an archetype. Take the stemma given above for BHP. It posits an archetype, and for practical purposes the assumption will be harmless. But it is possible that B derives from one ancient copy and HP from another that was not cognate with the first. The common assumption that the transmission of a Greek or Latin author normally depends on a single minuscule manuscript, the first and last to be transcribed from an ancient copy or copies (with variants recorded in some cases), is of rather limited validity, as Pasquali has demonstrated⁸). What criteria can be applied here?

It might be thought – and Pasquali himself thinks – that if all the manuscripts agree in error that implies misreading of minuscule script, there must have been a minuscule archetype. Not necessarily. If there has been contamination, there is no certainty that those errors were all to be found in the same prototype, or, if they were, that it was an archetype in the sense that *all* its errors were inherited by the later tradition. But the quantity and the quality of the errors come into consideration here. The greater their number, the less chance there is that they were diffused ‘horizontally’; and again, the more obviously false they are, the less credible it is that they were chosen by scribes to whom alternative readings were available.

That there was no single archetype may be inferred in the following ways. (i) From the presence in the medieval tradition of many pairs of variants known to be ancient. A reading can be taken as ancient either if it is attested by an ancient source or if it is true. If the medieval tradition in a series of places preserves true readings which could not have been restored by conjecture, side by side with false variants which already occur in papyri or

⁸) *Storia...*, chapter VI, particularly pp. 210–3. 259–61. 273–8. 295–8. 303–4. 375–8. 386–9. See also Barrett, *Euripides: Hippolytos*, p. 58.

ancient quotations⁹⁾, and if this happens more than can reasonably be accounted for by the recording of variants in the margins of an archetype¹⁰⁾ or in a body of scholia, then it is necessary to assume more than one line of transmission from antiquity. (ii) From the presence of divergences so substantial, or at so early a date within the Middle Ages, that one cannot believe them to have arisen in the short time available or under the conditions that prevailed after the end of antiquity.

In the absence of such indications it will often be an open question whether there was a single archetype or not. As I have intimated, it is not actually a question of much practical importance. What is important is to recognize that medieval variants are often ancient variants, and that ancient attestation of one of the manuscript alternatives does not necessarily mean that it is the true alternative.

When the critic has established that no stemma can be constructed, how is he to proceed? He must, of course, see what groupings are apparent among the manuscripts, and whether the individual groups can be analysed stemmatically, as was the case with BCEF in the example on p. 40; even if they cannot, he can treat them as units in his further cogitations, provided that they have a sharply defined identity. Thus he reduces his problem to its basic terms. In distinguishing fundamental affinities from the superficial ones produced by contamination, in other words, in distinguishing vertical from horizontal elements in the transmission, he may sometimes be helped by the principle that the most significant agreements between manuscripts are those involving omissions and transpositions (insofar as they are not due to some evident mechanical factor such as homoeoteleuton), since these are not easily transmitted horizontally – though it is not impossible.

⁹⁾ Provided that the quotations were unknown to the scribes. See also pp. 10-11 on the influence of direct traditions on the text of quotations.

¹⁰⁾ Barrett points out that such an archetype would have to contain far more variants than the number preserved among its surviving descendants.

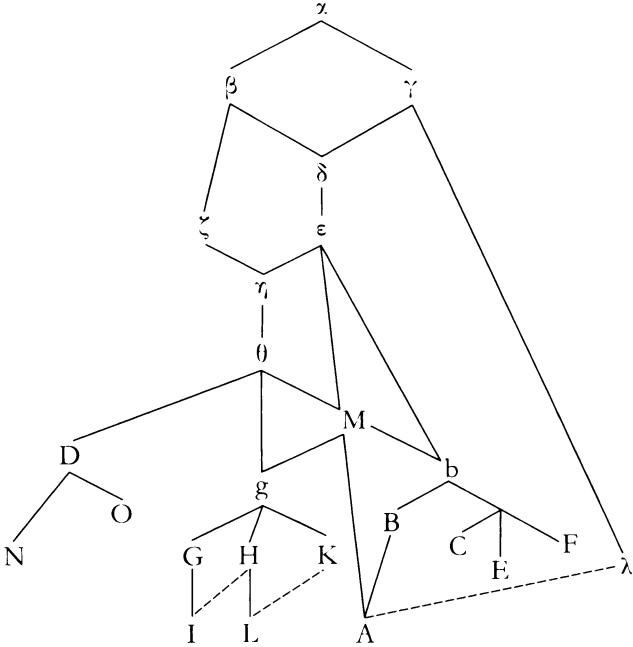
The aim now is to determine which of the manuscripts or manuscript families are most independent of each other, for these must go back most directly to the earliest phases of the tradition that we can reach, and they must be the most fruitful sources of ancient readings. The critic will take note of the general appearance of the various witnesses first – that this one is a humanist’s copy, liable to contain much emendation; that here is a major family that preserves its identity from the twelfth century into the fifteenth, and so on. His attention will naturally be drawn by any manuscripts that stand out from the rest by reason of their age, or are notable for agreements with an ancient source. He may well consider whether these apparently noble documents are all that he needs, or whether there are others that preserve further ancient readings.

This approach perhaps savours of trial and error, but it is not difficult to develop it into a generally applicable sorting procedure. The steps are these:

1. Whenever the manuscripts are at variance, make a note of the reading or readings that seem to be ancient (true, and not found by conjecture, or else attested by an ancient source unavailable to the scribes) and the manuscripts in which it or they appear.
2. Any manuscript that is the sole carrier of such readings is obviously indispensable. Adopt it.
3. Remove from the list *all* the readings for which the manuscripts just adopted may serve as sources (not just the readings that appear only in them).
4. See which manuscript contains the largest number of the remaining readings. Adopt it. Remove from the list the readings it contains.
5. Repeat (4) until every ancient reading is accounted for.

This is the most efficient way of reducing to a minimum the number of manuscripts that have to be quoted as witnesses to the tradition. The remainder can be eliminated. The elimination is primarily for practical convenience: it is not quite like the elimination

of apographa which demonstrably *cannot* tell us anything new. Nevertheless, there must be a correlation between lack of individual good readings and lack of independent sources. Even though the sorting method cannot elucidate the complex affinities of the manuscripts, it produces results that stand in some relation to them. This may perhaps be made clear with the help of an imaginary example. Suppose we have fourteen manuscripts ABCDEF GHIKLMNO, actually related as follows (the stemma is an extended form of the one on p. 40):



When their readings are compared it is soon discovered that NO are copied from D and can be dispensed with; that BCEF are so related that their hyparchetype b can be used instead; and that GHIKL form a group which can be treated as a unit, even if its structure resists analysis. The fourteen witnesses are thus reduced

to five, ADM b g. Further stemmatic construction turns out to be impossible. None of the five is the direct source of another – not consistently, at any rate – and each of them shares errors with one, two or three of the others in bewilderingly various combinations. We apply the sorting procedure. We find that only A has good readings peculiar to it; b has the largest number of the good readings that are not in A; and D contains all the remainder, whereas there are some that are not in M and others that are not in g. We decide therefore to base our recension on A b D.

What can we guess about the sources lying behind our manuscripts? A's unmatched ability to produce individual good readings (despite its late date) implies access to a source independent of those that feed the others¹¹). The others perhaps draw on the same range of sources, but b and D have profited most from them. M and g have chosen less well, or found them in a less pure state; each sometimes has a good reading that one or two of the trio A b D have missed, but never one that all three have missed.

These conclusions approximate to the truth. A has individual good readings because of its access to λ . When it is in the wrong, the right reading is more often found in b than anywhere else, because A followed M more often than b, and M followed γ - θ more often than the purer line δ - ϵ . When A and b are both in the wrong, the right reading is preserved in D if at all, because, if a corruption occurs (or is present from the start) on the line γ - δ - ϵ -(M-)b, and A fails to pick up the true reading from λ , then it can be preserved only by way of γ and θ , and D is the only manuscript consistently faithful to θ . M cannot preserve the truth against both D and b, for the reason given on p. 40, and a similar argument applies to g.

¹¹) If there had been a second copy that also had good readings peculiar to itself, that would not necessarily imply a second such source. It and A might be selecting independently from the same source. But in this case we should expect them at least as often to make the same choice and agree in good readings unknown to the rest of the tradition.

Now this manufactured example will illustrate a general truth. Whenever the manuscripts give divergent readings, one of which is primary and the other secondary, the secondary reading has originated at a given point in the tradition, and has come down by certain routes to all the copies in which it appears; the primary reading has come down by a route or routes which bypass that point and have no station in common with those other routes. The extant tradition will depend ultimately upon a very limited number of early medieval copies, and there will be a very limited number of possible routes from them to the extant manuscripts that do not touch at any point. To escape from the oldest corruptions we can escape from, we depend on those routes. The extant readings will not have consistently come down by those routes to particular manuscripts, in a contaminated tradition; but the sorting procedure that I have recommended must have the effect of isolating the manuscripts which have benefited from them most.

Of the value of other sorting methods, in particular statistical methods, I remain sceptical. A numerical table of significant agreements between every two manuscripts, as described on p. 38, will provide objective confirmation of groupings suggested by casual inspection, and will indicate how clear-cut they are (e.g. how much more often GHIKL agree with each other than with other manuscripts); but simply collecting the evidence, without reducing it to figures, will probably have given a clear enough picture already. Indeed, where groups of three or more manuscripts are concerned it will have given a clearer one, for the information that A agrees with B 81 times, B with C 92 times, and A with C 79 times does not enable us to deduce that ABC all agree together 73 times, or even once.

A more elaborate way of using such a table has recently been advocated by J. G. Griffith¹²). It involves comparing manuscripts

¹²) J. G. Griffith: *A Taxonomic Study of the Manuscript Tradition of Juvenal*, *Museum Helveticum* 25, 1968, 101-138; *Numerical Taxonomy and some primary*

in respect of the whole numerical series of each one's agreements with the others; no distinction is made between primary and secondary readings, though agreements that may represent coincidental innovation are excluded. Suppose manuscript A shows the following numbers of agreements with the others:

B	F	G	H	J	K	L	N	O	P	R	T	U	V	Z
50	44	61	49	52	48	62	62	48	42	44	53	61	47	43.

For each manuscript a similar series of numbers is found. The one whose series matches that of A most closely is then grouped most closely with A. Finally the manuscripts are all arranged in a 'spectrum': those with the most dissimilar patterns of agreement appear at opposite ends, with a continuous gradation from one end to the other, while certain clusters or 'taxa' mark themselves off along the line¹³). The trouble with this kind of analysis is that it is not clear what useful conclusions can be drawn from it. Two manuscripts may be grouped together just because they show no particular tendency to agree with any manuscript more than any other, in other words because they are equally promiscuous, even if they have no special similarity with each other textually¹⁴). In some cases it is evident that the taxa reflect real affinity-groups, in others it is not. In any case we are given no guidance as to the distribution of ancient readings.

3. Diagnosis

When the evidence of the various sources for the text has been collected and organized, apographa eliminated, hyparchetypes and archetypes reconstructed where possible, and so on, the time

manuscripts of the Gospels, *Journal of Theological Studies* n. s. 20, 1969, 389-406. He is preparing a book.

¹³) For the method of performing these operations see the author's articles.

¹⁴) An example is the taxon JU which Griffith constitutes for Juvenal.

has come to try to establish what the author originally wrote. Sometimes this is a matter of choosing between transmitted variants, sometimes it is a matter of going beyond them and emending the text by conjecture, or adopting an emendation already proposed. We will consider these alternatives separately; but the requirements which a satisfactory solution must fulfil are the same in both cases.

1. It must correspond in sense to what the author intended to say, so far as this can be determined from the context.
2. It must correspond in language, style, and any relevant technical points (metre, prose rhythm, avoidance of hiatus, etc.) to a way in which the author might naturally have expressed that sense.
3. It must be fully compatible with the fact that the surviving sources give what they do; in other words it must be clear how the presumed original reading could have been corrupted into any different reading that is transmitted.

The fulfilment of these three conditions does not logically guarantee that the true solution has been found, and there may sometimes be more than one solution that fulfils them. An element of uncertainty may therefore persist even if a reading is open to no criticism – just as it may exist in places where the sources are unanimous and what they offer unexceptionable. But often a reading seems so exactly right that those most familiar with the author can feel absolute certainty about it.

The evaluation of variants

Many variants are obviously wrong because they offend against grammar, metre or the plain sense of the passage. The more carefully a critic has studied these things, naturally, the more such faults he will detect; though it is possible to go too far, and to fall into error by applying more rigid canons of language or logic than the author observed.

If there are two or more variants in a given passage, and only

one of them is not obviously wrong, it does not follow that that one is right. It may be a plausible but nevertheless incorrect emendation by a scribe whose exemplar gave the corrupt text. And there are other possibilities. That a plausible reading is not necessarily a genuine one is proved by many thousands of places where more than one of the variants is plausible. (In only a tiny minority of these can authors' variants be involved.) By what criteria can we judge between them?

Such variants are 'plausible' in that they satisfy the first two of the three requirements. It remains, then, to consider how far they satisfy the third. To some extent this is bound up with an evaluation of the sources that attest them and with the interrelationships of these sources. If the source of one of the variants is a quotation, the assumption that inaccurate memory is responsible for it may in many cases be the likeliest explanation of the discrepancy. If you think that in general a reading which most of the manuscripts give is more likely to be right than one which only a few give, then to make the same assumption in a particular case where the manuscripts are unevenly divided between plausible readings, and to prefer the one attested by the majority, will be to make the choice that (on your view) fits the facts best. That would, of course, be a very naive principle. If the manuscripts happen to be related as in the stemma on p. 32, it is easy to see that a reading given only by A has just as much chance of being right as one in which BCDEF all agree.

Manuscripts must be weighed, not counted. That is an old slogan, one of several which deserve remembrance and comment in this connexion. A in the stemma just mentioned 'weighs' equal to the other five copies combined. 'Weight' is not determined solely by stemmatic considerations. Let us take a contaminated tradition for which no stemma can be set up. Where the credit of a plausible reading is concerned, a tenth-century manuscript whose scribe is not given to emendation obviously carries greater weight than a fifteenth-century one that is rich in copyist's conjectures, at least if the reading might be a conjecture.

This is not to say that the age of a manuscript is necessarily a guide to its quality. *Recentiores, non deteriores*: that is the famous heading of a chapter in which Pasquali protested against the tendency to equate the two terms, and showed that true readings are sometimes preserved only among the latest manuscripts¹⁾. A propensity to emendation, so far from discrediting a manuscript, may be symptomatic of an interest in the text that also prompted the consultation of out-of-the-way copies, like the use of λ by the late manuscript A in the stemma on page 44. Conversely, very old copies such as papyri sometimes disappoint expectation by giving a worse text than the medieval tradition instead of a better one. The quality of a manuscript can only be established by reading it. And when an opinion has been formed on the quality of a manuscript, it can be used as a criterion only when other criteria give no clear answer. The absurdity of following whatever is regarded as the best manuscript so long as its readings are not impossible is perhaps most clearly, and certainly most entertainingly, exposed by Housman, *D. Iunii Iuuenalis Saturae* (Cambridge 1905; 1931), pp. xi–xvi²⁾. Each variant must be judged on its merits as a reading before the balance can be drawn and a collective verdict passed. Since the collective judgment is entirely derived from the individual judgments, it cannot be a ground for modifying any of them, but only a ground for making a judgment where none could be made before. As Housman puts it, “since we have found P the most trustworthy MS in places where its fidelity can be tested, we infer that it is also the most trustworthy in places where no test can be applied. . . . In thus committing ourselves to the guidance of the best MS we cherish no hope that it will always lead us right: we know that it will often lead us wrong; but we know that any other MS would lead us wrong still oftener.”

In any case, merely to correlate good readings with good manu-

¹⁾ *Storia* . . . , pp. 43–108.

²⁾ See also Frankel, *Einleitung* . . . , pp. 131–4.

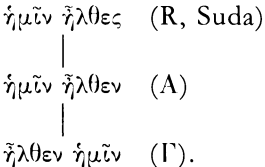
scripts is a very poor way to satisfy the third requirement of a convincing textual decision. It is not enough just to say “this corruption of what I take to be the right reading is explained by the fact that the manuscripts in which it appears are generally corrupt manuscripts”. A more particular explanation is called for, in terms of known processes of textual change. Hence the criterion *utrum in alterum abiturum erat?* Which reading was the more liable to be corrupted into the other? For example, if part of the tradition gives a word or phrase which is absent in the other part, and both versions give equally good sense and style, one may ask whether it is something that a scribe might have added, or whether it is easier to assume an omission. Where purely visual errors with no psychological side to them are concerned, the criterion has little applicability; it is mainly of use where there has been some mental lapse, or a more or less conscious alteration. Since the normal tendency is to simplify, to trivialize, to eliminate the unfamiliar word or construction, the rule is *praestat difficilior lectio*³). For instance, in Horace Odes 1,3,37, *nil mortalibus arduum est*, some manuscripts have *arduum*, which is equally good Latin, but also more everyday: to any copyist *nil arduum* would have seemed more natural and obvious than *nil ardui*, and it is far more likely that an original genitive was changed to the accusative (whether deliberately or not) than vice versa.

When we choose the ‘more difficult’ reading, however, we must be sure that it is in itself a plausible reading. The principle should not be used in support of dubious syntax, or phrasing that it would not have been natural for the author to use. There is an important difference between a more *difficult* reading and a more *unlikely* reading.

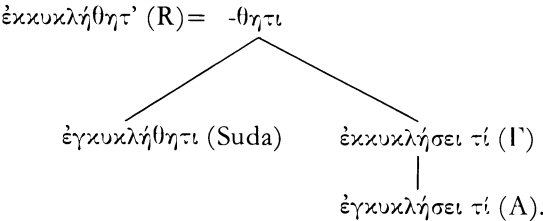
In deciding that one reading is derived from another and therefore to be eliminated, we are doing something similar to what we

³) The principle was clearly enunciated by Clericus, *Ars Critica* (Amsterdam 1696), II, 293. For earlier hints of it see S. Timpanaro, *La Genesi del metodo del Lachmann* (Firenze 1963), p. 21 n. 1.

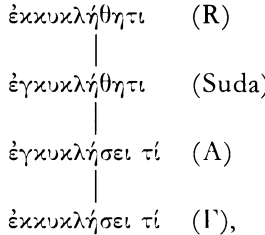
do when we decide that one manuscript is derived from another. The principle can be extended. If there are more than two variants at a given place, we should try to put them into a stemmatic relationship (if this has not already been done for the manuscripts in which they appear). For instance, at Aristophanes Ach. 121 εὐνοῦχος ἡμῶν ἦλθεσ ἐσκευασμένους, there are three different readings in the manuscripts, logically related as follows:



This does not mean that Γ derived its text from A at that place, only that it derived it directly or indirectly from a copy which had the same stage of corruption as we see in A. At 408 the ‘stemma variantium’ reads:



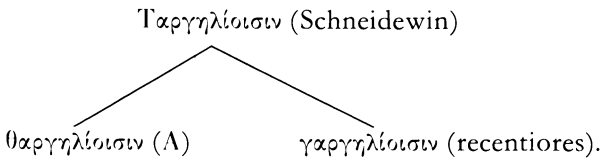
This assumes that the substitution of ἐγ- for ἐκ- took place independently in the Suda (or an antecedent copy) and in A (or an antecedent copy). But a valid alternative would be



with ἐκ- being restored by conjecture at the last stage. This case where more than one analysis is possible is not exceptional, and the critic must consider what different hypotheses are available, for they may lead to different choices for reading as the original one.

Emendation

As the comparison of manuscripts may lead to the reconstruction of a lost archetype, so comparison of the variants at a particular place may lead one to postulate another reading as their common source. E. g. Hipponax fr. 104,49 (ap. Athenaeum 370 a):



The reading of A represents a banalization of the Ionic into the familiar form of the name of the festival, the other variant a misreading of uncial T as Γ. Schneidewin's emendation accounts for both readings and at the same time restores what Hipponax meant to say in the correct dialect; it thus satisfies perfectly the three requirements formulated on p. 48.

But the archetypal reading, reconstructed or extant, may be unsatisfactory. In that case, further conjecture is called for, just as it may be called for if there is complete agreement among the manuscripts. It starts, so far as possible, from the 'paradosis' (παράδοσις), which is a rather imprecise but convenient term meaning 'the data furnished by the transmission, reduced to essentials'. It would be almost true to define it as the text of the archetype in a closed tradition, and the effective consensus of the manuscripts (disregarding trivial or derivative variants) in an open one. But reduction to essentials implies something further, namely the elimination from the archetypal-text or the consensus-text of

those features which we know, from our general knowledge of the history of books and writing, to have been introduced since the time of the author. The category includes orthographical modernizations, capital letters, word division, punctuation and other lectional signs.

To take orthography first, in Lucretius 4,1011, where the primary manuscripts give

*porro hominum mentes, magnis que motibus edunt
magna,*

we must choose between *quae* (recentiores) and *qui* (Lachmann); but as *que* is really only a way of writing *quae*, it would be legitimate to describe *quae* as the *paradosis* and not an emendation. In Semonides 7,4 the primary manuscripts give $\kappa\upsilon\lambda\iota\nu\delta\epsilon\tilde{\iota}\tau\alpha\iota$, and a Renaissance copy $\kappa\upsilon\lambda\iota\nu\delta\epsilon\tau\alpha\iota$, which is a form better attested for early Ionic. From one point of view the *paradosis* may be said to be $\kappa\upsilon\lambda\iota\nu\delta\epsilon\tilde{\iota}\tau\alpha\iota$. But when one reflects that Semonides would have written the contraction of $\epsilon\epsilon$ simply as E , it appears that the *paradosis* really amounts to an ambiguous QYAINΔETAI : $\kappa\upsilon\lambda\iota\nu\delta\epsilon\tilde{\iota}\tau\alpha\iota$ is some later person's interpretation of that, but we are free to prefer the alternative interpretation⁴). It is an emendation in the sense that it corrects a presumed error, but not in the sense that it postulates a form of the text for which evidence is lacking.

In ancient books there was no distinction of proper names, and hardly any word division. Punctuation existed from at least the fourth century B.C. and accents from the second, but the use of these and other signs (such as the apostrophe marking an elision) was very sporadic; in theory an accent or a breathing in a medieval copy of a post-Hellenistic writer might go back to the author's autograph, but in general all such features of the tradition will

⁴) In the case of the Homeric poems, however, such decisions will have been made by men familiar with the sound of the verse as preserved by generations of reciters, and mistakes are much rarer than has sometimes been thought. See Glotta 44, 1967, 135–6.

represent some later person's interpretation of a text consisting of virtually nothing but a continuous sequence of letters. The critic is at liberty to re-interpret e. g. $\tau\alpha\tilde{\upsilon}\tau\alpha$ as $\tau\alpha\tilde{\upsilon}\tau\acute{\alpha}$, $\nu\acute{o}\mu\omicron\nu$ as $\nu\omicron\mu\acute{o}\nu$, *maxima meque* as *maximam aeque*, *filiam artis* as *filia Martis*, or to repunctuate, even if he has taken a vow never to depart from the paradosis⁵). The same applies to the division and attribution of speeches in dialogue texts. In ancient books a change of speaker was normally signalled only by a dicolon(:) and/or a paragraphus, a dash over the beginning of the first complete line. It is not certain whether even this practice goes back to the earliest times, and the divisions given by manuscripts are so often erroneous that they cannot be regarded as useful evidence of the author's intentions⁶). Certainly the attribution of a speech to such-and-such an interlocutor rests on no tradition that reaches back to the author (except perhaps where the speaker makes his first appearance) but only on later interpretation. The practice of regularly identifying the speaker seems to have been invented by Theodoretus in the fifth century⁷). The critic is free to distribute the dialogue as best fits the sense.

In what circumstances is it legitimate to depart from the paradosis, to entertain a conjecture? Many scholars would answer, "only when it is clear that the paradosis cannot be right". Those are scholars who will dismiss a conjecture from consideration on the ground that it is 'unnecessary'. But it does not have to be 'necessary' in order to be true; and what we should be concerned with is whether or nor it may be true. Consider Euripides, Hippolytus 99–101.

⁵) Where a *vox nibili* (nonsense-word) is transmitted, however, accents etc. may be valuable clues to what lies behind it, since they must have been supplied when the text was in a more intelligible state.

⁶) See J. Andrieu, *Le Dialogue antique* (Paris 1954), pp. 288ff., J. C. B. Lowe, *Bulletin of the Institute of Classical Studies* 9, 1962, 27–42, and good modern editions of Menander (Lloyd-Jones's *Dyscolus*, Kassel's *Sicyonius*, Austin's *Aspina* and *Samia*).

⁷) N. G. Wilson, *Classical Quarterly*, n. s. 20, 1970, 305.

- πῶς οὖν σὺ σεμνήν δαίμον' οὐ προσενέπεις;
- τίν'; εὐλαβῶ δέ, μή τί σου σφαλῆ στόμα.
- τήνδ' ἢ πύλαισι σαῖς ἐφέστηκεν Κύπρις.

So the medieval paradosis (with a variant Κύπριν); but in a papyrus of the third century B.C. the third line ends]Ε.ΛΑC, doubtless πέλας in place of the proper name. This is almost certainly the right reading: the intrusion of the name to clarify a circumlocution is a very familiar phenomenon (above, p. 23), whereas there is no reason why an original Κύπρις should have been corrupted into πέλας⁸). Before the papyrus appeared, however, anyone who had suggested reading “e.g. πέλας” would have been told, “your conjecture is unnecessary: Κύπρις is perfectly satisfactory”. He would have been justified in replying, “I am not saying that Κύπρις is unsatisfactory, I am only warning you not to rely on it too much, because this is just the sort of sentence in which a proper name is liable to be interpolated”. His warning would have been timely and his conjecture correct. Probably no editor would have thought it worth mentioning. Yet it would have deserved mention, because it fulfilled the three requirements stated at the beginning of this chapter, being in full accord with the sense and with Euripides’ style and metre, and easily compatible with the fact that the paradosis gives Κύπρις.

This may seem to be opening the door to innumerable profitless speculations. If we are to attend to every conjecture that is possible, it may be said, there will be no end to it. But this is really not so. The number of conjectures that genuinely satisfy the requirements will not be large; and those that do ought to be attended to. The critic should not be content to exercise his art only on passages where his predecessors have exercised it. He should scrutinize every single word of the text, asking himself whether it is in

⁸) Barrett’s argument for Κύπρις (p. 439 of his edition) is answered by Merkelbach, *Zeitschrift für Papyrologie und Epigraphik* 1, 1967, 100.

keeping with the author's thought and expression⁹⁾, whether there are other better or equally good ways of interpreting the paradosis (e.g. a different punctuation), and whether the assumption that the wording of the paradosis reproduces what the author wrote is the only hypothesis that satisfactorily accounts for it. We want to know not only where the paradosis is certainly at fault, but also how far we can depend on it in other places, and what the limits of uncertainty are. The discovery of new sources (especially papyri) has often revealed the presence of corruption where no one had suspected it. It follows that one ought to be more suspicious.

The textual critic is a pathologist. It is his business to identify disorders known to him from professional experience and from textbooks (and the more he can supplement the latter from the former, the more sagacious he will be). When he notices that all is not well with a passage, however the paradosis is interpreted, his first problem is to discover as precisely as possible where the corruption lies. It may be obvious that one particular word is wrong and everything else in good order, or it may not. In that case he must go over the passage word by word, giving careful thought to the meaning and to the author's writing habits, and making preliminary decisions of the form "whatever has gone wrong here, this word at least is just right and not to be tampered with".

Finding the exact location of the corruption will sometimes lead him at once to recognize its nature, and perhaps to see the solution. At other times he will only be able to say where the corruption is but not what kind it is; or what kind it is, but not what exactly lies behind it. For instance, if something essential to the syntax of a sentence or to the progress of an argument is missing, he may be able to say "there is a lacuna at this point, but there is no knowing what it contained"; or "there is a lacuna which must have contained the words..."; or again "there is a

⁹⁾ It is a good plan to make a translation. Nothing more effectively brings one face to face with the difficulties of the text.

lacuna: the required sense would be given, for example, by...". In this case the supplement proposed would fall into the category of 'diagnostic' conjecture, that is, a conjecture which, while no one can feel confident that it is right, serves the purpose of indicating the kind of sense that is really required or the kind of corruption that may have occurred. If someone had conjectured *πέλας* for *Κύπρις* in the Hippolytus line discussed above, that would have been a diagnostic conjecture, by which *Κύπρις* was diagnosed as an interpolation of a well-known kind¹⁰). There is a dictum of Haupt, quoted with approval by Housman and others: "If the sense requires it, I am prepared to write *Constantinopolitanus* where the manuscripts have the monosyllabic interjection *ο*". The point he is making is that emendation must start from the sense. But the failure to explain how *Constantinopolitanus* came to be corrupted into *ο* may leave others with certain doubts as to whether that is really what the sense was. Until those doubts are stilled, the conjecture has the status of a diagnostic one. The vast majority of corruptions in manuscripts are explicable. A conjecture which presupposes an inexplicable corruption is not necessarily false, but it is not fully convincing. The more completely the critic can demonstrate that it satisfies the three requirements, the more plausible it will seem. So far as the first requirement is concerned, he can do this by analysing the argument of the passage, pointing out defects in other interpretations, and comparing similar passages from elsewhere. For the second, too, he will adduce evidence about the author's practice generally and that of other authors of the same period or genre. For the third, he will, if the corruption is not of a widely-known sort, quote examples of similar ones. When he claims that one word is a gloss on another, he will if possible reinforce his case by showing from scholia or lexica that the other word was so glossed. But he will be well advised not to make his case too complex by assuming chancy multi-stage corruptions, and not to rely too much on intricate palaeographical

¹⁰) The concept of the diagnostic conjecture is due to Maas, *Textkritik*, p. 33.

arguments. These are the commonest faults in twentieth-century emendation¹¹).

Even commoner is to deny the need for emendation and to defend the paradisis at all costs. If good arguments can be produced to show that the conjecture is mistaken (not merely ‘unnecessary’), that is fine. Understanding has advanced. All too often, however, the defender only succeeds in showing that he has no feeling for style, or does not know where to draw the line between the unusual and the impossible; he asks “could these words bear the required meaning?” instead of “would the meaning have been expressed in these words?” Sometimes one sees a conjecture dismissed simply on the ground that all the manuscripts agree in a different reading. As if they could not agree in a false reading, and as if it were not in the very nature of a conjecture that it departs from them! Sometimes the emender must hold himself back and admit that the means to a solution are lacking: *nescire quaedam magna pars sapientiae est* (Grotius). But to maintain that emendation generally is an idle pursuit with little chance of success would be absurd. Hundreds of conjectures have been confirmed (or at least raised to the status of variants) by the appearance of papyri or other new sources¹². Our knowledge of Greek and Latin, of the authors who wrote in Greek and Latin, their ideas, styles, metres etc., and of the processes of textual change, is not so inexact that we are helpless when our manuscripts let us down.

¹¹) The palaeographical criterion is looked up to as an ideal by many whose understanding of palaeography is minimal, and who think that in order to make a conjecture palaeographically plausible it is only necessary to print it and the transmitted reading in capitals.

¹²) Some Latin examples are collected by Havet, *Manuel...*, pp. 17–20. He points out that in some cases the same conjecture may have suggested itself to an ancient scribe as to the modern scholar; but these cases are certainly in a minority.

1. Preparation

Is your edition really necessary? That is the first question. Sometimes a new edition may be called for simply because no existing one is easily available to a certain sector of the public – schoolchildren, Poles, or scholars at large. If it is not a question of filling some such gap, a new edition can only be justified if it represents a marked advance on its predecessors in some respect, whether in the fullness, accuracy or clarity with which the evidence for the text is presented, or in the judiciousness with which it is used in constituting the text. The intending editor must therefore be clear, first of all, that he is able to contribute something for which the critical world will be grateful. All too often editions of classical authors appear that are not only no better but distinctly worse than existing editions. Sometimes this is due to carelessness in reporting the evidence or in correcting the printer's proofs. The commonest cause, however, is lack of competence in fundamental matters such as language, style and metre. Metre at least is reduced to rules: one would suppose that any editor of a verse text would make a point of mastering the rules relevant to his work, but in fact they frequently fail to (particularly in the more southerly countries of Europe). Nor are they greatly abashed when their mistakes are pointed out. They seem to feel they have merely overlooked a minor technicality, and not to realize that there is a large body of competent scholars whose contempt is earned by nothing more surely than by metrical

blunders. Since bad editors are clearly for the most part quite unaware of their limitations, it is difficult to offer advice that is likely to deter them. But it may be worth pointing out a common fallacy concerning the qualifications required. For editing a text it is not a sufficient qualification to have a long-standing interest in it, to have written articles or books about it, in short, to be firmly associated with it in the public's mind. Nor even to have investigated all the manuscripts and sketched the history of the tradition: codicology and textual criticism are very different things, and an expert on manuscripts may produce a dismal edition. Publishers are sometimes at fault here. Wishing to publish an edition of such-and-such an author to fill a place in some series, they turn to whoever is known to have busied himself with that author – no matter how – and invite him to undertake the task. Flattered by this compliment, and sharing the publisher's assumption that his acquaintance with the text qualifies him to edit it, he readily accedes, not stopping to reflect that this will expose his philological weaknesses to his contemporaries and to posterity more ruthlessly than anything else. A better policy for publishers, when they want a good edition of something, would be to look for someone who has done a good edition of something else, even if he has not hitherto concerned himself with what they want¹).

Collecting the material

The editor's work begins with a period of study of what has already been achieved by others. He does not necessarily read at this stage everything that anyone has ever written on his author, but he works through the main editions carefully, and whatever else has been published on the manuscripts and other sources for the text. In the absence of a complete and up-to-date special bibliography on his author, he will derive most help from library catalogues and from the following:

¹) Reviewers of critical editions should be chosen on the same principle.

W. Engelmann & E. Preuss, *Bibliotheca Scriptorum Classicorum*, 8th ed. (Leipzig 1880). Covers literature from 1700 to 1878.

R. Klussmann, *Bibliotheca Scriptorum Classicorum Graecorum et Latinorum*, = *Bursians Jahresbericht* (see below), Suppl.-Bde. 146. 151. 156. 165. Covers literature from 1878 to 1896.

S. Lambrino, *Bibliographie de l'antiquité classique 1896–1914* (Paris 1951).

J. Marouzeau, *Dix années de bibliographie classique: 1914–1924* (Paris 1927–8).

J. Marouzeau and others, *L'Année philologique*. Published regularly since 1928, covering literature from 1924 on.

(Bursians) *Jahresbericht über die Fortschritte der cl. Altertumswissenschaft* (Berlin & Göttingen 1875–1955); continued as *Lustrum* (Göttingen, since 1957).

Gnomon (Berlin & München, since 1925): *Bibliographische Beilage* several times a year.

N. I. Herescu, *Bibliographie de la littérature latine* (Paris 1943).

Association internationale d'études patristiques: *Bulletin d'information et de liaison* (Amsterdam, since 1968). Records projected editions of patristic writers.

If earlier scholars have argued for certain relationships among the manuscripts used by them, he should check their conclusions as far as he can from the evidence available to him. He may find that he cannot do so without fuller evidence about those manuscripts; or he may suspect that there are other manuscripts which have not so far been used at all. Then it is time to start doing some collating for himself. Even if he is satisfied that all the manuscripts have been investigated and their relationships correctly assessed, he will be well advised to make his own collations of the important ones, for two reasons. Firstly, it is very likely that no complete collations have been published, only selected variants, and he will want to make his own selection from the complete evidence. Secondly, no one ever checks anybody else's collations (or his own, for that matter) without finding mistakes in them. Even what appears to be a very detailed collation is liable to

contain amazing mis-statements; and when it comes to making inferences from its silence, the scope for error is large indeed.

He should not be afraid of collating because he has never done it before, or because manuscript facsimiles that he has seen strike him at first sight as indecipherable. Reading manuscripts is something that has to be learned, but it is by no means as difficult as it may look to the uninitiated. Becoming an expert palaeographer, able to date and identify hands, is another matter; but the main thing, what one cannot easily get someone else to do for one, is to be able to read them. There is great need to extend our knowledge of classical manuscripts. People often assume that the task of collating has by and large been done, but there are many major authors for whom dozens of manuscripts remain unread. The sooner they are read, the better. Numerous manuscripts have been lost since the Renaissance: how many of those that seem safe in libraries today will still be there when another five hundred years have passed?

Of the whole collating project, the hardest part to carry out with complete success is probably the business of finding out what manuscripts there are. For most of the libraries that come into question, catalogues of manuscripts have been published in book form or in periodicals. As far as Greek manuscripts are concerned we now have an excellent guide to these catalogues in M. Richard, *Répertoire des bibliothèques et des catalogues de manuscrits grecs*, 2nd ed. (Paris 1958), with the supplement to it published in 1964. When he has consulted as many of the catalogues as he can, the inquirer may be recommended to apply to the Institut de Recherche et d'Histoire des Textes, 15 quai Anatole-France, Paris VII^e, where he may obtain help in supplementing his list of manuscripts (though he must not expect them to do all his work for him). Papyri come in a different category: here he can get his information from R. Pack, *The Greek and Latin Literary Texts from Greco-Roman Egypt*, 2nd ed. (Ann Arbor 1965), supplementing it from the papyrological bibliographies published regularly in *Aegyptus*.

He should note down from the catalogues such information as datings, identifications of scribes, the pages on which the work that concerns him begins and ends, and the other works contained in each manuscript. This last item may be a useful hint of a manuscript's affinities, for groupings of works changed frequently in the Middle Ages and Renaissance. The investigator will not put off the question of the interrelationships of the manuscripts till he has finished collating them: he will be considering it while he collates them, forming and modifying hypotheses all the time. This will not only make the work considerably more interesting to do (which will make him more alert and accurate while doing it), it will also shorten it, as will be explained presently.

To do the collating he can either go to where the manuscript is and ask to see it (some libraries will require a letter of recommendation from an official-looking source), or obtain photographic reproductions. (In most cases writing to the library will produce the desired result; in cases of difficulty the Institut de Recherche (see above) may be of assistance.) Both methods have their advantages. By having the book in one's hands one is better able to appreciate external features of its format and to distinguish different hands that have made corrections; at a difficult place one can vary the angle of illumination as one likes, and be sure that one has as good a view of what is to be seen as it is possible to have. But occasionally things become clearer in photographs; and they have the very important advantage that one can easily refer to them again when some uncertainty arises after the first collation. Going back to the library is much more troublesome. Photographic copies may be broadly divided into full-size reproductions of various types, and microfilms. The latter are cheaper, and for most purposes perfectly adequate, but difficult to refer back to when one is away from a reading machine or projector (though it can be done with a good magnifying-glass), and for the same reason difficult to compare with one another. It is possible, however, to inscribe any requisite reference numbers on the margin of the film, using a fine pen and Indian ink.

The manuscript is compared with a printed edition word by word, and the differences written down. Some people write them in the margins of the edition, but even if the copy is interleaved this does not give one room for more than a few manuscripts' variants, and I usually use a separate notebook. It is essential in this case to record in writing which edition has been used for the collation, for if that is not known a collation loses much of its value. (One must bear in mind the possibility that one's collations will one day be used by someone else, and one must therefore make sure that it is clear in this and in all other respects how they are to be interpreted.) It is best to choose an edition which is light to travel with, will always be easily available, and keeps close to the paradosis (to minimize the amount of writing necessary); and to use the same one for each collation. Every effort should be made to prevent confusion between the collations of different manuscripts. If they are done into the printed copy, the best thing is to use different coloured inks²); in a notebook, the manuscript should be identified at the top of every page. Care must also be taken to avoid ambiguity about the location of the variant. In prose texts the lines should be numbered down each printed page and the numbers used for reference. If the variant is for a word that comes twice in the same line, or might be read as being for either of two similar words, it must be made clear which one is in question.

If it is decided not to record certain orthographical trivialities (e.g., in Greek, aspiration, or the presence or absence of ι subscript or movable ν), the fact should be stated. However, it is advisable to record orthographical variants fairly systematically, at least for portions of the text, for they can be of use (though not by themselves) in working out the details of a stemma, and they are not uninformative in themselves. Corrections and marginal or interlinear variants should be carefully recorded, with notes of whether they are due to the original scribe or in another hand.

²) Collations should always be in ink. If washable ink is used, beware of rain.

When collating in situ a manuscript that may be of some importance, it is a good idea to note the point in the text at which each page begins, for two reasons: one might then notice e. g. that an omission in another manuscript corresponded exactly to an opening of this one (which might confirm indications that it was derived from it); and if it is subsequently necessary to check the reading in a certain passage, it is easy to order a photograph of the right page.

It is useful to determine the manuscript's affinities if possible before actually collating it. If they are not already known before it is seen, they can often be quickly discovered with the help of select lists of readings peculiar to the different manuscripts and families. One or two such readings will prove nothing, but if (say) ten passages from different parts of the text are looked up and found to have the variants peculiar to a known branch of the tradition, it will be certain that a significant affinity has been found; further comparisons will then reveal its nature more precisely. If the manuscript is closely related to another that has already been collated, its own collation can be done more quickly and also more accurately by relating it to the other. One can write at the start "Where the line-number alone is given, the reading is the same as in Q", or "Has the same readings as Q except in the following places"³). But it is wise to tick or underline the readings in the collation of Q at the same time, as a precaution against later doubts. This forces one to look specifically for each Q variant, and it sometimes arouses suspicions – afterwards confirmed – that something in Q has been overlooked.

Should the manuscript turn out to be the exemplar from which Q is derived, it will only be necessary (except in isolated places) to underline those readings in the Q collation which it contains. Conversely, if it turns out to be an apograph, it will only be

³) If the relationship is known in advance, it is a great convenience to have the two collations drawn up in parallel columns. The first will need to be wider than the second.

necessary to note its additional errors and corrections. There will be little point in making a complete collation of an apograph; there is some point, however, in collating a portion of the text, to help determine its relationship to any other apographa that may be discovered. The same applies to manuscripts deemed unworthy of full collation for any other reason. The length of the text may make it advisable to investigate the whole tradition in the first instance on the basis of sample portions. If so, the portions to be studied should be taken both from near the beginning and from near the end, because it is not uncommon for a manuscript's allegiances to change in the course of a work.

So far I have been speaking only of the direct tradition. Ancillary sources too may call for research. An epitome or a translation has its own manuscript tradition. If the quotations have not been systematically collected, that may be something else with which progress can be made, by reading through the likely authors or consulting indexes to them. If they have been collected, it will still be necessary to look them up in the most up-to-date editions of the quoting authors, to verify the references and to see exactly what the textual evidence from that source is. Where such editions are suspected of being unreliable or founded on an inadequate basis, it may be worth the trouble to consult manuscripts of the authors.

Digestion

The processes of analysing the relationships of the various sources and evaluating the variant readings and conjectures have been described in earlier chapters. The editor is now at the stage when he can perform these operations in a more definitive manner. He is by now very familiar with his author, and it is desirable that he should be not much less familiar with any other authors who are particularly relevant because they are imitated by his author, or imitate him, or write in the same manner or on the same subjects. He completes, as far as possible, his reading of other scholars'

interpretations of the text and discussions of its difficulties. (In the case of major authors this is frankly impossible, the quantity of the secondary literature is too great. But one must do what one can, and try to pick out the grains from the chaff.) And then, in days of unhurried contemplation, preferably assisted by a word index or concordance, he decides what he is going to print in his text.

This involves more than just deciding which are the true readings and which problems must be left unsettled. Careful thought should be given to punctuation, which can be a great help or hindrance to following the author's train of ideas, and which is of course entirely a matter for the editor's discretion. Then there is the question of orthography. As a general rule it would seem most rational to impose consistently the spelling that the original author is most likely to have used (for which the manuscript tradition may not be the best evidence). It is true that he himself may have been inconsistent, and it may be argued that the best manuscript authority should be followed on each occasion. But this will be no reliable guide to his practice; we shall surely come nearer the truth by regularizing the spelling than by committing ourselves to the vagaries of the tradition.

The general rule, however, is subject to qualifications. No one would welcome an edition of Aeschylus in which the Choephoroi began

Ἡεῤῥμῆ γθόνιε, πατρῶι' ἐποπτεύον κράτε,
σοτῆρ γενῶ μοι γσύμμαχός τ' αἰτιομένοι,

and for early Greek generally one will use the standardized Ionic alphabet, although this sometimes means using different spellings for sounds that were originally written the same, and the same spelling for sounds that were originally written differently. In Latin there is not the problem of different alphabetic systems, but notions of the correct way to spell things were more fluid until the first century of the Empire, and here again (though with less justification) the convention has been established of presenting authors at least of the late Republic in the orthography of a some-

what later period. Late or vulgar texts raise other difficulties: it is often impossible to distinguish between the barbarisms of copyists and those of the original. In this situation, rather than impose a consistent system which can only be chosen rather arbitrarily, it is better to follow the *paradosis*, not under the delusion that it is at all reliable, but as the most convenient way of exhibiting it.

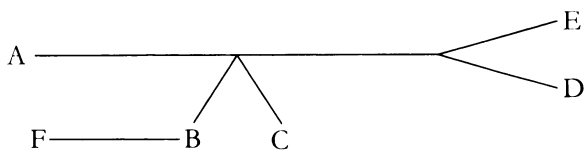
An associated problem that may face the editor is that of deciding what exactly it is that he is trying to constitute. A book transmitted to us may represent a re-working or rearrangement of older material, or the end product of several re-workings, and the editor must be clear which phase of its history he is restoring. Convention is inconsistent. Editors of Greek tragedies are agreed in trying to purge the texts of actors' interpolations, whereas editors of Homer do not normally mark as spurious passages of clearly secondary origin such as the *Doloneia*. The standard edition of Stobaeus rightly aims to show each passage not as its author wrote it but in the form in which the anthologist received it. Editors of the *Palatine Anthology* do not try to restore the arrangement of the older anthologies from which it depends. On the other hand they try to print the original text of each epigram, not the tenth-century text. These choices are sensible. They may be said to be based on the two principles of seeking the useful and not attempting the impossible.

In the case of a work that survives in more than one recension, the editor must either give each recension separately or choose one as a representative. He must not conflate them into a hybrid version which never existed (though he may use one to correct copyists' errors in another).

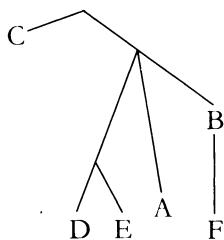
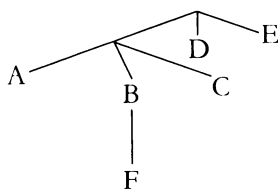
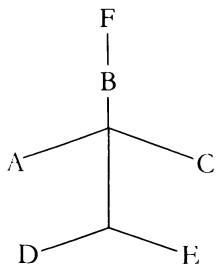
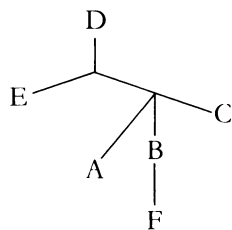
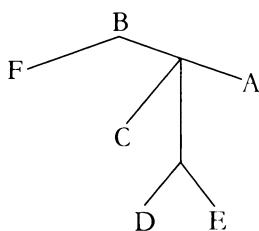
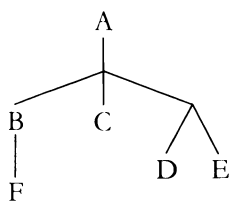
The use of computers

The possibility of using computers to help the editor in some of his labours has been discussed by Dom J. Froger, *La Critique des textes et son automatisation* (Paris 1968), chapter 5. It appears

that the time has not yet come when manuscripts can be collated automatically; machines have not yet been devised which can cope with the variations inherent in handwriting. If provided with suitably prepared transcriptions of the manuscripts, purged of coincidental errors, a computer could draw up a clumsy and unselective critical apparatus; and it could in principle – where there was no contamination! – work out an ‘unoriented’ stemma. That means, supposing that six manuscripts were related as shown on p. 32, that it could work out a scheme



simply by comparing the variants, without regard to whether they were right or wrong; but this scheme would be capable of suspension from any point, e.g.



The correct orientation could only be determined by evaluating the quality of the variants, which no machine is capable of doing. Since only a minority of textual traditions are closed, and these easily analysed by ordinary human wit, the very considerable trouble involved in submitting them to a computer does not appear worth while. At present, it seems, computers can serve us best by making concordances and the more unsubtle kinds of metrical analysis⁴).

2. Presentation

Prefatory material

It is the editor who is mainly responsible for the layout of his book, and he should take pains to arrange it as conveniently as possible for the reader – not only the reader who works through it from cover to cover, but also the one who only needs to consult it briefly, who is not deeply familiar with the text and its transmission, and wants to extract information quickly and easily.

Wishing to know what construction to put on what he finds in the critical apparatus, such a reader is likely to turn to the introduction, which should be so set out, with section- and page-headings, that he finds at once where the sources for the text are discussed. He may want to see what is said about a particular manuscript, and he should be guided to the place by some signpost: a separate paragraph-heading, bold type in the text, or, best of all, the siglum printed in the margin. He should then find the essential information; he is most likely to be interested in the date and general character of the manuscript, and its affinities. If it is found more convenient to discuss affinities after the account of the individual manuscripts, this too should be clearly signposted.

¹) On the use of computers in questions of style and authorship see K. J. Dover, *Lysias and the Corpus Lysiacum* (Berkeley & Los Angeles 1968), chapter VI; B. Fischer, *Journal of Theological Studies*, n.s. 21, 1970, 297–304.

If the conclusions of the discussion can be shown in the form of a stemma, a stemma should be printed; nothing makes them easier to locate or to comprehend. Quotations may not need to be discussed in the introduction, but sections should be devoted to sources such as scholia, epitomes, and translations. If the introduction is long, a list of contents is useful.

If a bibliography is provided, it should aim above all to inform the reader about the work of those editors and other scholars whose contribution is significant enough to have earned them a place in the critical apparatus. Ideally, whenever the reader finds a scholar named in the apparatus as having proposed an emendation or defended the paradosis, he should have the means to identify the relevant publication, so that if he wishes he can consult it and read the scholar's own argument. (In practice the editor must sometimes cite conjectures, mentioned by a previous editor, whose provenance he is unable to discover.) Publications that are only occasionally of importance can be specified in the apparatus itself; ¹⁾ those to which more constant reference is made are better listed separately. Editions are usually listed in chronological order, but other works should be arranged in alphabetical order of authors. If several books or articles by the same scholar are to be recorded, it is a good idea to number them, and the reference in the apparatus can then take the concise form 'Meyer³' or 'Meyer³ p. 268'.

Immediately before the text ²⁾ the list of manuscript sigla should be found, together with the explanation of any other unusual symbols or abbreviations used in the text or apparatus. It is a convenience if the manuscripts' dates are mentioned again here as well as their identities, and also their groupings, the limits of their content (if they do not contain the whole text), and page-

¹⁾ The abbreviations 'l.c.', 'op.cit.' are to be avoided unless the work has been named immediately before.

²⁾ 'The text' here includes ancient prefatory matter, Hypotheses, lists of characters etc.

references to the discussions of them in the introduction. For an example see Bethe's edition of Pollux, where however two criticisms can be made: the list could be clearer typographically, and it should have been printed in both volumes of text.

Choice of sigla

Manuscript sigla in current use should not be changed unless there is something particularly confusing about them (for instance, if the same manuscript has been given different sigla in different works of the same author). Where new sigla are necessary, the following principles can be observed with advantage.

1. For individual extant manuscripts, and only for these, use capital letters of the Latin alphabet. If there are not enough letters (though there should be, if the tradition has been analysed properly), one may resort to Greek capitals, or to e.g. Aa, Ab, or A_1A_2 ; it is best to avoid superior figures (A^1A^2), because they are commonly used for distinguishing hands in the same manuscript. In editions of Latin authors it is advisable to distinguish the siglum visually from the adjacent variant; this can be done by printing it in bold type, but a better typographical effect is obtained by using italic capitals. In Greek apparatuses either upright or sloping capitals can be used, only not both: to use A and *A* to mean different things would be to guarantee confusion and error. Letters with a mnemonic value should be chosen where possible, e.g. M = Monacensis; A = the most notable manuscript; T = Triclinius' copy. It is not necessary to assign sigla to manuscripts that are only cited in a few places.
2. Fragments of ancient copies, whether papyrus, parchment or ostrakon, are often given sigla like II, II⁶, II 25, \mathfrak{B}^{41} , which conveniently draw attention to their antiquity. The use of superior figures here is familiar enough to be acceptable, in spite of what is said above, and aesthetically it is preferable to full-size figures. It has the disadvantage, though, that other

qualifications such as 'ac', 'γρ' (see below, p. 93) cannot very satisfactorily be appended at the superior level.

3. For manuscript families or reconstructed hyparchetypes³), use lower-case Greek or Latin letters. It is best to use Greek letters in editions of Latin texts and vice versa. If Greek ones are used in Greek texts, they should be set from a different type found from that used for the variants themselves (as in Pfeiffer's apparatus to Callimachus' Hymns). Latin letters should be in italic, or, if not, bold.

The symbol σ or ω or Ω is often used to mean 'all the manuscripts'; this is better avoided, however, if other letters of the same font are being used for other purposes. The symbol ε (originally standing for 'Stephanus') is often used, especially in Latin editions, to mean 'one or more late manuscripts'.

4. Any sources of a different order should be represented by symbols or abbreviations of a different order. Thus the use of S for the Suda in the Budé Aristophanes is not very satisfactory beside R, V, etc.; Su would have been better. Σ is often used for 'scholia'.

The body of the edition: general layout

The text will occupy the upper part of the page. Where it is reconstructed from excerpts given by different sources, or where different recensions or versions in different languages have to be presented, they are in most cases most clearly exhibited in parallel columns or on facing pages. (Examples: W. H. Roscher, *Die Hippokratische Schrift von der Siebenzahl*; H. Diels, *Doxographi Graeci*; Damascius, *Vita Isidori*, ed. Zintzen.) Where this is unsuitable, they should be printed consecutively for each independent block of text, as e.g. in Hausrath's edition of the Aesopic Fables, where three recensions are printed, the page is not divided

³) The editor should make it clear which he means: whether *a* means 'A, B, C and D' or 'the exemplar from which ABCD are derived'. It makes a difference.

into three columns or horizontal layers, but each fable is given first in one version, then in the second, then in the third. With a more continuous text such as the *Life of Aesop*, it is better to print the recensions as separate wholes (as in Perry's *Aesopica*) than to interlace them chapter by chapter.

Below the text on each page will follow, in this order: any registers other than the critical apparatus (*testimonia*, etc., see below); the critical apparatus; and commentary or translation if these are to appear on the same page as the text. (The best place for a translation, however, is facing the text. As for a commentary, although there is clearly some advantage in having text and note on the same page, there is still greater inconvenience if the effect is to reduce the amount of text on each page to a few lines. If the bulk of the edition justifies printing the commentary in a separate volume, that is the handiest arrangement.)

With editions of fragments an alternative layout is possible, with the apparatus to each fragment following it immediately, before the text of the next fragment. (Example: D. L. Page, *Poetae Melici Graeci*.) This is quite unobjectionable so long as the fragments are short, but if they run over the page, and even more if they run over two pages, it becomes inconvenient, and the editor would be better advised to follow the normal arrangement, although it means a more complicated job for the printer.

The margins will be used for numeration. Sometimes they are also convenient for indications of manuscript attestation (below, p. 83), or of the sources of a compilatory work such as the *Suda* (see Adler's edition). The heading at the top of the page should be informative. If the volume contains more than one author or work, the reader must be able to see at once from the page-heading which one he has opened at. If a work is divided up in units that are liable to exceed a page in length – books, long chapters or fragments, groupings by subject or metre, years (in annalistic historians) – he again needs help from the page-heading. The left- and right-hand pages can be used to give different grades of information, and in addition section-numbers can be presented

as a ‘shoulder head’ at the inner corner. Here is an example from the OCT Hesiod, pp. 126–7:

(left-hand page)	ΓΥΝΑΙΚΩΝ ΚΑΤΑΛΟΓΟΣ sive ΗΘΙΑΙ [28–30]	(right-hand page) 30–31]	ΑΕΟΛΙΔΑΕ (section)
(title of poem)	(fragment numbers)		

The pages should be numbered.

Text

Both prose and verse should be printed in numbered lines. In verse texts the numbering will be continuous from the beginning of the poem, book or fragment; in prose texts it should start afresh at the top of each page and run to the bottom, except where the pages and lineation of an older edition have become established as the means of reference (as in Plato and Aristotle). Experience has shown that this is the most convenient way of correlating text and apparatus. The numbering should be by fives⁴). In the case of verse texts it will be the main means of reference, and it is best printed on the outer margins (i. e. to the left of the text on the left-hand page and to the right on the right), or else to the left of the text throughout (where there will be no interference from long lines; the numbers will be a constant distance from the verbiage). If an alternative numeration is to be printed too – which should only be done if it enjoys some currency – it should be in brackets or in distinctly smaller type. In prose texts the linea-

⁴) It is sometimes claimed that numbering every third or fourth line, instead of every fifth, makes it easier to find a reference. I disagree, believing that it is quicker to find one’s way from the simple stake-points 60 65 70 75 80 than from the more complex series 60 63 66 69 72 75 78 81 or 60 64 68 72 76 80. One does not need to think so hard about the individual numbers.

For the case where the accepted numeration reflects an obsolete colometry, see Barrett, Euripides: Hippolytos, p. 94.

tion will normally not be the common means of reference, and it will go on the inner margins, unless the outer ones are fairly free of other numbers. The more prominent position and type will be reserved for the conventional chapter- and section-numbers. Numbers should not have to be sought in the middle of a line; even if a new section begins there, the number should be in the margin. (The exact point of transition can be marked with a divider if there is any ambiguity.) Arabic numerals should always be preferred to Roman or Greek, except in the numbering of books (or of columns, in papyrus texts); where Greek numerals are traditional for that purpose, they should be accompanied by their Roman or Arabic equivalents. Care should be taken that numerals of different orders of significance are well distinguished typographically. Where it is necessary to note the pagination of an older edition as well as chapters and sections, it is helpful to add an initial; e.g. in K. Nickau's edition of 'Ammonius', '44 Va.' in the margin explains itself at once, whereas the figure by itself would have left one unsure and made one look somewhere else for clarification.

Established numerations should be retained as far as possible. If the editor decides that the usual division of paragraphs is unsatisfactory, he can change it without moving the numbers. If his study of the manuscripts has resulted in the discovery of additional sections or verses, he should give them numbers like '53a' which do not disturb the rest of the series. Snell's editions of Pindar's fragments give an illustration of how an inherited numeration can sometimes be adapted to accommodate new discoveries. It must be admitted that new numerations are sometimes necessary, but all too often they are made for frivolous reasons. The editor should ask himself whether a new numeration is really going to be convenient for the user, bearing in mind that he will continue to encounter references to the older system. If it is, it should be made as simple as possible.

Literary quotations and allusions in the text, including self-quotations ('as I have written elsewhere'), should be identified.

The references can be given in one of the registers below the text, or, perhaps more conveniently if the quotations are short and not too numerous, between brackets in the text itself. The same applies to dates given by an ancient author in Olympiads etc., which should be furnished with the equivalent in our reckoning.

Quotations should be presented in the form in which the quoting author gave them, so far as this can be determined, not adjusted to what we believe the quoted author wrote. Verse quotations should be printed as verse, unless the quoting author has destroyed the metre. Otherwise quotations should be distinguished as such, insofar as they are verbatim, by inverted commas or spaced type. Spaced type is particularly suitable for picking out verbatim elements in a loose paraphrase: see, for an example, Plato Protagoras 339–346 in the OCT edition.

Inverted commas (double ones in Greek texts) should also be used for speeches, except in those texts which, like drama, consist wholly of dialogue with no narrative framework. Here their place is taken by abbreviated speakers' names. These are normally put at the beginning of the line, but when there is a change of speaker within a verse one may adopt either of the following arrangements:

(a) Σω. φέρε νυν ἀθρήσω πρῶτον ὅτι δρᾶ τουτονί.

οὗτος, καθεύδεις;

Στ. μὰ τὸν Ἀπόλλω ἴγώ μὲν οὔ.

Σω. ἔχεις τί;

Στ. μὰ Δί' οὐ δῆτ' ἔγωγ'.

Σω. οὐδὲν πάνυ;

(b) (Σω.) φέρε νυν ἀθρήσω πρῶτον ὅτι δρᾶ τουτονί.

οὗτος, καθεύδεις; (Στ.) μὰ τὸν Ἀπόλλω ἴγώ μὲν οὔ.

(Σω.) ἔχεις τί; (Στ.) μὰ Δί' οὐ δῆτ' ἔγωγ'. (Σω.) οὐδὲν πάνυ;

The second may lead to lines so long that the printer has to break them anyway (which should be done at a change of speaker), but it saves space and makes line-references easy to find.

The following critical symbols have a place in the text. (They can of course also be used in the critical apparatus as convenient.)

() Besides being used for ordinary parentheses, round brackets are used for the expansion of abbreviations, e.g. *M(arcus) Cicero s(alutem) d(ixit) Ser(ui)o Sulpicio*.

< > Angle brackets enclose letters, words or passages added to the transmitted text by conjecture or from a parallel source. They can also be used with a blank space or *** or metrical symbols between them, to indicate the editor's belief that something has been omitted in the course of transmission (or the asterisks can be used alone). They should not be used to mark letters which an emender has substituted for something else; thus *qui*<*a*> should signify that the transmitted reading is *qui*, and where *quia* is an emendation of *quid* it should be printed without brackets⁵).

[] Square brackets have commonly been used for editorial deletions. But among papyrologists and epigraphists it is now firmly established practice to use them to mark off parts of the text lost through physical damage to the extant source; and since in practice no sharp line can be drawn between texts edited from papyri and other texts, it is highly desirable that square brackets be reserved for that purpose. When the number of letters missing can be estimated, it is indicated by the corresponding number of dots below the level of the line, [. . .]⁶), or by a figure, [-16-]. When it cannot be estimated, print [---] or [***], or, if the distance between the brackets indicates the size of the gap, [].

{ } Braces replace square brackets as the sign of editorial deletion. They can be used in combination with angle brackets to show that a transposition has been made, e.g. οὐ<χ ὅτι> τοῖς παρανομοῦσιν ἐπετιμήσατε {ὅτι} τὴν δίκην, but as this involves printing the transposed element twice it soon becomes cumber-

⁵) In some editions it would be printed *quia*. This rather ugly practice is now outmoded.

⁶) Grouping these dots in fives makes them easier to count; see e.g. Merkelbach-West, *Fragmenta Hesiodica*. Metrical symbols can be printed above the dots.

some if more than a word or short phrase is in question. Transpositions of verses should be shown simply by the line-numbers, as e.g. in the OCT Hesiod, pp. 5, 14, 23, 31. (Transposed lines should never be renumbered.)

[[]] Double brackets enclose letters or words that a scribe has deleted in the manuscript itself. If such letters can no longer be read, use dots as above, [. .]. The symbol |||, repeated for each letter, is also used for successful erasures.

‘ ’ These signs are used by papyrologists to enclose insertions by a scribe after he has made his original line. One could represent a scribal alteration of δε to τε by [[δ]]'τ'ε, but it is more elegant to print simply τε and note in the apparatus 'δε ante corr.'; if the reader fails to consult the apparatus, that is his fault.

┌ ┘ Half brackets are a logical modification of full square brackets. In papyrus texts they indicate that the papyrus itself is broken or worn away but that the supplement is supplied by another source and is not conjectural. In other texts, by extension, they can be used to show the absence of a particular source, whether because it is damaged or because it has a shortened version of the text. They might well be used, for instance, in a text of Nonnus' *Dionysiaca* to show which letters are preserved in the Berlin papyrus, or in one of Athenaeus to show how much is attested by the epitome. Complications, arise, however, if there is more than one of these intermittent sources. ┌ ┘ can be used for a second one, and Bethe's *Pollux* shows how more elaborate information can be conveyed; but it may be wondered whether such feats of typography are often worth while, especially when they endanger the legibility of the text.

† † Obeli mark words which the editor judges to be corrupt. If only one word is suspect, only one obelus is needed: *subsidiis magnis †epicuri constabilitas*. If the editor cannot limit the corruption to one word, he places his two obeli so as to define the area within which it is to be sought: *declinare quis est qui †possit cernere sese†*.

αβγ Dots under letters indicate that they are uncertainly deci-

phered⁷). They are mainly used for papyri and inscriptions, but there is no reason not to use them generally. They are not easily combined with subscript iotas, so adscript iotas should be used in texts where dotted letters are needed.

The use of metrical signs to guide the reader where there may be ambiguity is not to be scorned. Snell's editions of Pindar and Bacchylides are a model in this respect. Besides giving the metrical scheme at the beginning of each song, he helps us to read without constantly consulting it, by printing e.g. *τειζέων, τε κ' λυτάν, ποντόμεδον ἐβόων, ἀπὸ ῥίζας, παϊάνιζαν*⁸). Some editors of Plautus and Terence print ictus-marks, and they might well go further in signalling unclassical prosody⁹).

Between the text and the apparatus

There are some kinds of information that are best presented in a separate register or registers above the critical apparatus. Scholia, in those cases where they are sparse enough to be conveniently printed with the text, should go immediately below it. Then the sources for the text should be specified insofar as they are variable. If different manuscripts are available for different parts of the work, different poems in a collection, etc., the details should be shown on each page in whatever is the most suitable form for the circumstances.

Here are a few examples.

⁷) When the trace cannot be identified at all and the space above the dot is blank, one should insist on the dot remaining below the level of the line, to distinguish it from a full stop.

⁸) His use in the fragments of the symbol ⊗ (corresponding to the ancient coronis) to mark the beginning or end of a song is also commendable.

⁹) Why should we not, indeed, revive for classical Latin texts the apex (´) with which the Romans themselves, for about three centuries from the age of Sulla, found it convenient to mark long vowels? We would not use it for every long vowel (nor did they), but it would be very useful for forms like ablative *naturá*, accusative plural *cuís*, and for advertizing hidden quantities in such words as *νόσ*, *δίσι*.

(Pindar, ed. Snell) V, BEFGH = v; EFGH = β, GH = γ. Printed in the critical apparatus at the beginning of the ode. The value of the collective symbols v β γ and the separate status of V are conveyed to save the reader turning to the prefatory pages.

(Eur. Hipp., ed. Barrett) codd.: (446–59 K) MBOA V (469–74 H) CDE L. Printed above the apparatus page by page. HK are available for the passages stated, the rest for the whole page. The manuscript groupings are indicated by spacing.

(Menandri Sententiae, ed. Jäkel) 864 K || 865 εI' || 866 δ || 867 εI' || 868 K || 869–870 U || 871 υ I' || 872 υ I' || 873–875 I' || 876–877 υ.

(Ammonius, ed. Nickau) 1–8 om. ρ || 9–12 om. Mρ || 13–14 om. ρ || 15–17 om. Mπ.

(Petronius, ed. Bücheler) L, LO, etc., printed in the margin of the text at the top of each page and whenever the attestation changes. This is a satisfactory alternative to the position below the text provided that only a small number of sources have to be named. Drachmann uses it in his edition of the scholia to Pindar; it is more usual in editions of scholia to specify the manuscripts at the end of each scholium or alternative version thereof, as in Schwartz's edition of the Euripides scholia. See p. 98.

Quotations by later writers should be specified, and allusions or imitations at least where they provide evidence of the text read. Allusions etc. should be distinguished by 'cf.' or 'respicit', 'imit.'. If one of the writers mentioned is dependent upon another, this should be remarked (see e.g. Pfeiffer at Callim. Hymn. 3,180). Some editors give not only the reference but an extract from the context in which the quotation appears (e.g. Rzach in his big edition of Hesiod), and this is often a help in assessing its value for the text. But it is also possible to indicate the reason for the quotation, where it matters, much more briefly. Here, for example, is a testimonium on Pindar Ol. 2,45 (τιμώμενος, Ἄδραστιδῶν θάλος ἄρωγόν δόμοις) in the full and in a shorter form.

(a) 45 Et. Gen. 47,7 Cal. = Magn. 18,48 Ἄδραστειδῶν Ἄδραστος κύριον, Ἄδρασιτίδης, Ἄδραστιδῶν καὶ πλεονασμῶ τοῦ ε Ἄδραστειδῶν, οἶον “Ἄδραστειδῶν θάλος”.

(b) 45 Ἄδραστειδῶν (-ει- disertim) 0ζλζ Et. Gen. 47,7 Cal. = Magn. 18,48.

However, as the reader's attention will have to be drawn to the unmetrical variant in the apparatus if at all, all that is really necessary is: 45 Ἄδ. 0. Et. Gen. 47,7 Cal. = Magn. 18,48. In the apparatus he will find something like: 45 ἀδραστειδ- codd., Etym. disertim: corr. Tricl.

It sometimes happens that a piece of text extending over several pages is copied out by a later writer. It is helpful to the reader in such a case to give the appropriate reference on each new page. The same applies to the converse situation, where the author being edited has copied out a long passage from an earlier writer (who thereby becomes relevant to the constitution of the text in the same way as a quoter); and similarly where he has reproduced the substance of such a passage in his own words, and again where he and another writer are evidently following the same lost source¹⁰). Such parallel texts should be distinguished from direct quotations by 'cf.', at least if there is any danger of ambiguity: in some authors there will not be. The decision whether to print the references to sources, parallels, imitations and quotations in separate registers must likewise be governed by the particular case. Rzach's big Hesiod is a successful example of elaboration, with its four separate registers below the text: *Homeri loci similes*, *Poetarum (ceterorum) imitationes et loci similes*, *Testes* (i. e. quotations and allusions), *Varia lectio*. By contrast, Maass's Aratus shows how sources, parallels and testimonia can all be noted in the same register without unclarity, with the help of the sign § and 'cf.' Some editors go further and incorporate them in the critical apparatus, to the detriment of its perspicuity; this procedure cannot be recommended.

Before discussing the particular problems of the critical apparatus, I should deal with certain aspects of layout which are common

¹⁰) For an example of the technique see Mras's edition of Eusebius, *Praeparatio evangelica*.

to it and the other registers. Reference to the text is made by specifying the line of verse, or in prose texts the line of the page (except in cases like Plato)¹¹). If several items refer to the same line, the numeral is not repeated. Sometimes further precision is called for. Suppose a quotation only covers part of a line; then one must put: 636 (-ἔκελοι) Et. M. s. v. θυάδεξ (meaning line 636 as far as ἔκελοι); 554 (πολ.) – 555 (πύδ.) Et. M. s. v. τέργω. In the critical apparatus the information to be conveyed will usually be sufficient for the identification of the word or phrase in question; where it is not, brackets may again be used, e.g. 1096 (δὲ) τε L, or a colon, 1096 δὲ: τε L. A square bracket has most often been used for this purpose, 1096 δὲ] τε L, but as it is sometimes necessary to use square brackets for reporting readings from papyri and other damaged manuscripts, it may be better to avoid that. If δὲ occurs twice in the same line, one must be sure to make clear which is meant: 1096 δὲ prius: or (δὲ¹).

Separate, non-overlapping items are parted from each other by a broad space (as in the OCT series) or by the divider-sign || (as in the Budé series; similarly in modern Teubner editions except that a single vertical stroke is used between entries relating to the same line). Spaces have the theoretical drawback that they disappear when the second item begins at the beginning of a line of type, though in practice confusion seldom arises, and can be avoided by care at the proof-reading stage. Overlapping items in the critical apparatus should be treated in the same way, where the points at issue are unconnected (e.g. 717 *πάντας γνώμην τούτην* codd.: *τούτην γνώμην πάντας* Stob. *ταύτη Bergk*); overlapping items in the quotations-register are perhaps better linked, e.g. 371–2 + 374 sch. Pind. O. 7,72; (-γείνατο) Ammon. s. v. *ἡμέρα*, Eust. in Hom. 1527,57; 371–2 (-Ἡῶ θ') sch. Eur. Tro. 855;

¹¹) The line-number is often printed in bold type, but it stands out perfectly well in ordinary type, as users of the OCT volumes can see. When the numbers run in more than one series, the series-number must be in bold and the line-number in light face, see the OCT editions of Hesiod (fragments), Plato, Aristotle.

371 + 374 sch. Pind. I. 5,1; (-γείνατο) sch. Eur. Ph. 175; 371 sch. A. R. 4,54.

Items in the apparatus that are physically separate in their reference but interdependent should normally be brought together, e.g. Soph. Tr. 1021–2 ὀδυνᾶν . . . βίετον Musgrave: ὀδύναν . . . βίετου codd., rather than 1021 ὀδυνᾶν Musgrave: ὀδύναν codd. 1022 βίετου Musgrave: βίετον codd.

The critical apparatus

Critical apparatuses have more than one use. The most essential one is to inform the reader which parts of the printed text depend on emendation and which parts are subject to uncertainty. But apparatuses are also what most people depend on for instruction about the character of particular manuscripts and scribes, and of manuscripts and scribes generally. Unfortunately, the more fully an apparatus caters for the latter need, the less handy it is for the former; the important variants have to be discerned amid crowds of unimportant ones¹²). The editor must decide what principle he is going to follow, and select his material accordingly.

A few basic rules can be laid down:

1. The readings of apographa and other manuscripts which seem to contain nothing of independent value should be omitted, except where the exemplar is illegible or where an interesting emendation is involved.
2. Variants of a merely orthographical nature should be omitted unless they represent real alternatives (οἰκῆσαι : οἰκίσαι), or unless manuscript evidence is relevant to the choice.
3. Worthless conjectures should be passed over in silence; more precisely, conjectures which are not only unacceptable but also

¹²) A device sometimes employed is to relegate the less important ones to an appendix; see e.g. Kenney's OCT edition of Ovid's *Amores* etc. One might also pick out the main ones in larger or heavier type.

fail to suggest a new and plausible line of approach to the problem¹³).

4. Anything from any source (including scholarly conjecture) that may either be or point towards the true reading should be reported.

The apparatus should be in Latin, which has proved itself the most convenient for the purpose (except for papyri and inscriptions, see p. 94). Names of scholars and periodicals should not be latinized. In editions of Latin authors italic type is used except for the variants themselves, the line-numbers and the punctuation. The material is arranged on the following principles. Each entry begins with a specification of the place in the text which is in question, unless it is the same as for the preceding entry (see above, p. 85). The reader is already given one reading by the text itself. If it is not a conjecture, he can usually infer which sources attest it by elimination of those quoted for other readings, so it is not necessary to mention it in the apparatus (so long as it is clear which word or words the entry refers to)¹⁴. If it is included, it should be put first, unless it is represented by the formula 'corr. Haupt' (which has its place after the transmitted reading(s) and before any further conjectures that are to be mentioned). Alternative readings follow, in this order of precedence: direct manuscript tradition; indirect tradition (testimonia etc.); conjectures in order of merit. The editor ought to have a regular order to name the manuscripts in¹⁵), but he should depart from it whenever the

¹³) Conjectures that have been confirmed e. g. by a papyrus deserve to be recorded as such, for the honour of their authors and as evidence that emendation is a worthwhile endeavour.

¹⁴) An apparatus which regularly leaves the reading of the text to be understood is called 'negative'. There is no need for the editor to make a firm decision between the positive and negative apparatus; different treatments may be convenient in different places. A negative entry rather suggests an aberration, and I would recommend using a positive one where the rejected variant is well attested or judged worthy of consideration as a serious alternative.

¹⁵) He will naturally group cognate ones together.

logical connexion between variants is better brought out by a different ordering. Similarly he may find reason to couple a quotation-variant with one of the manuscript readings, or to place two conjectures together irrespective of the order of merit.

The variants and conjectures presented ought properly to fit the same hole in the text. Thus the variants at Ar. Ach. 121 mentioned on p. 52 must not be presented like this:

121 ἡμῖν ἤλοεζ R Suda: ἤλοεν A: ἤλοεν ἡμῖν Γ

That implies falsely that ἡμῖν is omitted by A. “ἡμῖν ἤλοεν Α” should have been written. However, strict adherence to this rule would sometimes involve excessive repetition, and I confess that I sometimes break it if I think there is no possibility of confusion, particularly when reporting conjectures, as at Archil. 122,4. (λάμποντος λυγρόν) λαμπρόν, τοσοῦτον Mähly: ὕγρόν Valckenaer: ὠγρόν Bentley, etc. Minor variations on a reading can be given in brackets:

Δημῶναξ σὺ δὲ Bergk (σοὶ Welcker, εἶ Boissonade): δημωναξιοιδε A etc.

Or, if they are of similar status, they can be separated by a mere comma instead of the colon which normally separates alternative readings and expresses their opposition to each other¹⁶). Thus

τ' A, θ' B: δ' C

indicates that the choice is really between two alternatives (τε or δέ), not three. In a negative entry, where the choice is not really between the readings in the apparatus at all, it might be better to avoid colons and to use commas or semicolons.

¹⁶) There is some variety of usage on this matter. Modern Teubner editions do not use colons; the Budé series uses them only after the first reading, the one in the text; similarly the Corpus Paravianum, but with commas after the second and subsequent readings, thus:

539 Metanira *Heinsius*: melanira U, metania IG¹, menalia A0, menalca D etc. The question is not important, but the system that I recommend is the most flexible and expressive.

A transmitted reading should be quoted in the form in which it appears in the source, obviously. But this rule too is subject to qualifications. It is not necessary or customary to print the readings of pre-minuscule manuscripts in capitals. (Ziegler's edition of Cicero, *De re publica*, however, reproduces the uncial script of the Vatican palimpsest to pleasing effect. This kind of fidelity is particularly helpful when corrupt Greek appears in a Latin text, cf. p. 27) One will write “*Ἡβην Ἡ*¹⁸ codd.” even though the papyrus has no accent or breathing; if its reading is being given by itself, on the other hand, one might as well be exact and write “*Ἡβην Ἡ*¹⁸“. Abbreviations in manuscripts need not be reproduced unless they are ambiguous or help to explain the origin of another variant. Sometimes there is good reason for the editor to make an abbreviation of his own: in reporting variations of word order, *aequo animo ferre nemo* T: *nemo* ae. an. f. E: ae. an. n. f. δ; in dealing with long words,

μεταφρασόμεθα: -*μεθα* D,

which, besides saving space, focuses attention on the variant element; and to avoid making a statement about part of a word in which unimportant variants exist. For example, suppose the whole truth is

affirmasse A: *adfir-masse* BE: *affirmauisse* C: *adfirmauisse* D,

one may save space and at the same time clarify the two issues by printing

aff- AC: *adf-* BDE *-asse* ABE: *-auisse* CD,

or simply the second divergence if the first is not thought worth reporting. But however insignificant the first is, it should not be disregarded to the extent of printing

affirmasse ABE: *-auisse* CD,

which involves a positive mis-statement. It would be better to put

affirmasse (*vel* *adf-*) ABE: *etc.*

Also to be avoided is

affirmasse A: adf- BE: -auisse CD,

where it is not clear whether CD have *aff*²- or *adf*-.

In general, abbreviation of readings should be kept within modest bounds. Too much of it will cause the reader bother.

The same applies to abbreviation in the editor's own Latin, though familiar abbreviations like *om.*, *add.*, *ci.*, *transp.* are preferable to their full forms. Scholars' names should be abbreviated sparingly; it is all right when they are long and famous (*Wil.*) or of frequent occurrence in the particular apparatus (that to Quintus of Smyrna, for instance, is full of *Rhodmann* and *Zimmermann*, who have a good claim to be shortened), but the casual user of the edition does not want to have to turn to the list of sigla for an explanation of *Bk.* or *Hu.*¹⁷). Especially to be deprecated is the use of abbreviations which do not suggest a human being at all, for instance *c* = Cunaeus, *g* = Graefe. The incautious consulter of the edition will certainly think that readings so labelled have some sort of manuscript authority, and he may not feel he has anything to gain by foraging in the introduction for codicological details¹⁸).

The basic information to be given about each reading is its source. This is done in the ordinary case simply by placing the appropriate sigla or name after the reading¹⁹). If the editor wants to emphasize his confidence in a conjecture which he has adopted,

¹⁷) The misleading practice of omitting a full stop with abbreviated names ('Dalec' = Dalecampius) should be eschewed.

¹⁸) Scholars' initials can also be mistaken for manuscript sigla. In my apparatus to Theognis I have written 'Otto Schneider' to avoid confusion on the one hand with J. G. Schneider and on the other with the manuscript O.

¹⁹) The statement of sources of a transmitted reading should not be augmented by names of editors or critics who have approved it. Similarly with conjectures, only the original propounder should be named, with the place of publication if necessary (see p. 73). There is no point in inserting 'ci.' (conecit) except where an emendation has to be distinguished from a decipherment of a difficult manuscript.

he can transpose “iunxerunt *Heinsius* (or *scripsi*): iunxerunt *codd.*” into “iunxerunt *codd.*: *corr. Heinsius* (or *correxi*, or *emendavi*)”. (The difference of meaning between ‘*corr.*’ or ‘*em.*’ and ‘*ci.*’ deserves more respect than many editors give it.) Omissions, additions, etc. are shown thus:

(i) Omission by a source.

672 om. b (i. e. the whole verse is omitted).

672 *deest* in b (carries less suggestion that b is at fault).

11 ab exitio urbium *om.* L (or *deest* in L).

(ii) Expunction by a scholar.

11 qui omnis hominis scit nomen *del. Rumpelstilzchen.*

If the deletion has been marked in the text by brackets, all that is needed is

11 qui – nomen *del. Rumpelstilzchen*, or

11 { } *Rumpelstilzchen.*

‘11 *del. Rumpelstilzchen*’, however, may be misleading, at least in a verse text, since it gives the impression that a whole line has been condemned.

(iii) Extra words in a source.

9 *post aliquando verba* scilicet *post resurrectionem mortuorum habent* MN.

(iv) Words added by conjecture²⁰).

25 *natam post fortunatam add.* (or *rest.* or *suppl.*) *Gandalf*,
or

25 *fortunatam* <*natam*> *Gandalf*.

If a lacuna is marked in the text by < >, all that is needed is

25 <*natam*> *Gandalf*.

²⁰) Conjecture by the copyist of a manuscript will be treated in the same way as conjecture by a modern critic.

If <natam> is accepted in the text, all that is needed is

25 *suppl. Gandalf*, or < > *Gandalf*.

(v) Transpositions.

26–8 *illud tibi – non uenerint post p. 31,10 nostra transp. Bartsch*

1 *arma canoque uirum Eigenwitz.*

Where the transposition is adopted in the text:

10–12 *illud tibi – non uenerint ante p. 30,28 quaedam habent codd.: transp. Bartsch.*

1 *uirumque cano codd.: transp. Eigenwitz.*

Where the fact of transposition is shown in the text by the verse-numbers or by the combination of < > and { }, all that is needed is

213–4 *transp. Hermann*

16 *ῥῆι transp. Koraes.*

If a verse has been transferred some way from its transmitted position, the reader will notice a gap in the numeration without immediately being able to see the reason for it. This calls for a note in the apparatus such as ‘1136 v. post 1158’. (A note is also called for if the numeration is discontinuous for any other reason, e. g. after Catullus 17.)

Mention may here be made of a more laconic style of apparatus favoured in particular by Wilamowitz. Here is a specimen from the Choephoroi.

(Text)	(Apparatus)
900 πῶν δῆ	δαί: Auratus (i. e. δαί cod.: corr. Auratus)
906–7 bracketed	906,7 del. Berlage
908 σὺν δέ	σὺν Auratus: ῶν
915 ἀλῶς	διγῶς: Wil

(He might have written ῶν: Auratus in 908, but felt that the reader might then hesitate before deciding that σὺν was the word

in the text that had been substituted for $\nu\tilde{\nu}$.) The system has not won much acceptance, and it seems that most people prefer things to be a little more explicit.

The choice of sigla has been discussed on p. 74. Often a qualification is needed, such as 'before correction', 'over an erasure', 'by a second hand'. Here one may use an abbreviated Latin phrase in ordinary type on the line: *ante corr.* (or *a. c.*), *in ras(ura)*, *m. sec.* (or *rec.*); or more compressed compendia at the superior level: A^{ac} , A^r , A^2 . (With a papyrus called Π^9 , however, one will have to revert to ' Π^9 m. rec.' or ' Π^9 m²'). These must be explained in the list of sigla. Care must be taken to forestall confusion over the referents of these qualifications; the comma is the simplest way of making clear what is to be taken together. For instance, instead of 'A γρ. D' write 'A, γρ. D' or 'A γρ., D', whichever is meant; instead of 'AD^{ac}G' write 'A^{ac}D^{ac}G' or 'AG,D^{ac}'²¹).

Superior type is also useful when there is variation between different manuscripts of an indirect source. At Theognis 724 $\gamma\acute{\iota}\gamma\nu\epsilon\tau\alpha\iota$ for $\gamma\acute{\iota}\nu\epsilon\tau\alpha\iota$ is given by p and by cod. A of Stobaeus. ' $\gamma\acute{\iota}\gamma\nu\epsilon\tau\alpha\iota$ p Stob. A' might well lead to confusion, since the most important manuscript of Theognis is also known as A. 'p, cod. A Stobaei' is safer but cumbrous; 'p Stob.^A' is better than either.

To embark on discussion of the merits of variants will rapidly enlarge and obscure the apparatus. But when a telling point can be made with a couple of words or mention of a parallel, there is every advantage in making it. To point out, for example, that a certain omission is explained by homoeoteleuton may save the reader from the temptation to attach some greater significance to it, and the editor himself from the need to refer to it in his commentary. To indicate the reason for a conjecture may be to avoid mystification or impetuous scorn. The apparatus is not unsuitable for an interpretation of a difficult phrase, either, even if there is to be no mention of an alternative reading. The resolu-

²¹) Commas or spaces can also be used to remind the reader of the manuscript groupings.

tion of an obscurity is a contribution to the examination of the soundness of the text.

Some special types of edition. Papyri, inscriptions

Editions of papyrus texts and inscriptions fall into two classes which may be described as 'scientific' and 'literary'. The first is particularly appropriate to the first publication of a new text (which should be accompanied by a photograph) or to a revision carried out on the original. It reproduces the formal layout of the original and conveys an accurate picture of its whole appearance. It preserves its alphabet (without necessarily imitating its letter forms) and records its spelling, its punctuation and its lection signs, marginal additions, etc., in the apparatus if not in the text. Modern reading signs may be introduced provided that they do not obscure ancient ones; ἡ Φράτρα τοῖς Φαλείοις. πατριὴν θαρρῆν καὶ γενεὴν καὶ ταύτῃ may be printed without risk that anyone will suppose the inscription to be furnished with accents and long signs, but with a papyrus that has some accents the simplest way to communicate the details is to print them as they are. Where there are difficulties of decipherment or interpretation, the method of 'diplomatic' transcription may be recommended²²). A completely objective transcription that adds nothing to what is visible on the original is printed together with an interpretation of it, e.g.

τέμενοςμ[]γακαί[τέμενος μ[έ]γα καί[
πλατυ,πιςτόναπασι . . [πλατύ, πιςτόν ἄπασι . . [
ιδρυαα(θ)εφρενωῶν[ἰδρύαα(θ)ε φρενωῶν ὕπ[
περιδαυτοδικαιων[περὶ δ' αὐτό δικαίων[

The apparatus includes a careful description of doubtful letters, or an indication of the different possibilities. This goes beyond the ordinary range of apparatus Latin, and it may be better if the editor uses his own language; compare the English palaeographical

²²) See E. G. Turner, *Greek Papyri* (Oxford 1968), p. 71. The system might also be used for a text which depends on one fairly corrupt medieval manuscript.

notes in recent volumes of the Oxyrhynchus Papyri with the Latin ones in Lobel and Page, *Poetarum Lesbiorum Fragmenta*. Reference is by column and line. It is customary to use Roman numerals for column-numbers.

In what I call literary edition of a papyrus text or inscription, less attention is paid to the layout of the original. The text is presented more as any other piece of prose or verse would be; there is less emphasis on the physical copy and more on the composition itself. The difference between this and the more interpretative sort of 'scientific' edition is illustrated by the text of the first Delphic Paean as given on p. 141 of Powell's *Collectanea Alexandrina*, in comparison with that on pp. 142–4. The lines are redivided, and melodic spellings like *ταασδε πετερας* eliminated. This kind of edition is suitable for a literary work such as Aristotle's *Constitution of Athens*, or a play of Menander, where numeration by chapter or verses takes the place of column and line²³). The apparatus too will be more like that to an ordinary text. There will be no need to record details like accents in a papyrus, except where they affect the interpretation. Anyone with a special interest in them will naturally turn to the original, scientific publication, to photographs, or to the papyrus itself.

The distinction between scientific and literary edition is of course not absolute. Their characteristics can be blended in different ways, and something between the two may be what is most suitable in a particular case.

Fragment collections

Special problems are involved in editing the fragments of lost works gathered from references by other authors. The first question is what to include. Some editions include only verbatim quo-

²³) So long as reference is by the lines of the scribe or stonemason, it is better to reproduce this lineation than to have to mark it by a system of dividers, as is done e. g. in Dittenberger's *Sylloge Inscriptionum Graecarum*: that makes it a slow business to find a line-reference.

tations, but it is arbitrary to make this a principle; a statement that the author told such-and-such a story, for example, may be far more valuable than an uninformative verbatim fragment. If the editor wishes to publish only selected fragments, let him make his selection in some sensible way. If his collection is meant to be complete, he must include testimonia – not biographical statements about the author or aesthetic judgments on his work, but everything that helps to compensate for the loss of the work by supplying evidence about its form or contents.

The sources for each fragment must be specified, and in many cases something of the context in which a quotation occurs must be given in order for the reader to orient himself. The most straightforward form of presentation is to print the fragment surrounded by its context (but picked out by larger or spaced type as appropriate) and preceded by the source-reference. Examples: Merkelbach-West, *Fragmenta Hesiodica*; Jacoby, *Fragmente der griechischen Historiker*. If several sources give the fragment in different contexts, it may be abbreviated after its first appearance, as in *Hes. fr.* 205. Dependence of one source on another should be indicated, as in *Hes. fr.* 62, 126, 170.

An alternative format often adopted consists of printing the fragment in isolation and the sources and contexts somewhere below. Examples: Diehl, *Anthologia Lyrica Graeca*; Pfeiffer, *Callimachus*. This gives the page a tidier appearance, but makes it harder to read the fragment in its context. It is useful as a variation on the first system when the fragment is not given complete by any source but is a reconstruction from two or more; see e.g. *Archilochus fr.* 5 or 43 in my *Iambi et Elegi Graeci I*. The latter fragment will also serve to illustrate how different sizes of type may be used to distinguish more important from less important sources.

Fragment-numbers should be printed prominently above the fragment or in the left-hand margin; in the apparatus they should be in bold type to distinguish them from line-numbers, in the case of verse fragments, but in an edition of prose fragments (unless,

they are very short) it is better to use the lineation of the page for reference as in an ordinary prose text. If alternative numerations are to be given, they may be added in brackets after the main number in the text (as in Page, *Poetae Melici Graeci*) or in the apparatus (as in *Fragmenta Hesiodica*), or reserved for a separate table. There must also be a table for converting the old numeration to the new. People will more often want to trace an old-style reference in the new edition than vice versa.

For remarks on the position of the apparatus on the page, see p. 76. In many cases it will be necessary to cite in the apparatus manuscripts of numerous different authors. The more often the reader can be given a brief note about their relationships, the more intelligently he can use the apparatus. For examples see my *Iambi et Elegi Graeci I. ix–xi* and the apparatus to *Archil. fr. 115, 122, 129*.

Scholia

Most bodies of scholia exist in different recensions. These should be edited together, not in different volumes or parts of a volume, nor on the other hand conflated into a hybrid text, but each distinct version of each scholium consecutively. (Minor variations of wording in individual manuscripts do not constitute a ‘distinct version’.) Each of these items should start on a new line. Unless it begins with a linking-formula such as ἄλλως, it should be prefaced with a lemma indicating which piece of text is the subject of the comment. This may or may not be transmitted in the manuscript(s). If it is not, it should be supplied by the editor in brackets²⁴). A long supplied lemma may be abbreviated, e.g. *Iliad* 1,13–16 (λυσόμενος – λαῶν). The lemma should be printed in bold or spaced type. It will itself be preceded by the reference of the chapter, section or verse from which it comes, unless this

²⁴) Round brackets, as used by Drachmann in the Pindar scholia, are more appropriate than angular ones, since the supplement is of something understood rather than omitted in error.

is the same as for the preceding item. Some editors distinguish by a series of letters the several scholia included in the same reference, whether or not they refer to the same lemma, e. g.:

- Pind. Ol. 3,12 a. (πράσσουντι:) ἀπαιτοῦσι. B^{g1}
b. θεόδματων χρέος: ἤ τὸ ἀπὸ θεῶν μεριζόμενον ἢ τὸ εἰς θεοὺς μεριζόμενον. A
c. θεόδματων: τὸ εἰς θεοὺς πεποιημένον. λέγει δὲ τὴν ὠδήν. B^{g1} (C),
DQ (→ 17).

It is a good idea. The lines of the page will also be numbered in the inner margin, as in a normal prose text, and this numeration used in the apparatus.

The manuscript sources for each item are best stated at the end of it, in the text, as shown in the example just given. The parenthesis after DQ (which are marked off by the comma after (C)) informs the reader that in those manuscripts the scholium is followed by the one on verse 17; such dislocations are common, and though they should be corrected, intelligibility sometimes depends on their being recorded. The outer margin can be used for indications of the scholium's origin in cases where it can be inferred. Example: Erbse, Scholia Graeca in Homeri Iliadem.

Grammatical material in scholia, especially to Greek poets, is often closely cognate with material in scholia to other authors or in etymologica etc. The parallels should as far as possible be sought out and cited in a register above the apparatus. Examples: Drachmann, Erbse, opp. citt.; Wendel, Scholia in Apollonium Rhodium.

Indexes

What kinds of index are required will depend on the nature of the text and the degree to which satisfactory indexes have already been published. The most usual sorts are the index of proper names, the index of authors quoted or alluded to, the index of subjects (in a work of a didactic nature), and the general index of words. In an edition of fragments, besides the numeration-con-

cordance mentioned above, an index of the sources is useful – papyri, quoting authors etc. Indices non sunt praeter necessitatem multiplicandi. There is seldom any advantage and often some disadvantage in separating the proper names from the index of words, for instance; and while Drachmann deserves benevolence for his anxiety to help the user of his Pindar scholia, the user for his part needs some persistence if he is to find what he wants amid the fifty-two alphabetical sequences at the end of the edition. Page-headings should be used to make clear which index each page-opening belongs to.

In an index of proper names, the entries are best given in the same language as the text, and in the nominative case, unless some special interest attaches to the case-forms. Different bearers of the same name must be distinguished, and some closer identification is always useful, e. g.

'Αρχέλαος (ἱστορικός)	L. Arruntius (historicus, cos. 22 a. Ch.)
'Αρχέλαος (RE 34) ²⁵	Asellius(? Sabinus; cf. PIR ² , A 1213)
'Αρχέλαος (Μακεδονίας, RE 7)	(T. Pomponius) Atticus.

If there are many references, it is a great help to the user to classify them and give an indication of what each passage is about.

In the case of a prose work the editor should consider whether references by page and line of the edition are not more convenient for the reader than references by book, chapter and section. (It should be said in favour of the latter that they can be used in conjunction with a different edition, to save turning pages backwards and forwards while looking up a series of references.) If the references consist of more than one numeral, it will make for clarity to separate adjacent references by a semicolon rather than a single point. But '36,26; 36,29;' should be abbreviated as '36,26.29;' not

²⁵ I. e. the 34th holder of the name in Pauly-Wissowa. The examples are from the OCT editions of Diogenes Laertius and Seneca's Letters.

‘36,26;29;’. ‘1,2,1; 1,3,3; 1,3,5; 1,6,7;’ may be abbreviated as 1 2,1; 3,3.5; 6,7;’.

An index of authors can be combined with an index of names, as in the OCT edition of Gellius. It should list the passages quoted or alluded to in order, with a note of the edition used if necessary, e. g.

Epicurus ed. Usener

fr. 132: 57,4

133: 61,5

135: 58,6.

In an index of subjects the entries will usually be best left in the language of the text. No one will find a Latin index to a Greek work convenient to use. If there is a word index, the subject index will naturally be incorporated in it.

A word index may be selective or complete. There are limits to the degree of completeness that is useful: there is no point in listing every occurrence of *καί*, for example, since anyone making a special study of *καί* would have to work through the whole text in any case. The sensible procedure would be to pick out the instances of *καί* in special uses, in combination with other particles, etc. and to indicate that the entry has been limited to these. It is obviously a great help to the user to distinguish between separate meanings and constructions to some extent, e. g. between *μετά* + accusative and *μετά* + genitive, or *ut* comparative and *ut* final. It is very desirable in indexing some texts – those of literary or linguistic and not merely technical interest – to distinguish the various forms of nouns, verbs, etc.²⁶). Naturally they should all

²⁶) A difficulty arises when the index covers a group of authors or works, like Fatouros’ Index Verborum zur frühgriechischen Lyrik. Someone looking up (say) the instances of *ἔρω* in Anacreon has to pick out the Anacreon references from those given for each case-form; someone looking up the instances in all the poets has to keep jumping from edition to edition. The user’s convenience is perhaps best served in such a situation by abandoning the analysis of forms except in entries where they are particularly significant.

be grouped together: ἐβούλετο under βούλομαι. The entry might read simply

βούλεται 29,2. 3 bis; 30,1; ἐβούλετο 6,7.

But suppose the author also used forms of βουλή, βουληφόρος. The user of the index would look for forms of βούλομαι after those entries. The entry should then take the form

(βούλομαι) βούλεται 29,2 etc.

Where there is uncertainty about the occurrence of a word or form because of some textual problem, warning must be given by means of some adjunct to the reference, '(ci.)', '(v. l.)', or a symbol such as an asterisk.

Printing

The printer should be offered a clear and well-spaced manuscript or typescript on paper of uniform size²⁷⁾ with the pages numbered continuously throughout. Only one side of the paper should be used. Any corrections that have been made should be very clearly marked. Instructions about page-headings etc. should be provided.

Footnotes for the introduction may either be placed at the foot of each sheet or on separate sheets. In either case they should be numbered serially through the chapter or the whole. Similarly with the critical apparatus and other registers to go below the text; the editor will almost certainly find it convenient to set them out on separate sheets. Unless he starts each item on a new line, he will have to be careful to indicate the spaces between them, especially at the end of a line.

Making a new copy of the text is laborious and involves the danger of error, particularly errors of omission. It is common practice to send the printer instead a copy of an existing edition with the required changes marked (in ink) as if on printer's proofs.

²⁷⁾ Except that for the text itself a corrected copy of a printed edition can be submitted (see below), and for the indexes a pack of cards or slips.

This too has its dangers. It is a well-documented fact that errors and misprints persist from edition to edition as a result of it²⁸), and one can only advise that the editor takes the greatest care to see that the one he uses correctly reproduces the *paradosis* in the places where he does not choose to depart from the *paradosis*. He must also see that it has been brought into conformity with his wishes in matters such as punctuation, numeration, the use of capitals.

Making alterations in proof causes extra delay and expense. The editor should reduce the need for them as far as possible by verifying references at the manuscript stage and generally seeing that his manuscript is correct, unambiguous and consistent with regard to abbreviations etc., and that it reflects his final and settled opinions. But if he has grown wiser by the time the proofs come, the printer's interests must yield to the reader's. The correction should be devised in such a way as to cause as little disturbance to the typesetting as possible, for instance by compensating for a deletion with an insertion of similar length nearby. This is particularly kind if the proofs are already arranged in the form of pages, as opposed to galley-proofs²⁹).

Page-proofs are necessary, of course, before page- and line-references can be adjusted. The line-numbers in the apparatus to a prose text must be inserted or corrected at this stage, unless the pagination of an older edition has been reproduced exactly. Indexes in which references are given by page and line are best not made till now.

Conclusion

The problems which different texts present, to the editor or to the textual critic, vary enormously, and one must be flexible

²⁸) See A. Severyns, *Texte et Apparat. Histoire critique d'une tradition imprimée* (Bruxelles 1962); Frankel, *Einleitung* . . . , p. 123.

²⁹) This does not seem the place for an account of the marks used in correcting proofs. Conventions differ somewhat in different countries.

enough to follow whatever course is most suited to the particular circumstances. The advice contained in the foregoing pages will not meet every possible case, I am sure. But if the editor holds fast to the ideals of accuracy, clarity and elegance, does what the subject demands, and treats the reader as a deserving but not necessarily patient friend, there is a good hope that his edition will be welcomed just as warmly as his scholarship merits.

1. Hesiod, *Theogony* 176–200

For my first illustration I have chosen a text transmitted in a fairly large number of manuscripts. I have complete collations of thirty at my disposal, and partial collations of several more. Many of them are of no individual importance, but in what follows I report their readings in full in order to give an idea of the extent and character of manuscript variation in a tradition of this kind.

No stemma can be constructed, but the majority of manuscripts fall into clearly defined groups. The hyparchetype *a* is represented by four descendants, OVWX. None of them is older than the 14th century, but agreements with an 11th-century fragment and with the perhaps pre-Eustathian allegorical commentary of Johannes Diaconus Galenus suggest that *a* may represent a kind of Byzantine vulgate. Not dissimilar is *r*, a lost copy represented by seven extant manuscripts and their apographa; three of the seven come from a intermediate copy *u* which deserts *r* a little later in the poem. After leaving *r*, *u* will follow *k*, which may have been a recension of the Palaeologan era drawing on several sources. In lines 176–200, *k* is represented only by one extant manuscript, K. Of similar character to *k* is the hyparchetype *b*, represented by five manuscripts. One of these, L, is 14th-century, the others depend on a 15th-century model *m*.

S, the oldest manuscript available here (1280), is of Planudean origin, and characterized by emendation as well as by eclecticism. The same applies to Triclinius' autograph copy Tr, made a little

before 1320. The remaining manuscripts mostly belong to the undistinguished family *c*, which has its heyday in the 15th century but has a precursor in Q about 1300.

- ἦλθε δὲ νύκτ' ἐπάγων μέγας Οὐρανός, ἀμφὶ δὲ Γαίῃ
ἰμείρων φιλότητος ἐπέσχετο, καὶ ῥ' ἐτανύσθη
πάντη· ὁ δ' ἐκ λοχέοιο πάϊς ὠρέξατο χειρὶ
σκαίῃ, δεξιτερῇ δὲ πελώριον ἔλλαβεν ἄρπην,
180 μακρὴν καρχαρόδοντα, φίλου δ' ἀπὸ μῆδεα πατρὸς
ἐσσυμένως ἤμησε, πάλιν δ' ἔρριψε φέρεσθαι
ἐξοπίσω. τὰ μὲν οὐ τι ἐτώσια ἔκφυγε χειρός·
ὄσσαι γὰρ ῥαθάμιγγες ἀπέσσυθεν αἱματόεσσαι,
πάσας δέξατο Γαῖα· περιπλομένων δ' ἐνιαυτῶν
185 γείνατ' Ἐρινῶς τε κρατερὰς μεγάλους τε Γίγαντας,
τεύχεσι λαμπομένους, δολίχ' ἔγχεα χερσὶν ἔχοντας,
Νύμφας θ' ἅς Μελίαις καλέουσ' ἐπ' ἀπείρονα γαῖαν.
μῆδεα δ' ὡς τὸ πρῶτον ἀποτιμήξας ἀδάμαντι
κάββαλ' ἀπ' ἠπείροιο πολυκλύστῳ ἐνὶ πόντῳ,
190 ὡς φέρετ' ἄμ πέλαιγος πουλὸν χρόνον, ἀμφὶ δὲ λευκὸς
ἀφρὸς ἀπ' ἀθανάτου χροὸς ὠρνυτο· τῷ δ' ἐνὶ κούρῃ
ἐθρέφθη· πρῶτον δὲ Κυθήροισι ζαθέοισιν
ἐπλήτ', ἔνθεν ἔπειτα περιέρρυτον ἵκετο Κύπρον.
ἐκ δ' ἔβη αἰδοίη καλὴ θεός, ἀμφὶ δὲ ποίη
195 ποσσὶν ὕπο ῥαδινοῖσιν ἀέξετο· τὴν δ' Ἀφροδίτην
{ἀφρογενέα τε θεὰν καὶ εὐστέφανον Κυθέρειαν}
κικλήσκουσι θεοὶ τε καὶ ἄνθρωποι, οὐνεκ' ἐν ἀφρῶ
θρέφθη· ἀτὰρ Κυθέρειαν, ὅτι προσέκυρσε Κυθήροις·
Κυκρογενέα δ', ὅτι γέντο περικλύστῳ ἐνὶ Κύπρῳ·
200 ἠδὲ φιλομμειδέα, ὅτι μῆδέων ἐξεφάνθη.

176 γαίην Vat. 1948

An accusative would be possible, but the correct form would be γαῖαν, and a single member of the *c* family is most unlikely to preserve a true reading by itself.

177 (i) ἰμείρω Arundel 522 : ἰμέρων *u* (ει superscr. U²)

The variants are restricted to the *r* family, and seem to be independent of each other. Neither has an obvious explanation; possibly the scribe who wrote *ἰμείρω*, seeing the words ‘longing for sex’, at once thought of his own longing.

(ii) *ἐτανύσθη* : *ἐπανίσθη* Vat. 1948

The scribe was unfamiliar with the poetic word. *ἐπαν-* may be an echo of *ἐπ-έσχετο* or an anticipation of *πάντη*, or, if the exemplar was written in two columns, it may come from *πάντα* at the end of 175, which would have appeared immediately above. *-ίσθη* represents the substitution of a phonetically equivalent but commoner ending, as if from a verb in *-ίζω*.

178 (i) *λοχέοιο* KLS^r Tr Par. 2772 Laur. 31,32, γρ. Z² schol. Et. Gen. : *λοχεοῖο* Mosq. 469 (*χε* in ras.?), Aristonicus : *λεχέοιο* Q : *λόχοιο* OV *r* Par. 2833 Vrat. Rehd. 35, γρ. L¹ : *λοχοῖο* W : *λούχοιο* X² ex *λόχοιο* : *λοχίοιο* Z Mosq. 470 Phillipps 11723 Senensis I,IX,3, *λοχόιο* Par. 2834 : *λοχιοῖο* Vat. 1948 : *λόκχοιο* Paley : τε *λόχοιο* Heyne : *λεχρίοιο* Ahrens

Scholia on this line and on Iliad 23,160 discuss the accentuation of *λοχεος*. In both, *λοχεός* is commended but it is admitted that manuscripts give *λοχέοιο*. Aristonicus is named as the authority for the correct form. It is clear, then, that *λοχεοιο* was the ancient reading, and although it is not found elsewhere, it is credible as a by-form of *λόχος*, however we accent it. Those manuscripts which have preserved it mostly give the accentuation which the scholia describe as current. In *a*, *r*, and *m* it was displaced by the ordinary form *λόχοιο*, to the detriment of the metre. But the copyist of one of the *m* manuscripts, Mosq. 469, had the scholium before him and was able to restore *λοχεοῖο* (with Aristonicus' accentuation). The scholium may also be responsible for the accentuations *λοχοῖο* in W and *λοχιοῖο* in Vat. 1948. *λοχίοιο* in four other *c* manuscripts may represent either a misreading of *λοχέοιο* or a metrical emendation of *λόχοιο*. *λούχοιο* (X²) is certainly the latter, inspired by epic forms such as *πουλύς* for *πολύς*. Q's *λεχέοιο* springs from confusion with *λέχος*, which the context put into the scribe's mind.

It should not be taken as support for Ahrens's conjecture, which was based on suspicion of the form *λογεος* and on Antimachus' use of the adverb *λέγρις* in connexion with the castration of Uranos. The other conjectures also aim at being rid of *λογεος*, but retain the word meaning hiding-place, which Hesiod used in 174 and is likely enough to have used again. Heyne's introduction of *τε* links the clause with the following one more closely than is usual in epic narrative. Paley assumes an original *λόγοιο* with the first syllable scanned long as with *βρόγος* in Theogn. 1099, *ὄφεις* in Homer and Hipponax, etc. *λογεοιο* would then be an early emendation of what seemed unmetrical. This is certainly an easier change than that presupposed by Ahrens, but still harder to believe than that *λογεοιο* is original.

(ii) *πάϊς τ'* Tr

The particle here is indefensible. Triclinius inserted it on metrical grounds without regard to its proper function, being unfamiliar with the rare scansion *παῖς*.

(iii) *ὀρέξατο* Arundel 522 Q Par. 2772 Laur. 31,32 Vat. Barb. 43: *ἐρέξατο* V: *ἐδέξατο* Mosq. 470 Phillipps 11723 Senensis I,IX,3 Vat. 1948, Barb. 43 in marg.

ὀρέξατο in Q, three *c* and one *r* manuscript is phonetically equivalent to *ὠρέξατο* for the Byzantine scribe. He made the error perhaps while mentally identifying the verb as *ὀρέγω*; he would not have written *ὠρέγει* for *ὀρέγει*. *ὀρέξατο* presumably stood in the common ancestor of Q and *c*, but arose independently in the *r* manuscript. Other scribes failed to recognize the verb, seeing instead other verbs that *χειρί* might well accompany; *ἐδέξατο* in a sub-group of *c* may be influenced by *ἔλλαβεν* below.

179 (i) *καιῆ* Mosq. 470 Senensis I,IX,3, Phillipps 11723 ante corr.

The same sub-group is at fault. Perhaps a red initial was overlooked.

(ii) *πελώρηγ* *b*: *πέλωρον* X²

πελώρηγ is a correct form, but gives a less usual rhythm for this place in the verse, and can be explained as an assimilation to

Γ᾿αῖα πελώρη in 159 and 173. The unmetrical correction in X is probably also inspired by the recent evidence that πέλωρος is the proper form of the adjective; but the -ον ending is retained.

(iii) ἔλαβεν *a r K* Mosq. 469 Vrat. Rehd. 35 Q *ε* Et. Gen.

The ordinary form has made extensive inroads in the tradition: not, however, in metre-conscious copies such as S and Tr.

180 (i) μακρόν S

Influenced by the preceding πελώριον and perhaps the masculine associations of the following -οντα.

(ii) καρκαρόδοντα Vat. 1948

The manuscript gave the same spelling in 175, and Hesychius has κάρκαροι τραχεῖς (for κάρχαροι). Simple assimilation of syllables will be responsible.

(iii) φίλον Arundel 522

Assimilation to the preceding accusatives.

(iv) μέζεα hic et in 188 Nauck

This is the dialect form used by Hesiod in WD 512, where he is speaking of animals. No manuscripts there have altered it to μήδεα, and it is not very plausible that it should have become μήδεα twice in the Theogony; nor is it justifiable to suppose that in speaking of the gods Hesiod would not use the Homeric form.

181 (i) ἐσσύμενος Vat. 1948 : ἐσσυμένης Arundel 522

Only the adverb is used in the sense 'quickly' in early epic. The scribe of Vat. 1948 may have been expecting a nominative participle; -μενος is after all a much commoner ending than -μένως. The compendium for ως is easily mistaken for η, so that -μένης might be explained as a conflation of -μένη with a correction ως.

(ii) ἔριψε V Vat. 1332, U ante corr. : ἔτριψε Casan. 356.

The first variant is merely orthographical. The second may have been influenced by ἐτ(ώσια) below.

182 (i) οὔτοι K

τοι is rare in epic narrative; τι is more often corrupted into it

than vice versa, e.g. WD 756, Theogn. 750, 989. Phonetically they were identical.

(ii) ἐτώσι' ἄμ' Flach

An absurd conjecture designed to obviate the quite unobjectionable hiatus. ἄμα has no appropriateness to the sentence and produces an unwelcome breach of Hermann's Bridge.

183 (i) ὄσαι Arundel 522

Banalization of the normal kind.

(ii) ἐπέσσυθεν O ante corr. : ἀπέσσυθον K : ἀπέσυθεν Senensis I,IX,3 ante corr.

The prefixes ἀπ-, ἐπ-, ὑπ-, are not infrequently confused. ἐπέσσυθεν would mean 'flew onto' (the earth), which is possible, but it is better to have the connexion with 182 as given by ἀπ-. The form given by K is incorrect, but shows the termination that the scribe expected for a 3rd person plural.

(iii) αἰματόεσσαν Laur. 91 sup. 10 (corr. m²)

Apparently just a misreading of iota as a narrow ν.

184 (i) ἐδέξατο Vat. 1332 μ : δ' ἐδέξατο Casan. 356

The variation is limited to the *r* family. ἐδέξατο is not impossible, since the Doric scansion πάσᾱς would have parallels in Hesiod, but it is far more likely to be the regular banalization of an unaugmented form. The reading of the Casanatensis should not be described as a dittography: it is ἐδέξατο inherited from *r*, with the further intrusion of a connecting particle, which is itself a standard type of corruption.

(ii) περιπλωμένων V : περιπαρμένων Vat. 2185 (corr. m²)

One phonetic and one visual error.

(iii) δ' om. V W X Casan. 356 Laur. 91 sup. 10 Vat. 1332 Arundel 522

The omission is common to *a* and *r*, though O and μ have avoided it. It goes back to a scribe who was unprepared for a new sentence in the middle of the line and who connected the participial phrase with what preceded. See below on 185 (i).

(iv) περιπλομένω δ' ἐνιαυτῶ Et. Gud. : τοῦ χρόνου δὲ περιεργομένου Exeg.

The paraphrase in the anonymous Exegesis may correspond to περιπλομένου δ' ἐνιαυτοῦ : χρόνος can mean 'year' in Byzantine as in modern Greek. Early epic usage allows either the singular or the plural in such expressions, but not the dative. The reading of the Etymologicum Gudianum will therefore be a corruption, of a genitive plural presumably. Since the support for a genitive singular is so uncertain, we shall naturally leave the plural in the text.

185 (i) γείνατο δ' V X Casan. 356 Laur. 91 sup. 10 Vat. 1332 Arundel 522

The attachment of περιπλομένων ἐνιαυτῶν το πάσας δέξατο Ἰαῖα led to the assumption of a new sentence here and the return of the particle omitted in 184.

(ii) ἐρινῶς ς (ν in ras. Phillipps 11723): ἐρινῶς O X (ἐρρ X ante corr.) Casan. 356 Vat. 1332 U m S Tr Q Laur. 31,32 m² Z Et. Gud.: ἐρινῶς K L : ἐρρινῶς W Laur. 91 sup. 10 Arundel 522 : ἐρρινῶς V Vat 2185

The spelling with ν is apparently commoner in manuscripts than that with single nu. The transfer of the gemination to the rho may have been an attempt to restore the metre after γείνατο δ'. At any rate it seems to go back to the junction of *a* and *r*; individual copyists corrected it (the scribe of X is seen in the act).

(iii) τε prius om. Vat. 1948

Omission of inessential particle. The scribe saw ἐρινῶς κρατερὰς together.

(iv) κρατεροῦς U ante corr.

Anticipation of μεγάλους.

186 δολίγγ' U ante corr.

Anticipation of ἔγγεα.

187 (i) δ' Q: τ' Vat. 1948

θ' can easily be misread as δ', and δ' immediately below may have played a part.

(ii) καλέουσιν *b* (αι superscr. L; corr. Mosq. 469)

The elided verb was accidentally written in full. The corrector of L, or a predecessor, misread the apostrophe in καλέουσ' as the compendium for αι.

188 (i) μήδε Laur. 91 sup. 10 ante corr. Arundel 522

The word may have been written μήδε^α in the exemplar.

(ii) θ' *a r* (corr. U) K Tr, γρ. L¹

From θ' ἄς above. The change of subject calls for δε.

(iii) τὰ πρῶτα Vat. 1948 Z

Probably a reminiscence of 108 εἶπατε δ' ὡς τὰ πρῶτα and 113 ἦδὲ καὶ ὡς τὰ πρῶτα.

189 (i) κάββαλλ' Laur. 91 sup. 10 Arundel 522: κάμβαλ' Casan. 356 K Q *c*

The very unusual combination ββ was interpreted as the less outlandish-looking μβ by an easy visual error. The scribe who wrote κάββαλλ' may have been thinking vaguely of καβάλλης 'horse'.

(ii) ἡπείρου *a r* (corr. U)

Banalization.

(iii) πολυκλύστῳ O X, W post corr.: πολυκλύτῳ Casan. 356: πολυκλείστῳ V, U ante corr.

Following the corruption to ἡπείρου, someone in the *a* family tried to restore the metre with the impossible πολλυ-. Other scribes assimilated -κλυστος to more familiar words: -κλυτος 'famous', -κλειστος 'closed' (quite unsuitable to the sea, of course, but phonetically equivalent to -κλυστος).

(iv) ἐνὶ Casan. 356

The scribe thoughtlessly gives the word the aspiration of the ἐνὶ more familiar to him.

190 (i) ἄν X S, ἄν Vat. 2185

That we write ἄμ πέλαγος but ἐν πελάγει is pure convention. However, the convention was established in antiquity, and these scribes are perhaps thinking of the much commoner modal particle rather than of a legitimate alternative spelling of the apo-

copated form of ἀνά. μ and ν are easily confused in minuscule, and words ending in μ are exceptional.

(ii) πέλογος Phillipps 11723

Assimilation of vowels perhaps influenced by thoughts of λόγος.

(iii) πολὺν S post corr.: πολλὺν X²: πολὺν codd. ceteri: πολλὸν Fick

πολὺν is clearly the paradosis, the two other variants being copyists' emendations to repair the metre; both S and the corrector of X are prone to emend. As πολλὺν is a non-existent form, we have the choice between πολὺν and πολλὸν. Both forms occur with χρόνον in epic, though πολὺν only in later epic; and there are known cases of both πολυός and πολλός being banalized to πολύς. (Details in my commentary.) So no certain decision is possible.

(iv) λευκός: λ ex κ factum S: λευχός Phillipps 11723 ante corr.

I have not put 'κευκός S ante corr.', because I do not suppose that the scribe ever wrote κευκός. He probably corrected his error after writing only κ. His eye may have slipped to κούρη below. I have no explanation for λευχός.

191 (i) ἀφρός om. Laur. 91 sup. 10 (post χρόδος rest. m²), Arundel 522

In an earlier copy in two columns written across the page, the word may have got transferred to the end of 190 (adjective and noun together: see below p. 138 on Catullus 61,219/20); that would make its omission easy. The corrector of the Laurentianus found it in the margin and, having no understanding of metre, inserted it next to its verb.

(ii) δ' ἀπ' Senensis I,IX,3

Another intrusion of a connective at the beginning of a verse.

(iii) χρόός: οός in ras. Arundel 522

Perhaps χρόνος had been written by mistake, from χρόνον in 190.

(iv) ὄρνυτο: ν in ras. Phillipps 11723: ὄρμα S

ὄρμα, i. e. ὄρμα, looks like a conjecture made because the end of ὄρνυτο was illegible in the exemplar; or it may be a gloss, cf. Hesych. ὀρνωμένου· ὀρμῶντος, ὄρτο· ἀνέστη, ὄρμησεν, etc.

(v) τῶ: δῶ Senensis, δῶ Phillipps ante corr.

Assimilation to the next consonant, presumably.

192 ἐτρέφθη Laur. 31,32 Z

Phonetic dissimilation, or the influence of the present (see above on 178 (iii)).

193 (i) ἔπλετο K Tr Q ε, γρ. Mosq. 469

The rare ἔπλητο, guaranteed by the sense, was ousted by the somewhat more familiar epic aorist of πέλωμαι. Perhaps the man responsible saw ἔπλητο written in full, and thought that it ought to be made into a dactyl.

(ii) πέρρυτον (superscr. ι) W : περίρυτον L

L's variant is merely orthographical, W's is a haplography.

(iii) ἔκετο : ι ex η S ut vid.

The scribe was thinking of ἔκω, similar to ἔκω in sound and sense.

194 αἰδοίων Lennep

There can be no objection to αἰδοίη, and it is supported by Hymn. Hom. 6,1 αἰδοίην...καλὴν Ἀφροδίτην. Certainly a corruption of αἰδοίων to αἰδοίη would be explicable (as assimilation). But αἰδοῖα is not the word Hesiod uses for the genitals in this passage, nor does he say that Aphrodite developed in them, he says she grew in the foam that formed round them. An unconvincing conjecture.

195 (i) ὑπαὶ U² Tr ε (praeter Par. 2772; ὑπὸ Laur. 31,32 m²)

A metrical emendation; Triclinius may have been its author. But the problem was already apparent to the scribe of S, and he knew that the initial rho was sufficient to lengthen the syllable. He indicated as much by writing a second rho above it.

(ii) ῥαδινούσι W : ῥάδινονῖσιν (accentu acuto postea eraso) Phillipps 11723

The scribe mistook the stem of the adjective for ῥάδιον, and made only a partial correction.

(iii) ἀύξατο W : ἀέξατο Tr : μαραίνετο Exeg.

The scribe of W was thinking of ἀῤζω, ἀῤζάνω, whence perhaps also his -ξα-. The sigmatic element in the ξ may also have suggested an aorist. The extraordinary μαρραίνετο, which is clearly presupposed by the Exegesis (p. 382,23 Flach), must have originated as a conjecture. One can only speculate on the reasons for it.

(iv) δ' om. Vat. 1948

196 (i) *versum damn.* Heyne

It interrupts the etymology Ἄφροδίτη – οὔνεκ' ἐν ἀφροῶ, and forestalls that of Κυθήρεια. It looks to have been interpolated to make the etymology more explicit with ἀφρογενέα.

(ii) ἀφρογένειαν codd., Et. Gen. et Magn.: -γενῆ Guyet, -γενέα Werfer

The verse is ancient – it was apparently known to Clement – and it is therefore likely that it was originally metrical. An accusative of fem. ἀφρογενής is indicated by echoes in Orph. εὐχῆ 11 and fr. 183,5. The corruption, and the parallel one in 199, may be explained by the influence of Κυθήρεια twice nearby and Κυπρογενεια in other poets.

(iii) θεὸν (sine τε) Tr

Triclinius omitted the particle in an attempt to mend the metre. The result is a very rough rhythm. He may have thought θεὸν more capable of synizesis than θεᾶν; or θεοί below may have affected his pen.

197 (i) κιλήσκουσι W ante corr.

A sort of haplography.

(ii) οὔνεκ' εἰν r: οὔνεκεν Mosq. 469 Tr: οὔνεκ' S: οὔνεκ' L Par. 2833 Vrat. Rehd. 35: οὔνεκ' ἐν Senensis

198 (i) θέρφθη Casan. 356 Vat. 2185, θέρφθη ex τέρφθη vel contra U (et marg. θρέφθη)

θέρφθη was probably the earlier reading in U, copied from *u* (which is a brother of the Casanatensis and parent of the Vaticanus). This was a simple error of metathesis, and τέρφθη a conjecture

suggested by it and by the delightful atmosphere that Aphrodite carries with her (cf. *τέρψιν* in 206).

(ii) *αὐτάρ* *r* *K* *ε*

Banalization: *αὐτάρ* is much the commoner epic form.

(iii) *κυθήρης* Arundel 522 : *κύθηραν* Vat. 2185

In the mental ear of a scribe who knew *Κύθηρα* as a feminine singular, *kithiris* naturally became *κυθήρης*. The other variant is an echo of *Κυθήρειαν*.

199 (i) *κυπρογένειαν* *O* *u* *K* *S* *Q*, Laur. 31,32 *m*², *Z* : *κυπρογένεια* *V* *r* (praeter *u*) Mosq. 469 *ε* (praeter *Z*) Et. Gen., γρ. *L*² : *-γένει'* *Tr*, *U* post corr. : *κυπριγένειαν* *X* (*αν* *m*² in ras.) : *κυπριγένεια* *W* Mosq. 469 post corr. et γρ. : *κυπριγενέα* *L* Par. 2833 *V*rat. Rehd. 35 : *κυπρογενῆ* Schrevelius, *-γενέα* Werfer

Κυπρι- is incorrect; it may have been suggested by *Κύπρις* or by other forms in *-ιγένεια* (*ἥρι-*, *Ἴφι-*, etc.). The ending has suffered the same corruption as in 196 in part of the tradition, but is correctly preserved by *b*. *-γένεια* is half and half.

(ii) *δ'* *r* *K* *S* *Q* Mosq. 470 Phillipps 11723 Senensis Et. Gen. : *θ'* *V* *W* *b*, *τ'* *O* in ras. : om. *X* post corr., *U* post corr., *Tr* Par. 2772 Laur. 31,32

δ' is the more appropriate particle, especially after *ἀτάρ*. 196 may have helped *τε* to come in. The omission of the particle is a metrical expedient at least in *Tr* *U*, where *κυπρογένει'* was written.

(iii) *ὅτι γένετο* *ε* (praeter Vat. 1948 *Z*) : *ὅτι γένοιτο* Vat. 2185 *m*², Mosq. 469 ante corr., *Z* : *ὅττι* ||||| *O* : *ὅττε* Vat. 1948

γένετο is a banalization of the unfamiliar *γέντο*. To others the lack of augment suggested *γένοιτο* (*yénto* : *yénito*); they did not understand the use of the optative in classical Greek. *O* and Vat. 1948, by suppressing the verb altogether, contrive to make the line scan despite the initial corruption.

(iv) *περικλύστῳ ἐνὶ κύπρῳ* schol. Hom., Et. Magn. : *πολυκλύστῳ ἐνὶ κύπρῳ* *a* (*-κλείστῳ* *V*) *b* (*πολυρρύτῳ* *L*²) *K* *S* *Tr* *Q* *ε* (praeter *Z*), ps.-Choricus, Et. Gen. : *πολυκλύστῳ ἐνὶ πόντῳ* *r* (γρ. *κύπρῳ* *U*),

γρ. L² : πολυκλύστῳ ἐνὶ πότμῳ Vat. S. Pietro C 152 : κύπρῳ ἐνὶ καλῆ
Z, γρ. κύπρῳ ἐν[... U

The context guarantees Κύπρῳ. πόντῳ is a reminiscence of 189, and πότμῳ a further corruption of it. Κύπρῳ ἐνὶ καλῆ is a deliberate change to make the verse scan after Κυπρογένειαν δ' ὅττι γένοιτο.

It remains to choose between περί- and πολὺ-κλυστος. (For V's πολυκλείστῳ see on 189 (iii); the fact that the same manuscript is involved is typical. The suprascript ρρῦ in L may be meant as a gloss.) περίκλυστος is particularly appropriate to an island, and is twice elsewhere applied to Cyprus. πολυκλύστῳ has an obvious origin in 189 (whence also πόντῳ in *r*). Illud in hoc abiturum erat, non hoc in illud.

200 (i) versum om. *u* : marg. rest. U Vat. 2185

(ii) ἦδὲ : καὶ X² O², U (marg.) v. l., Tr

A conjecture based on mis-scansion of φιλομηδέα.

(iii) φιλομμηδέα S : φιλομηδέα K Tr *c* (praeter Laur. 31.32) : φιλο-
μηδέα *a r* Vat. 2185 (marg.) L Par. 2833 Vrat. Rehd. 35 Q
Laur. 31.32 : φιλομηδείαν O post corr. : φιλομηδεία, deinde φιλο[[μ]-
μηδέα (εα post corr.) U (marg.) : φιλομηδέα superscr. μει Mosq.
469 : φιμηδέα Et. Gen. cod. A, φημιδέα B : φιλομμειδέα Bergk.

The appellation of Aphrodite that Hesiod must be referring to is φιλομμειδής (cf. 205 μειδήματα). Because he derives it from Uranos' μήδεα, the tradition has turned -μειδέα into -μηδέα or (with the accent of the noun) -μήδεα. The suprascript μει in one of the representatives of *m* will be due to conjecture rather than tradition.

The simplification of the μμ to μ caused metrical difficulties. S may have restored the gemination by conjecture (cf. on 195 (i)). S was available to Lascaris as he copied U, and it was no doubt the source of the marginal restoration in U in its uncorrected form. The corrector of O fashioned the metrical but barbarous hemistich καὶ φιλομηδείαν.

(iv) ὅττι X² : ὅττ' ἂν Vat. 2185 : δ' αὖ ὅττι Tr : ὅτ' αὖ Vat. 1948, ὅττ'
αὖ Z : ὅτε schol. Hephaest.

ὄττι, ὄττ' αὖ (of which ὄττ' ἄν and ὄτ' αὖ are corruptions), and δ' αὖ ὄττι represent further attempts to repair αὖ the metre. Only Triclinius allows for a caesura; and his καὶ . . . δέ is impossible in early Greek. ὄτε is an innocent variant for ὄττι of a common kind. It does not suit the sense.

(v) μειδέων Casan. 356 schol. Hom.

This must somehow have been generated by the correct φιλομμειδέα, either by assimilation when the latter stood in the text, or by mistaking the reference of a marginal variant.

Apographa

Here are details of some apographa of manuscripts used above.

The Marcianus IX.6 and the Salmanticensis 243 were both copied from O before it was corrected. No new errors were made in lines 176–200.

Constantinopolitanus 31 was copied from X after its correction by X². It has the following discrepancies from its model: 176 γαῖα (corrected by the scribe); 181 ἐσσημένως (itacism); 187 θ' omitted, but restored by the scribe; 189 πολυκλύστω (re-banalization of the conjectural πολλυ- in X).

Scorialensis Φ III 16 is a copy of U, with these divergences: 181 ἔρρεψε; 185 γείγαντας; 186 om.; 191 χρωός; 193 ἔπλετο (the same corruption as in K Tr Q c; λ altered from ε); 194 αἰβοίη (influence of ἔβη, *évi*: *evii*?).

The Barocciani 60 and 109 were copied from the Scorialensis. 109 differs only in 181 ῥιμεσε (as if from ἐμέω instead of ἀμάω). 60 has the banalization γαία in 176, and makes ποίη in 194 into a dative.

Mosquensis 462 is a copy of K. Its only difference in this passage is in 178, where λόγους was at first written for λοχέους but then corrected.

Marcianus 480 is a copy of Tr. The only new error is πολλήν for πολλόν in 190. ην and υν are easily confused in some hands, including Triclinius'.

Atheniensis 2965 and Glasguensis Hunter. U. 6.11 are copied from Z. They agree in having τρέφθη in 198 (after ἐτρέφθη, 192) and in the banalizations ἔλαβεν 179 and ὄτ' for ὄττ' 200. In 178 Z had λογίσις with γρ. λογέσις m²; the Athens copy keeps to λογίσις, the Glasgow one has the *ι* altered to an *ε* by the original scribe. In 199 the Athens copy after correction and the Glasgow one have the ὄττι which Z's reconstruction of the metre requires. The Atheniensis has the further miscopyings 193 ἔθθ'; 195 πόσιν, and ὑπὸ ante corr.; 198 κυθήραν (cf. the note on the line, above); 199 κυπρογένεια ante corr.

Athous 3868 is also descended from Z, but through a Vatican manuscript of which I have not got a collation. It diverges from Z as follows: 178 ἐκ om.; 179 σκαιῆ misplaced at the end of 178; δεξητερῆ; 181 ἐσσυμένος ἦσε (haplography); 183 αἱματώεσαι; 184 πᾶσας; 185 ἐρυννῖς κρατερᾶς; 186 λαμπομένας ante corr. (from -ας endings in 185 and 187); 190 χρόνων, λευκῶ; 193 πέρρυτον, *ι* post insertum (as in W).

Two lessons can be drawn from these data. First, there is no standard frequency of error. One scribe makes eight errors in a passage where another makes none. Second, these copies sometimes produce errors which coincide with ones known from other, independent manuscripts: 193 ἐπλετο Scorialensis; 178 λόγισις Mosquensis 462; 198 κυθήραν Atheniensis; 193 πέρρυτον Athous. This is a serious reminder that the agreement of two manuscripts in individual corruptions does not always prove affinity.

2. 'Hippocrates', de morbo sacro 1, 29–44

The first part of De Morbo Sacro is transmitted in two independent manuscripts, Θ and M, of the tenth and eleventh centuries respectively. For details see H. Grensemann, Die hippokratische Schrift "Über die heilige Krankheit" (Berlin 1968). I have taken my information about readings from Grensemann's edition.

εἰ γὰρ σελήνην τε καταιρεῖν καὶ ἥλιον ἀφανίζειν καὶ χειμῶνά τε
καὶ εὐδίην ποιεῖν καὶ ὕμβρους καὶ αὐχμούς καὶ θάλασσαν ἄπορον
καὶ γῆν ἄφορον καὶ τᾶλλα τὰ τοιοῦτότροπα πάντα ὑποδέχονται ἐπί-
στασθαι, εἴτε καὶ ἐκ τελετεῶν εἴτε καὶ ἐξ ἄλλης τινὸς γνώμης ἢ
5 μελέτης φασὶν οἷοί τε εἶναι, οἱ ταῦτα ἐπιτηδεύοντες δυσσεβεῖν ἔμοιγε
δοκέουσι καὶ θεοὺς οὔτε εἶναι νομίζειν οὔτε ἰσχύειν οὐδέν, οὐδὲ εἴργε-
σθαι ἂν οὐδενὸς τῶν ἐσχάτων ποιέοντες ἕνεκά γε θεῶν, ὡς οὐ δεινοὶ ἄρα
αὐτοῖς εἰσιν. εἰ γὰρ ἄνθρωπος μαγεύων τε καὶ θύων σελήνην τε καται-
ρήσει καὶ ἥλιον ἀφανιεῖ καὶ χειμῶνα καὶ εὐδίην ποιήσει, οὐκ ἂν ἔγωγ'
10 ἔτι θεῖον νομίσαιμι τούτων εἶναι οὐδὲν ἀλλὰ ἀνθρώπινον, εἰ δὴ τοῦ
θείου ἢ δύναμις ὑπ' ἀνθρώπου γνώμης κρατεῖται καὶ δεδούλωται.

ἴσως δὲ οὐχ οὕτως ἔχει ταῦτα, ἀλλ' ἀνθρώποι βίου δεόμενοι πολλὰ
καὶ παντοῖα τεχνῶνται καὶ ποικίλλουσιν ἐς τε τᾶλλα πάντα καὶ ἐς
τὴν νοῦσον ταύτην, ἐκάστω εἶδει τοῦ πάθεος θεῶ τὴν αἰτίην προστι-
15 θέντες. †οὐ γὰρ ἀλλὰ πλεονάκις γε μὴν ταῦτα μεμίμηνται.† ἦν μὲν
γὰρ αἶγα μιμῆται κῆν βρυγῆται κῆν τὰ δεξιὰ σπᾶται, Μητέρα θεῶν
φασιν αἰτίην εἶναι. ἦν δὲ ὀξύτερον καὶ ἐντονώτερον φθέγγηται, ἵππῳ
εἰκάζουσι καὶ φασὶν Ποσειδέωνα αἴτιον εἶναι. ἦν δὲ καὶ τῆς κόπρου
παρή, οἷα πολλάκις γίνεται ὑπὸ τῆς νούσου βιαζομένοισιν, Ἐνοδίης
20 θεοῦ πρόσκειται ἢ ἐπωνυμίη· ἦν δὲ πυκνότερον καὶ λεπτότερον οἶον
ὄρνιθες, Ἀπόλλων νόμιος. ἦν δὲ ἀφρόν ἐκ τοῦ στόματος ἀφή καὶ τοῖς
ποσὶ λακτίζη, Ἄρης τὴν αἰτίην ἔχει. ὀκόσοισι δὲ νυκτὸς δαίματα παρί-
σταται καὶ φόβοι καὶ παράνοια καὶ ἀναπηδήσεις ἐκ τῆς κλίνης καὶ
φεύξιες ἔξω, Ἐκάτης φασὶν εἶναι ἐπιβολὰς καὶ ἡρώων ἐφόδους.
25 καθαρμοῖσί τε χρέωνται καὶ ἐπαιδῆσι, καὶ ἀνοσιώτατόν τε καὶ ἀθεώ-
τατον πρῆγμα ποιέουσιν ὡς ἔμοιγε δοκεῖ. καθαίρουσι γὰρ τοὺς ἐχο-
μένους τῇ νούσῳ αἵματί τε καὶ ἄλλοισι τοιοῦτοῖς ὥσπερ μίασμά τι
ἔχοντας ἢ ἀλάστορας ἢ πεφαρμαγμένους ὑπ' ἀνθρώπων {ἢ τι ἔργον
ἀνόσιον εἰργασμένους}. οὗς ἐχρῆν τάντια τούτοισι ποιεῖν, θύειν τε καὶ
30 εὐχεσθαι καὶ ἐς τὰ ἱρὰ φέροντας ἰκετεύειν τοὺς θεοὺς. νῦν δὲ τούτων
μὲν ποιέουσιν οὐδέν, καθαίρουσι δέ, καὶ τὰ μὲν τῶν καθαρμῶν γῆ
κρύπτουσι, τὰ δὲ ἐς θάλασσαν ἐμβάλλουσι, τὰ δὲ ἐς τὰ ὄρεα ἀποφέρουσι
ὄπη μηδεὶς ἄψεται μηδὲ ἐμβήσεται· τὰ δὲ ἐχρῆν ἐς τὰ ἱρὰ φέροντας
τῷ θεῷ ἀποδοῦναι, εἰ δὴ ὁ θεός ἐστιν αἴτιος. οὐ μέντοι ἔγωγε ἀξιῶ
35 ὑπὸ θεοῦ ἀνθρώπου σῶμα μαινεσθαι, τὸ ἐπικηρότατον ὑπὸ τοῦ ἀγνο-

τάτου, ἀλλὰ κῆν τυγγάνῃ ὑφ' ἑτέρου μεμιασμένον ἢ τι πεπονθός, ὑπὸ τοῦ θεοῦ καθαίρεσθαι ἂν αὐτὸ καὶ ἀγνίζεσθαι μᾶλλον ἢ μαιίνεσθαι.

1 (i) τε prius om. Θ

Omission seems a likelier error than insertion here.

(ii) κατααιρεῖν scripsi : καθαίρειν M : κατάγειν Θ

καθαίρειν is the verb used of drawing down the moon in line 8 and in other classical references to the accomplishment (Aristoph. Nub. 750, Plat. Gorg. 513a). In a Hippocratic work it may have been written κατ-, which would help to account for the variant κατάγειν. The uncontracted spelling -έειν is common in manuscripts of Ionic prose and verse, but historically incorrect.

2/3 ἄπορον καὶ γῆν ἄφορον Lobeck, Aglaophamus i, 634 not. s: ἄφορον καὶ γῆν ΘM

Common sense commends the alteration. There are several ways of explaining the assumed corruption; for instance, ἄπορον might have been corrupted to ἄφορον by assimilation and the second ἄφορον then dropped out.

3 ἐπιδέχονται M

Anticipation of ἐπίστασθαι. Perhaps the Ionic -δέκονται should be written.

4 (i) τελετῶν Θ

Banalization.

(ii) ἦ M: καὶ Θ

The words are often confused, for graphical reasons, and here the preceding καί's may also have exercised an influence. ἦ suits the sense better.

5 (i) οἷοί τε εἶναι Ermerins, οἷόν τε εἶναι M: ταῦτα οἷόν τ' εἶναι γενέσθαι Θ

The impersonal οἷόν τε goes ill with ἐξ ἄλλης γνώμης ἢ μελέτης. φασὶν οἷοί τε εἶναι suits it better and parallels ὑποδέχονται ἐπίστασθαι. After the initial corruption had occurred, the scribe of Θ or a predecessor expanded the phrase to clarify its apparent meaning.

(ii) Note that the comma before οἱ ταῦτα ἐπιτηδεύοντες might instead be placed after it. But the phrase has more point if it is resumptive, summing up the lengthy protases.

6 οὐδὲ Wilamowitz ad Eur. Her. 1232 : οὐτ' Θ, οὔτε M

The preceding οὐτε's are governed by νομίζειν, whereas εἶργεσθαι ἄν is parallel to it and cannot be attached by a third οὔτε. Assimilative corruption.

7 (i) ἐσχάτω M, corr. M²

(ii) ἔνεκά γε θεῶν (omissis ὡς – εἰσίν) Wilamowitz, Gr. Lesebuch I, 272 : ἔνεκά γε πῶς οὐ δεινοὶ ἄρ' αὐτοῖς εἰσίν M : ὡς οὐ δεινοὶ αὐτοῖς ἐῶσιν Θ

The senseless ἔνεκά γε πῶς in M must be nearer the original reading than the version of Θ, which clearly represents an attempt to restore sense, with ἔνεκά γε eliminated and the ὡς-clause converted into a quite unsuitable final clause. If ἔνεκά γε is accepted as genuine (the only plausible origin for it), θεῶν or τῶν θεῶν is unavoidable. There is no reason to suspect the ὡς-clause, which is not in glossator's language.

8 (i) τε prius om. Θ

See on 1 (i).

(ii) καθαιρήσει codd.

See on 1 (ii).

9 (i) ἀφανεῖσι Θ

A double itacistic error, characteristic of this manuscript. The copyist may have felt that -οι was the sort of ending the ancients were liable to use after 'if'.

(ii) ἔγωγέ τι codd. : corr. Wilamowitz

The word division of the manuscripts is of course quite without authority. You do not say οὐδὲν τούτων τι θεῶν but οὐδὲν τούτων θεῶν. The idiomatic ἔτι is perfect.

10 (i) οὐδὲν om. M

After τι the word seemed redundant.

(ii) ἀνθρώπινον εἶναι εἰ Θ

Not impossible, but inelegant, and probably due to a scribe consciously or unconsciously clarifying to himself the construction of ἀνθρώπινον.

13 ἔσται τᾶλλα Θ : ἔσ τε ἄλλα M

ἔσται is merely Θ's careless orthography again; 'este', he said to himself without thinking what the words were, and it went down as if it were the future of εἰμί. The article with ἄλλα seems necessary. It was easily lost after τε.

15 ἄλλα πλεονάκις γε μὴν Θ : ἐν ἄλλὰ πλεονάκις μὲν M

This sentence is so corrupt that it is no longer possible to see even the general sense intended. γε μὴν and μὲν may both go back to γε μὲν. If so, πλεονάκις begins a new main clause: 'but more often they imitate these'. This may or may not be corrupt, depending on what preceded. What follows suggests that 'these' are various animals. See also below on 16 (ii).

Grensemann proposes, *exempli gratia*, οὐ γὰρ ἓνα ἄλλὰ πλέονας ἐπαιτιῶνται, supposing the verb to have been corrupted by the following μιμηται. But it is hard to see how πλέονας could have become πλεονάκις (γε) μὴν (μὲν) ταῦτα.

15/16 ἦν-μιμηται om. Θ

Homoeoteleuton after μεμίμηνται.

16 (i) κῆν M : καὶ ἦν μὲν Θ

The true beginning of the sentence having dropped out, the scribe instinctively put in μὲν here.

(ii) βρυχῆται Wilamowitz : βρύχωνται codd. : βρυχῶνται Erotianus? : fort. βρύχη

The parallel verbs are all in the singular (except for the variant σπῶνται), of a single patient, and this one surely was too. The transmitted plural will be due to the preceding ones. But it is surprising that μιμηται was not affected first: possibly μεμίμηνται was a misplaced correction of it, though μιμῶνται would have been the obvious conjecture. Erotian fr. 34 p. 109 Nachmanson records βρυχῶνται as a Hippocratic word, and there is a good

chance that he had this passage in mind. If so, the plural reading goes back at least to the first century.

βρούχω or βρούκω is to gnash the teeth, βρυχάομαι is to roar. The writer probably used one or other form, though there is some evidence for the use of βρούχομαι in the middle (Liddell and Scott s. v. βρυχάομαι at end), and Grensemann reads βρούχεται. Note that βρούχη would easily become βρούχεται (before becoming βρούχωνται) between μιμῆται and σπᾶται.

(iii) σπῶνται M

A natural assimilation to βρούχωνται.

18 (i) Ποσιδέωνα Θ : Ποσειδῶνα M : corr. Regenbogen

An itacistic error in Θ, a banalization in M.

(ii) κόπρου τι M

Perhaps right, but may well be an addition to clarify the construction. If it is right, its omission in Θ might go back to an uncial copy (ΓΙΠ-). Cf. 28/29 (ii).

19 (i) παρείη Θ

Another of this manuscript's mis-spellings; cf. above on 13.

(ii) οἷα scripsi : ὄσα Θ : ὄ M

The conjecture accounts for Θ's impossible reading. ὄ in M may be either a banalization of οἷα or a conjecture for ὄσα.

(iii) ἐνοδίηι Θ : ἐνοδείης M

πρόσκειται may have wrongly suggested a dative.

20 (i) θεοῦ Grensemann : οὐ M : om. Θ

It is easy to delete the nonsensical οὐ (so Θ), but we must account for its existence. Grensemann has recognized it for a corruption of ΘΥ', the nomen-sacrum abbreviation of θεοῦ.

(ii) προσωνομίη M

Unsuitable. Influence of πρόσκειται.

(iii) λεπτότερον καὶ πυκνότερον M

Such variations are common in prose authors. There is nothing to choose.

22 (i) ὀκόσοισι scripsi : ὀκόσα M : οἷσι Θ

A similar case to 19 (ii). There are five other places in De Morbo Sacro where Θ has οἷσι, ὄσοι etc. and Μ ὀκόσοισι, ὀκόσοι (Grensemann, p. 53). This can only be the result of a systematic process on one side or the other. Here, ὀκόσοισι has been assimilated to the following noun.

- (ii) δειματα νυκτός Μ
Cf. on 20 (iii).

24 Ἐκάτης : ‘fortasse ἀνταῖου θεοῦ’ Grensemann

Erotian, in a group of entries in his Hippocratic glossary that come from De Morbo Sacro, has the following:

Ἄνταῖον θεόν· τὸν βλάβης ὑπονοούμενον αἴτιον ἔσεσθαι ἀνθρώποις. ἀνταῖον δὲ ἐκάλουν οἱ παλαιοὶ τὸν †σώφρονα (ὀλόσφρονα Welcker – diagnostic conjecture), ὡς καὶ Σοφοκλῆς ἐν Κλυταιμίστρα λέγων “τόνδ’ ἀνταῖον περιδιθέοντ’ οὐχ ὄρατε” καὶ “δειμα προσπαίοντ’ ἀπ’ ἀνταίας θεοῦ” (frr. 334–5 Pearson).

The position of the entry suggests a location for the phrase between 1.10 ἀλαζόνες and 1.40 ἀλάστορας, and the passage about gods certainly offers a promising field in which to seek it. Since the ἀνταία θεός causes a δειμα in Sophocles, and elsewhere is equated with Hecate, Grensemann proposes (first in Hermes 93, 1965, 490) to place Erotian’s ἀνταῖος θεός here, and to assume that Ἐκάτης is a gloss.

Two objections may be made. One is that a masculine ἀνταῖος θεός was unlikely to be glossed by the name of a goddess. Ἐνοδίης θεοῦ in 19 was much likelier to be glossed Ἐκάτης. One might suppose that Ἐκάτης was originally intended to refer to that, and accidentally displaced ἀνταῖου θεοῦ instead; but the second objection is more serious, that if Erotian’s entry came from here it ought to be in the genitive or in the nominative. We should try to place it rather where there is room for an accusative. Since an ἀνταῖος θεός seems essentially to be one who is *supplicated* in adversity (ἰκέσιος, Hesych. and Et. Magn. s. v. ἀνταία; ἀνταίη ἢ εὐλιτάνευτος καὶ εὐάντητος sch. Ap. Rhod. 1.1141), a suitable place would be in line 30 where we read τοὺς θεοῦς, which could

be a banalization. It is true that this is just after ἀλάστορας (28), which follows ἀνταῖον θεόν in Erotian, but it is not the case that strict order is preserved, as a glance at Nachmanson's edition shows.

26 *πρῆγμα* om. M

The word is clearly genuine. A case of simple omission, possibly helped by the fact that the next word begins with the same letter.

27/28 *αἵμασι καὶ τοῖσι ἄλλοισι τοῖσι τοιούτοις ὥσπερ μιάσμασι ἔχοντας* M

It is difficult to say anything for or against the articles with ἄλλοισι τοιούτοις. But the Ionic -οῖσι seems to have impressed the scribe so much that he involuntarily wrote -σι for *τι* both before and after. *μιάσμασι* is impossible and *αἵμασι* unlikely. For the omission of *τε* compare 1 (i), 8 (i).

28 *πεφαρμακευμένους* Θ

φαρμάσσω and *φαρμακεύω* both existed in fifth-century Ionic, but the former is slightly the *difficilior lectio*, cf. Hesych. *φαρμάσσει*: *θεραπεύει, φαρμακεύει. φαρμάσσων· βάπτων, στομῶν, στομοποιῶν, φαρμακεύων.*

28/29 (i) ἦ *τι ἔργον ἀνόσιον εἰργασμένους* del. Regenbogen, *Symbola Hippocratea* p. 3

Regenbogen points out that Erotian's explanation of ἀλάστορες includes the alternative *ἐνιοὶ δὲ τοὺς ἀνόσιόν τι καὶ μιὰρὸν εἰργασμένους*. The phrase in our text is clearly an intrusive version of the same interpretation. Such glosses are often introduced by ἦ ('in other words'), and here the phrase beginning with ἦ seemed to belong in the sentence.

(ii) *τι ἔργον: πέργον* Θ

An unintelligent uncial misreading; cf. on 18 (ii).

29 (i) *ταναντία* M (ii) *τούτων* Θ

Difficult decisions. On the one hand one may argue that *τάναντία τούτων* is supported by *De Aere Aquis Locis* 5,1 *τὸ ἐναντίον*

τούτων (the same writer as De Morbo Sacro); Herodotus 6,86α,1 τὰ ἐναντία τούτων, 109,6; 8,102,2; 9,104; and that τάντια is a mere haplography. On the other hand Herodotus can speak of a γνώμη ἀντίη τῆ προκειμένη (7,10,1), and while this is a less similar phrase, it makes it hard to question the possibility of τὰ ἀντία τούτοισι: ἐναντία and τούτων could both easily be understood as lectiones faciliores. Nor can τάντια τούτων or τάναντία τούτοισι confidently be excluded.

(iii) θύειν om. Θ

The τε implies a verb linked more closely with εὔχεσθαι than ποιεῖν can be. θύειν is ideal. Homoeoteleuton explains the omission.

30 τοὺς θεούς: fort. τὸν ἀνταῖον θεόν

See above on 24.

31 καθαρμάτων Jones

καθαρός is usually the rite and κάθαρμα the concrete object of it. The neuter τὰ μὲν . . . τὰ δέ also favours Jones's conjecture, and it is palaeographically easy, since stems in -ματ- are often abbreviated in minuscule, καθαρῶ. On the other hand Herodotus speaks of 'making Athamas a καθαρμός' (7,197,3), and Plut. de curiositate 6 p. 518b has τὰ λύματα καὶ τοὺς καθαρμούς ἐκβάλλουσιν.

32 φέρουσιν Θ

The sense is not affected. ἀπο- might in theory be an anticipation from ἀποδοῦναι, but it is more reasonable to regard it as the original reading and φέρουσιν as a simplification.

33 (i) ἕψηται Θ

The product of uncertainty about classical syntax.

(ii) μηδὲν βήσεται Θ : μηδὲ ἐπιβήσεται M

The sense demands a μηδέ, and the reading of Θ evidently goes back to μηδεμβήσεται. Between ἐμ- and ἐπι- there is not much to choose, but ἐμ- (which perhaps carries a stronger implication of involvement in what is trodden on) appears in connexion with defilement in Heraclitus fr. 86 Marc. and Soph. OC 400.

34 (i) ὁ θεός Θ : θεός γε M : possis γε θεός

The articulated δ $\theta\epsilon\acute{o}\varsigma$ matches the preceding $\tau\tilde{\omega}$ $\theta\epsilon\tilde{\omega}$. This correspondence may be due to the author; or on the other hand to a scribe, if the author meant ‘render them to the god concerned, if a god is responsible’. $\epsilon\acute{\iota}$ $\delta\eta$. . . $\gamma\epsilon$ seems to be unparalleled; $\epsilon\acute{\iota}$ $\delta\eta$ $\gamma\epsilon$ would be paralleled by variants in Herodotus 7,10,1 and Plato Parm. 135b, see Denniston, Greek Particles 247; and it would account for the presence of $\gamma\epsilon$ in M.

(ii) $\acute{\epsilon}\gamma\omega$ Θ

The writer always uses $\acute{\epsilon}\gamma\omega\gamma\epsilon$ in expressions of opinion except when he has enclitic forms of the pronoun (2,1 $\text{o}\tilde{\upsilon}\delta\acute{\epsilon}\nu$ $\tau\acute{\iota}$ $\mu\omicron\iota$ $\delta\omicron\kappa\epsilon\acute{\iota}$) or when there is a connective to be accommodated (1,10 $\acute{\epsilon}\mu\omicron\iota$ $\delta\acute{\epsilon}$ $\delta\omicron\kappa\acute{\epsilon}\omicron\upsilon\sigma\iota\nu$). The examples may be found from Grensemann’s index. Θ ’s reading is a banalization paralleled at 17,2 ($\acute{\epsilon}\gamma\omega\gamma\epsilon$ Θ M : $\acute{\epsilon}\gamma\omega$ C, a 15th-century manuscript which is of use later in the work).

35 $\acute{\upsilon}\pi\omicron\kappa\eta\rho\acute{o}\tau\alpha\tau\omicron\nu$ M

There is no such word. The influence of one or more of the neighbouring $\acute{\upsilon}\pi\omicron$ ’s is responsible.

36 (i) $\kappa\alpha\acute{\iota}$ $\eta\gamma$ Θ

A merely orthographical variant. The author probably said $\kappa\eta\gamma$ (or $\kappa\acute{\alpha}\gamma$) in reading out his work, in writing he may have put either.

(ii) $\acute{\epsilon}\theta\acute{\epsilon}\lambda\omicron\iota$ $\acute{\alpha}\nu$ ante $\acute{\upsilon}\pi\omicron$ $\tau\omicron\tilde{\omega}$ $\theta\epsilon\omicron\tilde{\omega}$ *habet* M

The sentence was too long for the scribe. He did not realize that $\kappa\alpha\theta\alpha\acute{\iota}\rho\epsilon\sigma\theta\alpha\iota$ $\acute{\alpha}\nu$ etc. was still governed by $\acute{\alpha}\xi\acute{\iota}\tilde{\omega}$, and felt the need to supply another verb, which he did without much understanding of the sense.

3. Aesop. fab. 157 Perry; Xenophon, Memorabilia 1, 3, 8–9

These short items are included here not so much to illustrate the textual critic’s way of working as to show how freely prose texts can be altered at the hands of copyists. In the Aesopic collections,

which were valued for their substance and not for any stylistic reason, variations of wording from manuscript to manuscript are the rule, though often not unconnected with corruption by misreading. The fable of the fox and the goat may serve as an example. It is transmitted in the following manuscripts¹):

(sigla and groupings)	G Pa Pc.	Ca Mb.	Pb Pd.	Ma Mo
(century)	x xii xiv	xiii xv	xiii/xiv xv	xv xv

Λύκος και αίξ

λύκος θεασάμενος αίγα ἐπί τινος κρημονῦ νεμομένην, ἐπειδὴ οὐκ ἠδύνατο αὐτῆς ἐφικέσθαι, κατωτέρω παρήνει αὐτὴν καταβῆναι, μή καὶ πέση λαθοῦσα, λέγων ὡς ἀμείνων ὁ παρ' αὐτῷ λειμῶν καὶ ἡ πῶα σφοδρὰ εὐανθής. ἡ δὲ ἀπεκρίνατο πρὸς αὐτόν· “ἀλλ' οὐκ ἐμὲ ἐπὶ νομῆν
5 καλεῖς, αὐτὸς δὲ τροφῆς ἀπορεῖς”.

οὕτω καὶ τῶν ἀνθρώπων οἱ κακοῦργοι ἔταν παρὰ τοῖς εἰδόσιν πονηρεύονται ἀνόνητοι τῶν τεχνασμάτων γίνονται.

1 κρημνῶδους ἀντροῦ G Pa Pc

The oldest group of manuscripts on the whole offer the better text, but this cave is not very appropriate.

2 (i) κατωτέρω παρήνει αὐτὴν G: κάτω παρήνει αὐτὴν Pa Pc: π. αὐ. κατωτέρω Mb Pb Pd Ma Mo, π. κατωτέρω Ca

The placing of κατωτέρω next to καταβῆναι in the later manuscripts represents a simplification of word order.

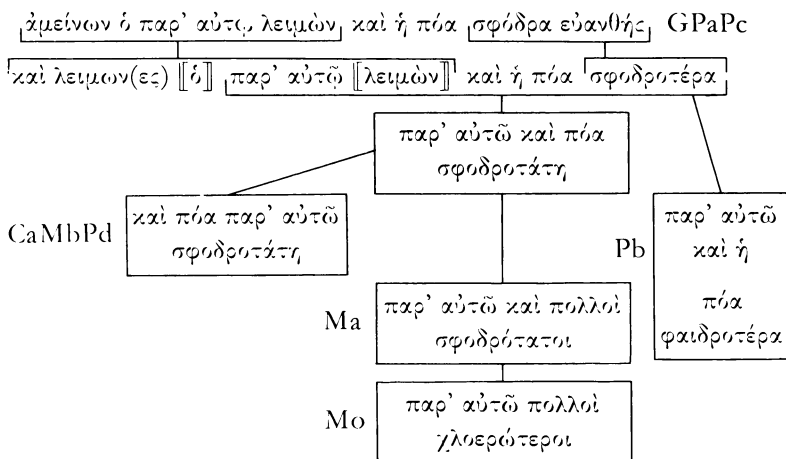
(ii) μή πως πέση Ca Mb

3 ὡς καὶ λειμῶνες καὶ πῶα παρ' αὐτῷ σφοδροτάτη Mb et omisso ὡς Ca Pd: ὡς καὶ λειμῶνες παρ' αὐτῷ καὶ ἡ πῶα φαιδροτέρα Pb: ὡς λειμῶνες παρ' αὐτῷ καὶ πολλοὶ σφοδρότατοι Ma: ὡς λειμῶνες παρ' αὐτῷ πολλοὶ γλυερώτεροι Mo

When the readings are presented in this order (which happens

¹) I have used Perry's sigla, and constructed my apparatus from his edition and Hausrath's clumsier one.

to be chronological), it is not difficult to see their genetic relationship. σφύδρα εὐανθής was corrupted, probably through σφοδρύτερα (the scribe expecting another comparative), into σφοδρουτάτη. Seeing the absurdity of ‘violent’ grass, another copyist emended to φαιδρύτερα. In another branch of the tradition καὶ πῶς σφοδρουτάτη was corrupted into καὶ πολλοὶ σφοδρότατοι (Ma); Mo makes sense of this by omitting καί and substituting another adjective. A complete *stemma lectionum* will look like this:



4 ἀπεκρίνατο πρὸς αὐτόν G Pa: ἀπεκρίνατο Pc: πρὸς αὐτὸν ἔφη cett.

5 (i) καλεῖς ἄμείνονα Pc

(ii) αὐτὸς δὲ: ἀλλ' αὐτὸς Pc: ἀλλὰ Ca Mb

6 κακοῦργοι G Pa: κακοῦργοι καὶ πανοῦργοι Pc: πονηροὶ cett.

πνηροὶ comes from the following verb and is unlikely in conjunction with it.

7 (i) πορεύονται Pc

(ii) ἀνόνητοι Ca Mb: ἀνόητοι G Pa Pd Ma Mo, ἀνοητά(των) Pb, εὐνόητοι Pc

The sense guarantees ἀνόνητοι. Predictably it was mistaken for the much commoner word ἀνόητοι. Pb's ἀνοητάτων for ἀνόητοι

των is a further misreading, probably influenced by τεχνασμάτων. On the other hand, while α/ευ is a common graphic confusion (in early minuscule, particularly), Pc's reading looks like a conjecture, meaning 'inventive', which is not appropriate to the ending of the fable or to παρὰ τοῖς εἰδόσιν.

(iii) τῶν om. Ca

Haplography?

A manuscript tradition that does not display such variations as these offers less of a challenge to the critic, and he may be beguiled into excessive trust in its fidelity so long as sense and style seem to run smoothly. Take this passage from Xenophon, *Memorabilia*, 1,3,8-9:

ἀφροδισίων δὲ παρήνει τῶν καλῶν ἰσχυρῶς ἀπέχεσθαι· οὐ γὰρ ἔφη ῥάδιον εἶναι τῶν τοιούτων ἀπτόμενον σωφρονεῖν. ἀλλὰ καὶ Κριτόβουλον ποτε τὸν Κρίτωνος πυθόμενος ὅτι ἐφίλησε τὸν Ἀλκιβιάδου υἱὸν καλὸν ὄντα, παρόντος τοῦ Κριτοβούλου ἤρετο Ξενοφῶντα· “εἰπέ μοι” ἔφη “ὦ Ξενοφῶν, οὐ σὺ Κριτόβουλον ἐνόμιζες εἶναι τῶν σωφρονικῶν ἀνθρώπων μᾶλλον ἢ τῶν θρασέων καὶ τῶν προνοητικῶν μᾶλλον ἢ τῶν ἀνοήτων τε καὶ ῥίψοκινδύνων;”

Why should anyone doubt that this text given by the medieval manuscripts, and as far as σωφρονεῖν also by Stobaeus 3,17,43, is a faithful reproduction of what Xenophon wrote? Except that we happen to possess a fragment of a copy made about one century, instead of eight or sixteen centuries, after Xenophon, and it gives the text thus:

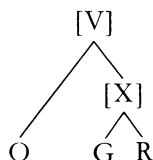
[ἀφροδισίων δὲ παρ]ρήνει ἰσχυ[ρῶς τῶν καλῶν ἀπέχεσ]θαι· οὐ γὰρ οἶ[όν τε ἔφη εἶναι τὸν κα]λῶν ἀπτό[μενον σωφρονεῖν, πολὺ δ]ἔ μᾶλλον [..... ..]. .η κέ[ξε]σθαι. [ἀλλὰ καὶ Κριτόβουλον] ποτε τὸν [Κρίτωνος πυθόμεν]ος ὅτι ἐφίλησεν [τὸν Ἀλκιβιάδου υἱὸν κ]αλὸν ὄντα, [ἤ]ρετο Ξενοφῶντα· οὐ σὺ ἐ[νό]μιζες εἶ[ναι τὸν Κριτόβουλον τ]ῶν σωφρο[ν-.....

(E. Siegmann, *Literarische griechische Texte der Heidelberger Papyrussammlung*, 1956, no. 206.) The version of the papyrus is not necessarily authentic in every detail. The phrases that it omits,

παρόντος τοῦ Κριτοβούλου and εἰπέ μοι ἔφη ὁ Ξενοφῶν, look genuine. But so does the extra clause after σωφρονεῖν; it would be arbitrary to dismiss the Ptolemaic text as aberrant and cling throughout to the Byzantine one, which must after all have Ptolemaic ancestors. However one judges the differences, the unity of the tradition has been proved illusory. How many other variants may not have been current in ancient copies of these lines?

4. Catullus 61, 189–228

The extant manuscripts, about 110 in number, all descend from a single copy which was written perhaps in the ninth century, discovered at Verona in the late 13th century, and subsequently lost. Only three of the whole swarm are primary witnesses, O G R, all of the 14th century: the rest are derived from them. As far as they are concerned, it is a closed recension, the stemma being:



at marite, ita me iuuent
 190 caelites, nihilo minus
 pulcher es, neque te Venus
 neglegit. sed abit dies:
 perge, ne remorare.

189 Ad maritum tamen iuuenem O G R (*sc.* V): *corr.* Scaliger

The transmitted reading is unmetrical and nonsensical. *caelites* in 190 requires a construction; and what follows shows that the bridegroom is being addressed, as in the preceding stanza. That leads us to *marite* (as in 184), and it follows that *ad* conceals *at* (often written *ad* in manuscripts and inscriptions in spite of the grammarians' rule given by Quintilian 1,7,5 and others; cf. below on

225). In the remainder, *tamen iuuenem*, Scaliger recognized a formula like 66,18 *ita me diui . . iuuerint*, 97,1, *ita me di ament*. It is hard to say exactly how the corruption came about. *ad* might have generated the accusatives, $\mu\alpha\rho\iota\tau\alpha$ being read as $\mu\alpha\rho\iota\tau\bar{\upsilon}$. Or *iuuent* might first have been read as *iuuenē* and the corruption spread back from it.

190 (i) Celites O

(ii) *nichil ominus O : nichōilo minus G*

The words *nihil* and *mibi* are commonly written *nichil* and *michi* in manuscripts. The scribe of G anticipated the ending and wrote *nicho*, then realized his error and corrected it.

191 (i) Pulcre res V : corr. ‘alii’ ap. Robortellum

Again nonsense, though arranged in Latin words. It is clear from the context that the groom is being complimented in the conventional way. The Catullus manuscripts usually spell *pulcer* without an *b*; this corruption may go back to either spelling. *Pulcher* was the usual pronunciation in Catullus’ time (Cic. Orator 160), but it could still be written *pulcer*, and the manuscript evidence may indicate that he wrote it so, if it does not reflect a deliberate archaizing policy by scribes of the imperial period.

(ii) *nec V : corr. rec.*

192 abiit V : corr. rec.

The same phrase (*sed*) *abit dies* has been used in lines 90, 105 and 112, and V has the same corruption each time. So has X in 63,38, the only other place in Catullus where *abit* occurs, while in 63,30 one copy has *abiit* for *adit*.

193 rememorare X

Perhaps a mechanical dittography like ‘renonown’ (above, p. 24), but more probably the thought of the word *memorare*, or an actual variant, played a part; cf. Seneca, Quaest. nat. 2,55,4 *remorari* Z : *remorare* HPG : *memorare* F : *rememorare* T. Note that the impossible form was faithfully copied in both G and R.

non diu remoratus es:
 195 iam uenis. bona te Venus
 iúuerit, quoniam palam
 quod cupis cupis et bonum
 non abscondis amorem.

194–8 *ante 189 habuit V : transp. Scaliger*

The stanza goes well enough after 184–8 *iam licet uenias* etc., but 189–93 makes no sense afterwards: *nihilominus* has no reference, and *ne remorare* does not come well after *non diu remoratus es*. Scaliger's transposition restores coherence between each of these three stanzas and the one following it, and is unquestionably right.

194 *remorata X : remota O corr. Calphurnius (ed. 1481)*

V must have had *-ta*; and it will have had *remorata*, since if it had had *remota*, that would also have appeared in X. *remota* is a secondary corruption in O, a quasi-haplography.

The true reading is obvious, but to scribes with little understanding of metre and a limited field of vision it was not quite so obvious when the line immediately followed 188. It was the sentence about the bride, no doubt, that generated the feminine ending.

195 *Iam uenus rec. duo*

A nice example of assimilation.

196 *Iuuerit rec. : Inuenerit V : Inuenit rec.*

Of the two humanist emendations of V's impossible reading, *iuuerit* is far superior to *inuenerit* from the point of view of the sense, making an expression like those mentioned on 189. Once *iu-* was read as the much commoner syllable *in-* (a very easy visual error), the unrecognizable remainder *-uerit* might naturally be made into *-uenerit*, especially with *uenis* directly above. Or *inuenerit* may have been written and then conflated with a correction.

197 *cupis cupis G, R m. rec.*

This reading, which gives good sense, was easy to think of, and it would be rash to assume that the agreement of G with a corrector of R implies that it was a variant in X. *cupis cupis* must be treated

as the paradosis, and it is unexceptionable. The other must be treated as an emendation, and as such it is a worthwhile one. Corruption by assimilation would have been very easy.

198 abscondas V : *corr. recc.*

Grammar and metre impose the indicative. I cannot account for the corruption, unless the *a* comes from the variant to the eleventh letter of 197.

 ille pulueris ericei
200 siderumque micantium
 subducat numerum prius
 qui nostri numerare uolunt
 multa milia ludere.

The reader to whom the emendations so far discussed have appeared simple now has the opportunity to try his own hand, unless he remembers how this stanza reads in a modern text. I have given it as it is transmitted, and postpone my discussion of it to the end of the present section.

 ludite ut lubet, et breui
205 líberos date. non decet
 tam uetus sine líberís
 nomen esse, sed indidem
 semper ingenerari.

204 Et ludite et lubet V : *corr. Calphurnius* (ut), *Parthenius*
ut and *et* are often confused. In the present case assimilation comes into play too. The superfluous *et* before *ludite* may come from an instinctive tendency towards symmetry that turned A *et* B *et* C into *et* A *et* B *et* C.

208 ingenerati O

A visual error.

 Torquatus uolo paruulus
210 matris e gremio suae
 porrigéns teneras manús
 dulce rideat ad patrem
 semihiante labello.

209 Torcutus O

This is the only place in the poem where the name appears, but there can be no doubt that Torquatus is the correct form of it. The copyist of O probably saw the *a* as a *u*, *Torquutus*.

210 et O

Another common confusion, due to abbreviation of *et*.

213 Sed mihi ante V (michi G): *corr. Scaliger*

The nonsensical transmitted reading was easily cured once the word division was disregarded. The unusual long word had been seen as three much commoner words. G then modified the spelling of *mibi*, cf. on 190 (ii).

sit suo similis patri
215 Mánlio, et facile ínscieis
nóscitetur ab omnibus,
et pudicitiam suae
matris indicet ore.

214 simili *rec. unus m. pr.*

A typical assimilation-corruption.

215 (i) Maulio O: Mallio *rec.*

Maulius is not a Roman name, and clearly derives from a misreading of *Manlio*, which therefore stood in V. The name is also given in line 16, where V had *Mallio*. Mallius is a genuine name, often confused with Manlius, Manilius, etc. Corruption in either direction was easy, since Manlius was the better-known name, while Italian pronunciation tended towards Mallius. The former is made probable here by Torquatus in 209, for the Manlii Torquati are a well-attested family. The man who wrote *Mallio* no doubt remembered 16.

(ii) ut *Bergk*

A quite legitimate suggestion (cf. on 204).

(iii) facie *Burmann*

Another conjecture based not on any objection to the transmitted reading but on the discerning of its possible origin from some-

thing else. *facie nōscitare* is good Latin (Livy 22,6,3), but when we have *ore* in the next clause it is labouring the point too much to have *facie* as well; it adds nothing to the sense, whereas *facile* does add a little.

(iv) *inisciis* R *m. rec.*, *-eis* Lachmann: *insciens* V: *vix insolens*

The infant's own ignorance is irrelevant, and *insciens* cannot be right. *insci(e)is* adds point to 216: 'may he be recognized as his father's son even by those who do not know'. The spelling *-eis* was still in use in the late Republic, and there are distinct signs of it in the manuscripts of Catullus and Lucretius. This is one place where the assumption of its use helps to explain a postulated corruption.

One might also think of *insolens*, 'though he is unfamiliar to them', but I am not sure whether the adjective can be used in quite that sense.

216 omnibus *cum* *inisciis commutat* Dawes: *obuieis* Pleitner

217 (i) *set* Hand: *sic* Hermann

All these conjectures are attempts to eliminate the anomaly of the short syllable at the end of 216. Synapheia prevails otherwise throughout the poem, as in Catullus' other glyconic composition, 34: the last syllable of the line is genuinely long except at the end of the stanza, and words may be elided at line-end or even broken between lines. The material is sufficient to establish the rule, so that the problem is a real one. Dawes's transposition is not very felicitous; *insci(e)is* is better in the predicative position, the desired emphasis being *ab omnibus, etiam inscieis*, not *ab inscieis, et quidem omnibus*. Pleitner's *obuieis*, as an adjective in substantival use, could hardly be qualified by another adjective such as *insci(e)is*. There seems more hope in attacking *et* in 217, a word often involved in corruption. Hand's *set* (i. e. *sed*) is contrary to the sense. Hermann's *sic* is more suitable, only the clause is so nearly equivalent to the two preceding that one hankers after a closer connexion. No convincing solution seems yet to have been found, and as the scope

for emendation appears so limited, it may be that having stated the anomaly we should with due reserve accept it.

217 (ii) pudiciciam O

ci and *ti*, being both pronounced *tsi* in the Middle Ages, are liable to be interchanged. Hence such spellings as *conditio* for *condicio*, *nuncius* for *nuntius*.

(iii) suam V : corr. *Calpurnius*: suo R corr.

The required sense is clear. It could be given by *suo*, but the word-order is then involved, and the other correction is supported by 58 *a gremio suae | matris*, 210 *matris . . suae*, 214 *suo . . patri*. The corruption is a commonplace assimilation of endings.

218 iudicet O

The sense guarantees *indicet*. The easiest of graphical errors.

talis illius a bona
220 matre laus genus approbet
 qualis unica ab optimā
 matre Telemacho manet
 fama Penelopeo.

219/220 bona matre/Laus V

A similar misdivision occurred at 58, *a gremio suae matris*/instead of *suae/matris*. A scribe's eye ran on from the adjective to the noun that it heralded.

221 ab *om.* O

222 thelamacho O : theleamaco X

Uncertainty over aspiration (t/th, c/ch) manifests itself particularly in Greek names. The variants in the second syllable point to V's having had *thela-* with a suprascript *e* over the *a*. The *a* was an anticipation of the third vowel.

223 penelopeo O, penelopeo X : Penelopaeo *Housman, J. Phil.* 33, 1914, 73

penelop- is the same kind of mistake as *thelamacho*.

A name in $-η$ normally gives an adjective in $-αῖος$, and Housman observes that the transmitted *Penelopeus* here and in Ovid Tr. 5,

14,36 may stand for *-paeus*. However, the question is not a simple one. We do not know that the adjective was ever used in Greek. If Catullus first coined it, the question is what analogies were uppermost in his consciousness. It is not a question that we are well placed to answer; but it seems possible that the poetic form of the name itself, Πηνελόπεια, might have made *Penelopeus* sound right.

 claudite óstia uirgines:
225 lusimus satis. at bonei
 coniuges bene uiuite et
 munere assiduo ualentem
 exercete iuuentam.

224 hostia V

225 (i) ad V: *expl. recc.*

See on 189.

(ii) bonlei O : bolnei X (al. bonei R,G *corr.*)

V perhaps had *bonei* with a suprascript *i* that looked like an *l* to both copyists.

226 bone uite V : *corr.* R *m. rec.* : bone uitas, bonae uitae (*partim sine et*) *recc.*

No part of *uita* will fit here, and *bene uiuite*, giving a verb in parataxis with *exercete*, is a certain correction. Haplography produced *uite*, while *bene* was affected by *bonei* and became an adjective qualifying *uit(a)e*. Attempts were then made to accommodate the noun in the construction by making it *uitas et . . iuuentam*, or *bonae uitae munere*.

227 assidue V : *corr. recc.*

munere needs an adjective to give it meaning. *-e* may have been a mechanical assimilation to preceding endings.

228 Exercere O

An easy corruption in purely visual terms, but *munere* was probably a contributory factor. As a matter of method, one ought to consider the theoretical possibility that *exercere* stood in V (*-ete* in

X being a natural correction) and that the corruption really lay elsewhere. Once the question is asked, the idea quickly suggests itself that *ualentem*, or *ualētē*, might conceal *ualete*. But while *ualentem* in this context might well become *ualete*, corruption in the opposite direction is difficult to imagine. An adjective with *iuuentam* is also supported to some extent by Phaedrus app. 12,4 *et exercebat feruidam adulescentiam*; Calpurnius Siculus 5,11 *gnauam potes exercere iuuentam*.

Postponed discussion of 199–203:

The stanza does not make sense as it stands. The two last lines are unmetrical as well as syntactically incoherent, while *ericei* is a *vox nihili*. We must begin by ascertaining what sense was intended. Evidently something like ‘let him first reckon up the number of the sands and stars, who would count the myriad games of love’. Compare 7,3–12 (with 5,10 for *milia multa*). We proceed to detail.

199 *ericei*: an adjective qualifying *pulueris* seems to be required. *aridi* (Broukhusius) is palaeographically not hard, but very banal. Renaissance scholars more laudably sensed that a geographical term was wanted, and developed *ericei* through *erit(h)ei* into *Erythrei*. But then metre had to be mended by reducing *pulueris* to *puluis*, an impossible form of the genitive; in any case *-ēi* cannot stand for *-aei*. These efforts were superseded when Heinsius performed the simple equation, *ericei* = *AFERICI* = *AFRICI*, confirmed absolutely by the parallel passage with its *Libyssae barenae* (7,3). Lachmann wrote *Africei*, and this spelling seems to have been used in at least one ancient text of Catullus. It may be a scribal archaism, or it may go back to the poet (cf. on 215 (iv), 225 (ii)): it had no etymological justification in the genitive singular as it had in the nominative and dative/ablative plural, and Lucilius condemned it, but the distinction in pronunciation disappeared and in Catullus’ time original *ī* was sometimes being written *ei*.

(**200** *micantium* O: see on 217 (ii).)

202–3: *uolunt* is unmetrical, therefore corrupt; but it is the most

suitable verb. The only part of it that would scan is *uolt*. Since *ille . . . subducat . . . qui . . .* calls for a singular, that is clearly right. It was read as *uol̄t*, which occurs as an abbreviation of *uolunt*.

ludere is also unmetrical. A noun in the genitive appears to be required: *ludi*, or *ludei*. The ending was assimilated to *numerare*.

One word remains incongruous: *nostrī*. The adjacent stanzas show that Catullus means the love-play of the bridal pair: *uestri* or *uostri*. If the word was written in full, the latter form was the more easily misread; but it may have been represented by the nomen-sacrum abbreviation *ūri*, which often causes confusion.

How did you score? If you failed to see that the words *ericeī*, *nostrī*, *uolunt* and *ludere* were corrupt, I see little hope for you as a textual critic. If by your own unaided wit you restored *uestri* (or *uostri*), *uolt* (or *uult*) and *ludi* (or *ludei*), you are competent. If you restored *Áfriceī*, you are brilliant.

5. Ovid, Amores 3, 15

Whereas the tradition of Catullus issues from a single source after the late 13th century, that of Ovid ramifies throughout the Middle Ages, and gives us better opportunities of observing what liberties scribes can take with a text. As one might expect in the circumstances, it is an open tradition. The four oldest and best manuscripts of the Amores are R of the 9th century, P of the 9th or 10th, and S Y of the 11th. For 3,15, however, the last poem of the collection, neither R nor S is available; and P ends at line 8. For the rest we are dependent upon Y and upon manuscripts of later date (the oldest being of the 12th or 13th century), known collectively as ω and going back to a source that is at least sometimes independent from that of R P S Y. I have used the sigla of Kenney's Oxford edition with the addition of Munari's J and the newly-respected Y (on which see Munari, *Il Codice Hamilton 471 di Ovidio*, Rome 1965). The sign ε means 'some of the ω manuscripts'.

Quaere nouum uatem, tenerorum mater Amorum:
 raditur haec elegis ultima meta meis;
 quos ego composui Paeligni ruris alumnus,
 nec me deliciae dedecuerunt meae.
 5 {si quid id est, usque a proauis uetus ordinis heres,
 non modo militiae turbine factus eques.}
 Mantua Vergilio gaudet, Verona Catullo:
 Paelignae dicar gloria gentis ego,
 quam sua libertas ad honesta coegerat arma
 10 cum timuit socias anxia Roma manus;
 atque aliquis spectans hospes Sulmonis aquosi
 moenia, quae campi iugera pauca tenent,
 “quae tantum” dicit “potuistis ferre poetam,
 quantulacumque estis, uos ego magna uoco.”
 15 culte puer, puerique paréns Amathusia culti,
 aurea de campo uellite signa meo;
 corniger increpuit thyrsu grauiore Lyaeus,
 pulsanda est magnis area maior equis.
 imbelles elegi, genialis Musa, ualete,
 20 post mea mansurum fata superstes opus.

2 (i) traditur Y ω (P *macula obscuratur*): corr. Heinsius

Traditur meta does not make sense. But *meta* is sound; Ovid uses the same image in *Ars Amat.* 1,40; 2,426. The required sense for the verb is that expressed in those passages by *premere* and *terere*, and in *Am.* 3,2,12 by *stringere*. Heinsius saw what *traditur* pointed to. A scribe had substituted a commoner word and one more readily connected with *elegi*. The occurrence of *tradita* at the beginning of a pentameter sixty lines earlier may have contributed.

(ii) haec Y ω (P *obscuratur*): hic P_a T

Hic may be only a conjecture in the two 13th-century manuscripts from which it is quoted; if it were the only reading attested no one would quarrel with it, but *haec* is hardly to be explained away as a mechanical (even less as a deliberate) assimilation.

(iii) meta P Y ∷: nota H: c(h)arta ∷: cura P_b

After the corruption of *raditur*, *meta* became puzzling, and *charta*, *cura* are deliberate substitutions by copyists; *nota*, however, looks like a visual corruption of *meta*.

5–6 (≅ *Trist.* 4,10,7–8) *post 10 habent* E_aO_b: *susp. J. Schrader, lib. emend. 205*

The virtual repetition of a couplet in another poem is not in itself a sign of interpolation in one or other place, But when there is added to this the fact that it is not given by all manuscripts in the same position, and the fact that in the *Tristia* it sits well in an extended autobiographical passage, while here it interrupts concentration on Ovid's place of origin, and breaks the connexion between 4 and 7–8, then it certainly becomes worth considering the hypothesis that the lines are not genuine here but were added, at first in the margin, by someone who saw fit to append a detail from another autobiographical poem, much as another couplet from the *Tristia* (3,3,73–4) is added at the end of the elegy in one manuscript (X). The question is complicated by something else:

6 modo militiae turbine P Y ω : ego fortunae munere E_aO_b modo fortunae munere *Ov. Trist.*

The same manuscripts that have the couplet in a quite unsuitable place offer a major variant that agrees with the *Tristia* version (except for *ego*). The combination strongly suggests that in these manuscripts at any rate the couplet comes from a marginal quotation of the *Tristia*. But this need not mean that it does not belong in *Am.* 3,15, after verse 4: its presence there might itself prompt the marginal quotation of the parallel, and the reception of the latter into the text after 10 might be accompanied by the deletion of the original couplet after 4. So only the argument from inner coherence can be used against it; how much weight that carries, each reader will decide for himself, but it is enough for me.

Militiae turbine is a more precise and forceful phrase than *fortunae munere*. One can imagine copyists replacing it by the other, but not the contrary. So it is possible that Ovid wrote

militiae turbine in the Tristia. The assumption is certainly helpful if one regards the lines as an interpolation in the Amores.

8 gentis gloria dicar ⁂

The transposition is of the common type that brings related words together: *Paelignae gentis, dicar ego*. The metre is preserved; scribes could cope with elegiacs as they could not (till the renaissance) with Catullus' glyconics.

9 quam E_a Q : quem Y ⁂

The antecedent is *gentis*, but scribes mistakenly took it to be the more emphatic *ego*.

12 parua ⁂

Perhaps influenced by 14. *Pauca* is supported by Fasti 3,192.

13 dicit, dicat ⁂

Such variations are common. The subjunctive may have been introduced in the belief that *dicar* in 8 was a subjunctive. It is better taken as a future (cf. Hor. Carm. 2,20,3ff.; 3,30,6ff.), and that confirms *dicit* here.

15 amathusia culti Y *corr.*, ⁂: amat uisia culti (c *ex u facto*) Y : amathontia culta H: amat hostia cultum F, -us X: mihi tempore longo *cett.*

Venus is clearly being addressed, and *Amathusia culti*, even if it is an emendation, is indubitably right. The Greek name, as so often, baffled the copyists. FX have dismembered it to form Latin words, which however make nonsense. Someone else, desiring sense, substituted *mihi tempore longo*. It is not very good sense, and if this had been the only reading preserved, critics would certainly have queried it. Others would have defended it as perfectly Ovidian, pointing irrelevantly to other examples of *tempore longo* in Ovid. But who could have guessed the true reading?

18 est magnis : Haemoniis *Merkel*: Emathiis *Martinon*

There has been felt to be something flat about *magnis*, especially with *area maior*. Merkel's conjecture is based on Prop. 2,10,1-2,

sed tempus lustrare aliis Helicon choreis | et campum Haemonio iam dare tempus equo. The assumed corruption would not be difficult: a copyist expecting *est* after *pulsanda* might well see it (abbreviated) in the *e* of *emoniis*, and the mysterious residue might well be made into *magnis*. Martinon's alternative has similar qualities, without the advantage of the Propertian parallel. *Haemoniis* may be right; at least it deserves a place in the apparatus. But *magnis* also has point, and it is precisely the juxtaposition with *maior* that gives it point. 'Big horses must have a bigger space to gallop in'; in other words, 'I have great powers, I must exercise them on something more ambitious than elegy'.

19 Musa : turba N

The use of *turba* with an adjective as an appositional phrase is a favourite mannerism of Ovid's, as e. g. in *Fasti* 4,764 *et ualeant uigiles, prouida turba, canes*. If it were the only reading transmitted here, it would not be suspect. Given the much better supported variant *Musa*, one may hesitate. It is not obvious why either should have been replaced by the other.

post 20 sequitur sine intervallo in X Hic ego qui iaceo tenerorum
 lusor amorum | Ingenio perii Naso poeta meo (*Trist.* 3, 3, 73 sq.),
in J Hic tua iam Naso deponit castra Cupido, | Hic dat militiis
 ultima signa tuis.

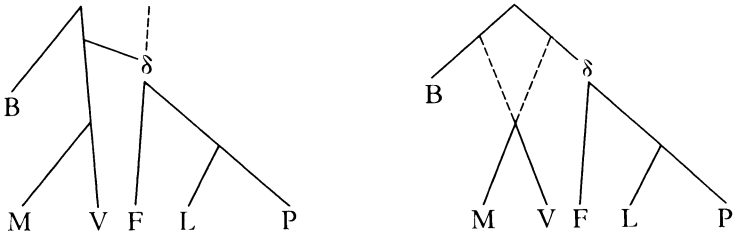
Clearly neither couplet belongs here. They were added to embellish the end of the book.

6. Apuleius (?), de Platone 2, 20

The somewhat corrupt tradition of this work rests on six manuscripts, BMVPLF. B is the oldest (11th century), and quite often the only copy to preserve a true reading or a trace of it. The other five are dated to about the 12th century. P L F derive from a hyparchetype δ , which sometimes has a better text than B M V; in certain cases this can be ascribed to emendation, but in others a

better tradition must be assumed. F is particularly given to emendation itself, and the cases where it alone gives the right reading are so to be accounted for. This behaviour by F often leaves PL on their own; there are indications, however, that their shared readings do not always go back to δ , but that there was another intermediary. The two remaining copies MV also derive from one exemplar, whose text generally resembled that of B.

These facts can be accommodated in either of two stemmas:



Since δ generally offers a more intelligible text than MV, it is more likely than MV to be the product of selection from alternative sources, which is a point in favour of the first stemma.

perfecte sapientem esse non posse dicit Plato nisi ceteris ingenio
 praestet, †artibus et prudentiae partibus† absolutus atque †enim
 iam tum a pueris inbutus, factis congruentibus et dictis adsuetus,
 purgatá et efficatá animi uoluptate, electis ex animo <de>hinc
 5 abstinentiá atque patientiá omnibusque doctrinis ex rerum scientiá
 eloquentiáque uenientibus. eum qui per haec profectus fídenti et
 securo gradu uirtutis uíá graderetur, adeptum solidam uiuendi
 rationem †repente fieri perfectum: hunc repente praeteriti futuri-
 que aeui ultimas partes adtingere et esse quodammodo intem-
 10 poralem. tum post hoc, uitii exclusis ínsertisque et inmissis
 <uirtutibus>, omnia quae ad beatam uitam ferunt non ex aliis
 pendére nec ab aliis deferri sibi posse sed ín sua manu esse sapiéns
 récte putat. quare nec in secundis rebus effertur nec contrahitur
 in aduersis, cum se ornamentis suis ita ínstructum sciat ut ab his

15 nullá ui segregetur. hunc talem non solum inferre sed ne referre quidem oportet iniuriam; non enim eam contumeliam putat quam improbus faciat, sed eam non putat quam patientia firmiter toleret, qua(ndo)quidem naturae lege in animo eius sculptum sit quod nihil horum possit nocere sapienti quae opinantur ceteri mala esse.

2 (i) praestet δ: praestat BMV: 'fort. praestet, <et>' Thomas

Grammar calls for the subjunctive; δ may have restored it by conjecture. The addition of *et* is of course possible, but there is nothing particular to be said in its favour.

(ii) artibus et prudentiae partibus: *malim* prudentiae artibus *vel* artibus et prudentiá a parentibus

prudentiae partibus is an odd phrase, and the paronomasia with *artibus* uncharacteristic of the style. *artes* is corrupted to *partes* in 2,21 and perhaps 25, so that one possibility is that *prudentiae artibus* is the true reading (cf. 2,14 *bonis artibus*, 21, 22), *artibus* being a correction of *partibus* that entered the text and generated a connecting *et*. Or *artibus* may stand unqualified as in 2,26 *easdem puerorum nutritiones, easdem vult esse artium disciplinas*, followed by *et prudentiá a par(en)tibus*, which would balance *iam tum a pueris*, though it would clash with the account given later of the communal upbringing of children (2,25–6, from the Republic).

(iii) enim iam: iis iam Scaliger: etiam Sinko: eximiá <discipliná> (et statim pro tum) Novák: *malim* eníxim iam

enim is impossible; there is no reason to suspect *iam*. For the sense one might expect something meaning 'continuously' from childhood, or 'vigorously'. If *enim* is to be changed into an adverb, it is reasonable to look first for a suitable adverb in *-im*, and *eníxim* suits both sense and palaeography. But it cannot be regarded as more than a guess.

3 (i) puero F

Classical Latin uses *a puero* when the subject is singular, *a pueris* when it is plural, but the plural here seems more likely to be a genuine variation of the idiom than the result of corruption. F's reading will be a conscious or unconscious correction.

(ii) et dictis: edictis B

With *edictis* one of the passive participles must be taken after *congruentibus*: 'accustomed to actions that agree with pronouncements'. This makes fair sense, but one expects the simple *dictis*, and the construction is unusually involuted. *congruens* is used absolutely in 2,7. 25, and *factis et dictis* may be supported by 2,5 *non uerbis modo sed factis etiam secum et cum ceteris congruentem*.

4(i) *efficata* B, *eficata* M, *aefficata* V: *effecata* F, *effaecata* edd.: *effecta* PL

δ must have had *effecata*, since F could hardly have arrived at it from *effecta* by conjecture; rather the exemplar of PL corrupted it into a more familiar word. The choice is basically between *effec-*, i.e. *effaec-*, and *effic-*. They are both the same word, *-fic-* showing the vocalization of an old compound, as in *caedo|concido*. It is paralleled by *defīcatam* in Plautus, Most. 158, and is clearly the '*difficilior et potior lectio*'.

(ii) *eiectis codd.* (eīectis B): *corr.* Oudendorp

The qualities named in the following words are certainly not meant to be cast out, and *eiectis* can only be defended by positing a lacuna (see below). In any case, purgation has been dealt with by the preceding phrase. The subscript points in B indicate a correction, and Oudendorp's minute change gives the required antithesis; *ex animo* means of course 'whole-heartedly'.

(iii) *dehinc scripsi*: *hinc codd.*: *hinc* <intemperantiá, illinc mollitiá, insertis> Novák

Novák's insertion is one of several similar attempts to make sense at once of *eiectis* and of *hinc*. *Hinc .. illinc*, however, is unconvincing; we would expect the nouns to be joined simply by *et* or *atque*. I propose *dehinc*, which occurs in 2,2.

5 (i) *omnibusque Thomas*: *obque* B δ, *ob quae* M: *absque* V

The paradosis is *obque*; V has tried to change it into a preposition suitable for a following ablative. Thomas is probably right to see in the meaningless word a corruption of $\bar{o}\bar{i}b;q$, i.e. *omnibusque*. A more plausible correction will hardly be found.

(ii) doctrinas F

F did the opposite to V, and accommodated the case of the noun to the apparent preposition.

6 hanc B : *primum* hoc *deinde* hec *corr. m. rec.*

8 (i) repente *prius del. Novák* : *fort. sapientem*

'Suddenly' seems out of place in a sentence describing steady progress along the path of virtue, and the recurrence of the word immediately in a more fitting place makes it intolerable. Deletion, however, leaves the final phrase too short for the balance of the sentence. *Sapientem* (cf. line 1) is only one possibility.

(ii) hunc *Kirchhoff* : hoc *codd.* : hoc est *ed. Romana*

The neuter pronoun does not make sense as the subject of *adtingere*, nor can it be taken as an ablative without further alteration. The editio princeps of 1469, by adding *est*, makes a facile connexion between the infinitives and so bypasses the need for the subject to be expressed again. But the equivalence implied by *hoc est* is contrary to sense; so we need the subject after all, and *hunc* (hūc) is the obvious correction.

(iii) repetente B, M *in ras.*

There is no sense to be seen in this (even with *hóc*), and it appears to be a mere error.

(iv) praeteriti F : praeteritis *cett.*

The genitive is obviously right, and its restoration was well within the capacity of the copyist of F. It is not clear what caused the corruption.

9 quod ad modum temporalae B (*sed modo coeperat exarare*) : quodam modo intemporale *cett.* : *corr. ed. Iuntina altera*

The view of the sentence's meaning which has led us to adopt *hunc* also presupposes *intemporalem*. After *hoc* appeared it was natural for *-alē* to become *-ale*. B read *quodā* somehow as *quod ad*, and then made *modo in* into *modum* so as to have an accusative. The exemplar apparently lacked word division.

10 utiis : ut iis B

A mindless misreading, again involving wrong division.

11 (i) uirtutibus *vel* bonis *add.* Thomas: incertisque etiam missis
Purser

The transmitted text is clearly impossible. Purser's conjecture is palaeographically ingenious, but *insertis* looks genuine as an antithesis to *exclusis*; cf. 1,2 *ni Sócrates humilitatem cupidinis ex eius mentibus expulisset et uerae laudis gloriam in eius animum inserere curasset*. It follows that a noun such as *uirtutibus* is to be added.

(ii) omnibus F

This is another attempt to restore sense to the passage, but a short-sighted one, as scribes' emendations so often are. It is soon seen that *omnia quae* etc. is the subject of *pendere*.

(iii) fuerunt BMVPL, fuerint F: *corr.* Stewechius

Even if *ad beatam uitam esse* were possible Latin, the perfect tense would be quite out of place. (F is emending again.) *Ferunt* is good Latin, and virtually guaranteed by the Platonic passage that underlies this sentence, Menexenus 247e ὅτω γὰρ ἀνδρὶ εἰς ἑαυτὸν ἀνήρτηται πάντα τὰ πρὸς εὐδαιμονίαν φέροντα κτλ.

15 (i) ui BVF, M *post corr.*: uis L, M *ante corr.*: tenus P

The curious variant in P comes from misreading **uif** as **τῦf** or **τῆf**, which are found as abbreviations of *-tenus*. The exemplar from which L P were copied thus had *uis*, and δ may have done, since F could easily have emended to *ui*. Decision between nominative and ablative depends on our judgment of the next variants.

(ii) segregetur δ: segregere B: segregare M V: segregari <possit>
Novák

The lowest common ancestor of BMV will have had *-ere*, for it was natural for this to be made into *-are*, and it is nearer the reading of δ. In other words the agreement of B and δ makes *segrege-* the paradosis, and one should not build on the reading of MV as Novák does. *-etur* gives excellent sense (with *ui*) and a good clausula, while *-ere* makes no sense. Abbreviations were confused again, ~ (*tur*) being read as ~ (re).

17 sed eam quam patientia non *Oudendorp* : sed <et> eam non putat quam patientia *Robde*: sed patientia *Thomas*

Oudendorp felt that *non enim eam . . . sed eam* ought to become a positive statement of what the wise man does regard as *contumelia*. But the context implies that there is nothing that provokes him and that his patience does not tolerate. Rohde's reading makes supportable insults appear to be a separate category from those offered by the *inprobus*, which is awkward. Thomas deletes *eam non putat quam*, making it 'the insult which the unrighteous man offers but which endurance can support'. But it is hard to see why the words *inprobus faciat sed* should have been included in the proposition if it took that form. The transmitted text is better than any of these attempts. It means, in paraphrase, 'his attitude is not "I am aggrieved by what is done to me wrongfully" but rather "I am not aggrieved by what I can tolerate"'.

18 (i) quando *Kroll* : qua *codd.*

qua might be defended as meaning 'according to that law of nature by which', but *quidem* does not go well with it, and a simpler connexion would be more in keeping with the style of the work. Hence Kroll's excellent emendation. $q^n = \textit{quando}$, $q^a = \textit{qua}$.

(ii) scultum B

Simplification of the consonant cluster, as in Italian *scultura*.

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