VELIA AND THE SCHOOL OF SALERNO

by

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THE PROBLEM of the origins of the medical school of Salerno has exercised the talents of many distinguished medical historians, who, even if they have not reached complete agreement, have purified and tested the ancient traditions and the surviving evidence. Although Kristeller's magisterial article which imposed clarity upon much that was formerly obscure seemed to have fixed the terms of the debate.¹ an old and discredited theory has been resurrected in the last decade and is beginning to find its way back into general acceptance. A direct link is discovered between medieval Salerno and early Greek medicine through the existence of a medical college at Velia which was transferred with its learning and institutions intact to Salerno. The classical heritage of Salerno is thus more than vague ideas; it is the continuation of a tradition of doctrine and organization going back to the Romans and Greeks, back to the age of Hippocrates himself. The new evidence is derived from archaeology, epigraphy and numismatics, each of which has its own limitations and difficulties, and the argument gains whatever cogency it may be thought to possess from the cumulation of several minor arguments. I shall review these new discoveries in the first part of this paper and then discuss other recent developments in the history of classical medicine in Europe in the Dark Ages in an attempt to show how they may lead to a better understanding of the place of Salerno.

The small town of Velia (close to the modern village of Ascea Marina) lies some eighty kilometres south along the coast from Salerno and is a palimpsest of south Italian history. On the headland dominating the bay stands a Saracenic—Norman tower whose foundations rest in part upon a Greek temple of the early fifth century B.C. beneath which have been found traces of an even earlier Greek civilization. The classical town whose walls extend into the surrounding hills lay at the foot of the headland and there, close by the Porta Marina, was uncovered a building with an underground portico, a *cryptoporticus*, in which were found statues, portrait busts, strigils, a few surgical (or, more likely, toilet) instruments and pieces of pottery.² An inscription in Greek at the base of one of the male statues reads as follows:

¹ P. O. Kristeller, 'The school of Salerno', *Bull. Hist. Med.*, 1945, 17, 138–94; republished in his *Studies in Renaissance Thought and Letters*, Rome, 1950, 495–552. The first publication is hence-forward referred to as Kristeller.

^a P. Ebner, 'A Velia anche una scuola di medicina', Rassegna Storica Salernitana (RSS), 1961, 196-98; 'Scuole di medicina a Velia e a Salerno', Apollo, 1962, 2, 125-36; 'La scuola di medicina di Velia', Panorama Medica, 1964, 1, 11-14; 'Velia e la civiltà della Magna Grecia', Il Veltro, 1967, 11, 173-85; 'Le scuole di medicina di Velia e di Salerno', Salerno, 1967, 1, 43-49; 'La scuola di medicina di Velia nel I secolo D.C.', Atti del XXI Congresso internazionale di Storia della Medicina, Siena, 1968, 995-1003 (henceforward, Ebner, Cong.); P. Ebner et al., 'Velia e i Focei in Occidente', La Parola del Passato (PdP), 1966, 19: L. B. Kreitner, History Today, 1968, 18, 129-31.

Oulis son of Euxinos from Velia, doctor and pholarchos, year 379.

This is paralleled by two other inscriptions:

Oulis son of Ariston, doctor and pholarchos, year 280. and:

Oulis son of Hieronymus, doctor and pholarchos, year 446.

A head of a philosopher, presumably Parmenides, and a headless base with the inscription:

Parmenides son of Pyres, Ouliades, a natural scientist (ougikóg)

were also discovered, and it is probable that the two were originally joined. The interior of the building contained a shrine with a central altar and, beyond, an open space around whose edges water channels ran from a cistern in the south-east corner. The whole complex in its first form may date from between A.D. 20 and 60, although it is clear from the style and decoration of the altar that substantial modifications were carried out during the reign of Hadrian, about A.D. 130.⁸

The presence of doctors at Velia confirmed the well-known stories of its success as a healing spa: Aemilius Paullus, Cicero and Horace, on the advice of Augustus' doctor, Antonius Musa, all came to take cures at its waters. No literary text mentions the survival of the spa after the early empire and it was thought that its decline was caused by the competition from the Campanian resort of Baiae, a far cry from the early days when Velia was important enough to be one of the Greek cities of south Italy and Sicily which received a formal embassy from Cos in 242 B.C.⁴ But by assembling scattered fragments of evidence Pietro Ebner, whose energy and enthusiasm have done much to further the excavations at Velia, has tried to demonstrate a direct connection between this group of doctor-philosophers and the famed medical school of medieval Salerno.⁵ The mysterious Dark Ages of the fifth to tenth centuries are bridged, and the classical foundations of Salernitan medicine are shown to rest upon the rock of pre-Socratic Parmenidean philosophy.

But it is open to doubt whether this association of persons at Velia is a medical school in the strict sense of the word. Certainly Pugliese-Carratelli was right to relate the dates on the inscriptions to the lifetime of Parmenides rather than to the foundation of the city, but this tells us nothing about the detailed interests of the group.⁶ Ebner had long ago predicted on the evidence of coinage a Pythagorean sect with its headquarters at Velia, and the rare word pholarchos should indicate the leader of a secret society, especially of a philosophical school.⁷ A more cautious investigator will accept only that the evidence permits a 'learned association' which included doctors and philosophers in an inquiry into the problems of natural

PdP 1965, 18, 306.

⁷ P. Ebner, BCNN, 1951, 13f.; G. Pugliese-Carratelli, PdP 1963, 16, 386.

⁸ P. Ebner, 'Parmenide medico Ouliades', Giornale di Metafisica, 1966, 21, 103-14. Good photo-graphs appear in Illustrated London News, 31 August 1963, and see also M. Napoli, PdP 1966,

graphs appear in Illustrated London News, 31 August 1963, and see also M. Napoli, PdP 1966, 19, 222 ff. ⁴ The literary evidence is conveniently assembled by D. Musti, PdP 1966, 19, 318-35; R. Herzog and G. Klaffenbach, 'Asylieurkunden aus Kos', Abh. dt. Akad. Wiss. Berl., 1952, 1, 21. ⁵ To the list of articles in notes 2 and 3 add: P. Ebner, 'A proposito dell' incusa di Velia n. 26 edita dal Garrucci', Bollettino del Circolo Numismatico Napoletano (BCNN) 1960-61, 45-46, 3-8; 'Dei follari di Gisulfo I e della Schola Salerni', BCNN, 1962, 47, 3-43: 'L'errore di Alalia e la colonnazione di Velia nel responso Delfico', RSS, 1962, 3-44. ⁶ G. Pugliese-Carratelli, 'φώλαρχα' PdP 1963, 16, 385-86; 'Parmenides φυσικός', PdP 1965, 18, 306

philosophy and possibly of medicine. Such a combination was fashionable especially in the cities of Greece and Asia Minor and Glenn Bowersock has lucidly placed the study of medicine in the Roman period among other intellectual pursuits.⁸ Female philosophers are known as well as female doctors, and while there is a presumption that the Parmenidean philosophers of Velia discussed medical questions, it is not enough to claim on this evidence alone that we have here a medical school.⁹ Not even the presence of statues of Asclepius and Hygiaea among the debris nearby or of a 'sacred well' at the corner of a neighbouring street outweighs the silence of all authorities on Velia as a medical teaching centre. In his writings Galen gives many examples of cities from which doctors come and where such teaching centres may be assumed or are known, such as Tarsus, Ephesus, Smyrna, Pergamum, Corinth and Marseilles, and inscriptions add the collegia of Aventicum, Turin and Beneventum, but Velia is never mentioned. Aegimius, whom Ebner tries to link with Velia, came from Elis in Greece and it is the authenticity of his writings, not his place of birth, that is queried by subsequent authors.¹⁰ No doctor refers to the members of a medical school at Velia or appeals to it as a source of his medical qualifications, and it is simpler to regard Q. Manneius, an immigrant from Tralles, as having been trained at home than to associate his epitaph with Velia.¹¹ Such an argument is by no means conclusive, but neither is the evidence for medical instruction formally carried out within a teaching establishment so compelling.

But since the purpose of this article is to examine the origins of the medieval school of Salerno, let it be accepted for the present that this association was a medical school and let us follow its history in the account of Ebner and Pugliese-Carratelli from Augustus to Salerno. The style of the lettering of the inscriptions is almost identical, and we may agree with Pugliese-Carratelli that they were engraved around A.D. 40. This is important because it shows that all the statues, or at least all the inscriptions, were erected at the same time, a generation or more after the person they commemorate held office. It is tempting to connect them with the erection or rebuilding of the 'cryptoporticus' building which Pugliese-Carratelli ascribed to the private doctor of the emperor Claudius, Caius Stertinius Xenophon.¹² The building was destroyed in a disastrous flood about A.D. 120, after which it was restored to linger in obscurity for centuries. As the plains of the Haliartus and the Palistrus became deserted and infested with malaria, Velia was abandoned and the members of the medical school followed their fellow-citizens to the largest and nearest free city, Salerno, where a pentangle on the coinage of Gisulf I reveals their activity in the years A.D. 946-977. Just as Salerno had become the protector of the body of St. Matthew which had formerly rested at Velia, so its medical school became the heir to the Greek learning

⁸ G. W. Bowersock, Greek Sophists in the Roman Empire, Oxford, 1969, 30-42, 59-75.

 ⁶ G. W. Bowersock, Greek Sophists in the Roman Empire, Oxford, 1969, 30-42, 59-75.
 ⁹ Galen treated the female philosopher Arria, XIV.218 (Kühn).
 ¹⁰ Ebner, Cong., 1002; Galen, VIII.498 K, on which see M. Wellmann, in Pauly-Wissowa-Kroll, Real-Enzyklopädie für Altertumswissenschaft, vol. 1, p. 964, s.v. Aigimios 3.
 ¹¹ Ebner, Cong. 999: recourse to the publication of this inscription in Corpus Inscriptionum Latinarum, vol. 10, p. 388 would have shown that this inscription was 'rinvenuto in un fondo dei Signori Condo de' Signi Columna di Pertosa sito alla contrada Massatevere, cioè sulla via che mena da Viatti a Pertosa' not preservad in an antiquarin collection. See alos S. M. Traggiori. Pomore da Vietri a Pertosa', not preserved in an antiquarian collection. See also S. M. Treggiari, *Roman Freedmen during the late Republic*, Oxford, 1969, 131 f. ¹³ Pugliese-Carratelli, *PdP* 1963, 16, 385-86; 'Culti e dottrine religiose in Magna Grecia', *PdP* 1965, 18, 5-27, esp. 26f.

of the Pythagoreans of Velia and the propagator of classical medicine to the Middle Ages.

The propounders of this coherent story of the origins of the Schola Salerni have two advantages over those who seek to attack it: their explanation of the phenomena rests upon a single hypothesis which the facts themselves scarcely contradict, and their fragile line of tradition satisfies both local patriotism and ancient theories about Salerno's continued heritage. Little can be urged against this save the weight of historical probability, and arguments from silence are never entirely convincing even when strong. The fact that an event failed to impinge itself on the records of men is no evidence that it did not occur. Nevertheless, if the grounds for these suppositions are examined critically, it becomes clear how much is speculation and how much incontrovertible fact.

Pugliese-Carratelli rightly stressed the antiquarianism of these inscriptions from Velia, erected centuries after the death of some members and displaying both an archaic word, pholarchos, and an archaic spelling of the ethnic, 'Υελήτης'. Caius Stertinius Xenophon with his pride in his Coan family, which went back to Asclepius and Hercules, was then alive and practising in Rome; he was active in south Italy; his benefactions were famous; Cos had sent an embassy to Velia in 242 B.C. What was easier than to believe that in restoring the links between Velia and Cos Xenophon took upon himself the rebuilding of the headquarters of the school and the erection of some statues? But there is nothing at all to connect Xenophon with Velia. His passion for archaeology is no more than the completion or the embellishment of the Asclepieion of Cos, and his recorded concern for the Greeks in south Italy extended only to Naples where he and his brother erected some magnificent buildings.¹³ As for his belief in the great therapeutic properties of baths, this was certainly less enthusiastic than that of his predecessor, Antonius Musa, or his successor, Charmis of Massilia, and is not mentioned in any description of his treatments.¹⁴ Besides, if the construction or restoration of this period belongs to Xenophon, two problems remain. Why are the persons on the inscriptions all called Oulis and why are they especially favoured by Xenophon?¹⁵ Some have suggested that they were great medical innovators, but it is therefore strange that they are never named at all in the many works on Greek medicine; and others that the name Oulis was adopted by each successive head of the school upon taking office, or that the office was hereditary in one family, the Ouliadae, descendants of Parmenides. I suggest a third possibility which does not involve Xenophon. The statues and inscriptions were erected by another Oulis, possibly the president of this group, to commemorate those members of his family who had played a part in the life of the school, and this Oulis was sufficiently rich to donate this building as the school's headquarters.

¹³ R. Herzog, 'Nikias und Xenophon von Kos', *Historische Zeitschrift*, 1922, **125**, 189–247. Ebner, *Cong.* 1002, misinterprets Pliny, *Natural History* XXIX. v. 8, to mean that he made large profits

from speculation in property. ¹⁴ On Charmis, Pliny, op.cit. XXIX v. 10 (cf. Seneca, *Letters* VI. 1. 3 and XII. 1. 5) on Antonius Musa, XIX. xxxix. 77 and XXIX. iv. 6. We know that he advised Horace to visit Velia and Salerno, and that he was granted a public statue in Rome for his cure of Augustus, but this is insufficient to permit the derivation of all the male statues in the '*cryptoporticus*' building from a 'ritratto di Musa', Ebner, *Cong.* 1002, of which neither I nor anyone else has ever seen a copy The evidence for a statue of Augustus, Ebner, ibid., is equally unconvincing, merely the fragment of an arm. ¹⁵ Ebner, *Cong.* 996–1002, is the best summary of the differing views.

The detailed publication of the excavations of Velia by Professor Mario Napoli is awaited with eagerness, especially as much depends upon exact knowledge of the findspots of objects and implements, and until then we are compelled to rely upon personal inspection and the summaries of results he has presented to the annual conferences on Magna Graecia held at Taranto. Even so, it is already abundantly clear that his interpretation of the '*cryptoporticus*' building differs radically from that of Ebner and Pugliese-Carratelli and that his record of the excavation raises difficulties for those who assert continuity.

His first, and least damaging, conclusion is that this building has nothing whatsoever to do with the medical school but was a recreation centre or *palaestra* for the youth of the town. This hypothesis readily explains the series of portrait busts of young members of the imperial family that were found in niches in the building, and also the open level area at the rear. The discovery of a female statue of a style similar to those in the '*cryptoporticus*' building but at a site much further up the hill, close by the *agora* or *forum*, led Napoli to suggest that the headquarters of the association were to be sought elsewhere.¹⁶ Continuous occupation of the lower building thus offers no proof of the continuous existence of the medical school.

It is agreed that this edifice was severely damaged in a flood, although the date is disputed, and that what remains is primarily a restoration of the Hadrianic period, about A.D. 130, when the statues of the pholarchoi were used as infilling, that is, they were built into the foundations of the new wall as ballast to give greater strength and were then covered over by other materials.¹⁷ By itself this evidence is inconclusive: it is impossible to tell whether the statues were washed down the hillside by the savage flood and remained undiscovered under a mass of mud and debris or were deliberately employed as valuable and meaningless pieces of stone well suited to strengthening foundations. But the fate of the head and the base of the bust of Parmenides points even more clearly to the latter explanation. As far as can be known from the daily excavation reports, both pieces were found reused in the pavement of the Hadrianic building where their re-employment cannot have been due to a failure to locate them under a burial of earth. A pavement is vastly different from the rough masonry of the infilling of foundations: it has to be laid, suitable stones must be chosen, and its construction cannot be left to chance. While the discovery of a level slab like the statue base of Parmenides may easily be ascribed to luck, its use in a building which all admit to have had some public purpose was deliberate and likely to call forth a protest from the medical school, were it still flourishing. The permitted desecration of such an important piece of sculpture as the bust of the founder, Parmenides, one of the greatest citizens of Velia, and possibly of the statues of some of his more distinguished successors, can only be plausibly explained by the assumption that the association of doctors and philosophers no longer existed in A.D. 130 and that the family of Ouliadae who had cared for the erection of these memorials had either died or moved away. Only if, when the true

¹⁶ PdP 1966, **19**, 225, and in an (as yet unpublished) intervention at the V. Convegno di studi sulla Magna Grecia held at Taranto in 1965. The plan of the 'cryptoporticus' building differs considerably from those of the Asclepieia at Delos, Corinth, Perachora and Athens, and Ebner's contention that it was originally such a shrine is unlikely.

¹⁷ The dates range from A.D. 62 (Napoli) to the beginning of the second century (Ebner).

headquarters are unearthed, they are shown to continue long after this date can this conclusion be controverted.¹⁸

Hypothesis must take the place of fact in the description of the later links between Velia and Salerno. Only the most ardent champion would claim that the origin of the Greek doctor at Salerno, Tiberius Claudius Diogenes, son of Diogenes, was Velia when the other possibilities are so many and when the speciality he professes. that of a clinical doctor, cannot be brought into line with the balnear therapy of Velia.¹⁹ The gradual depopulation of Velia, partly due to malaria and partly to adverse economic conditions, ended in the near-abandonment of the site by the ninth century. But rather than an orderly withdrawal of the Eleans to the safer free city of Salerno, retaining medical and ecclesiastical institutions intact, the medieval sources indicate a much more confused picture. It is essential to recall the situation of Velia: some forty kilometres south of the river Sele, south of the wild Cilentine coast: there were small hill-towns both inland and to the south, while to the north was the city of Paestum, between which and Salerno stretched a marshy and malaria-ridden plain. If malaria is one of the causes of the decline of Velia-and flood, earthquake, piracy and the silting up of the twin harbours all contributed—then the small towns around offered as safe and salubrious a refuge as Salerno. The early ecclesiastical documents confirm this diaspora. In A.D. 592 the bishopric of Velia was joined to those of Agropoli and Buxentum with Blanda, later transformed into the bishopric of Capaccio, and the bishops of Paestum, Buxentum and Blanda appear together at the Lateran Council of 649. The city of Paestum which had obtained the relics of St. Matthew from Velia did not lose its title to Capaccio 'in monte tutiori situm' until its devastation by the Saracens in the tenth century and kept its pre-eminence even after the transfer of its holy relics to Salerno in 954.²⁰ It is difficult to see why at this period a group as small and as insignificant as the medical association of Velia should have chosen Salerno above all when other centres of trade and population were closer at hand as refuges.

Even allowing that the doctors of Velia, harried by raiders and ravaged by plague, reached the safety of Salerno with their precious traditions inviolate, can the three pieces of evidence adduced by Ebner from medieval Salerno bear such a burden of proof? I shall deal with them in order of importance, beginning with the weakest, and try to estimate their value in establishing or confirming a tradition.²¹

The term '*physicus*' which is applied to Parmenides at Velia properly means a natural scientist, and includes such as the doctor follower of Asclepiades, Q. Manneius, *physicus* and prescriber of wine. Macrobius in the fifth century scornfully refuses to

¹⁹ It must be stressed that the full excavation report is not yet published and that my information derives from visits to the site and consultations with the workmen, Dr. Ebner and Professor Napoli who discussed my theories both on the site and at Salerno. Napoli in his Taranto contribution stated: 'The statue of Parmenides is certainly no longer in use in the Hadrianic period . . . in the Hadrianic period the medical school no longer functioned.'

¹⁹ Ebner, Cong. 1001. It was first published in Notizie degli Scavi, 1949, 103, where the archaeological context suggests a date of around A.D. 150. ²⁰ P. F. Kehr, Italia Pontificia VIII, Berlin, 1935, 367f., 370, publishes the relevant original

¹⁰ P. F. Kehr, *Italia Pontificia* VIII, Berlin, 1935, 367f., 370, publishes the relevant original documents.

¹¹ I exclude discussion of the opinion of the sixteenth-century physician, Telesio, that the medical school of Salerno was the heir to the school of Pythagoras, Ebner *BCNN* 1961, 9, and 1962, p. 5. n. 5. Such an *obiter dictum* of so late a date cannot be used as primary evidence for events eight centuries earlier, cf. F. Kudlien, *Clio Medica*, 1970, 5, 108.

consider medicine in his influential work, the Saturnalia, because it is the very dregs of physic-medicina autem physicae partis faex est-and the Carolingian references to the word 'physicus', as for example in Rhabanus Maurus, reflect this preoccupation.²² Medicine is a subdivision of the natural sciences, and a man who practises medicine and turns his attention to other phenomena of the natural world can justly be termed 'physicus'. To demonstrate a connection between Velia and Salerno on this evidence alone meets with one unsurmountable difficulty. In the words of Kristeller, 'the doctor is regularly called *medicus*, the student of the natural sciences and philosophy, physicus, and any change in terminology is unlikely to have occurred before the twelfth century.'23 The Regimen Sanitatis upon which Ebner relies has been shown by Sudhoff and his followers to belong at the earliest to the second half of the twelfth century and thus cannot be strictly used as evidence for terminology in the eighth or ninth.²⁴ At this period there is nothing to suggest that the word physicus was used for a doctor-very surprising indeed if the connection between the Pythagoreans, Parmenides and Velia was so well known as to be denoted on a coin of Salerno.

The presence of a pentangle on a coin of Gisulf I was the spur to these new investigations into the relationship between the two cities, and the numismatic argument is difficult for a non-numismatist to evaluate.²⁵ One point must be made clear: the work of Professor Grierson, one of the most distinguished scholars of early medieval numismatics, has shown conclusively on the evidence of overstrikes and typesimilarities that the coinage attributed by Ebner to Gisulf I is to be dated to nearly a century later, to the reign of Gisulf II, A.D. 1052-1077.26 Its worth as evidence for the origins of the school of Salerno is thus impaired, if not destroyed; the line of tradition, if there is one, becomes longer and frailer. Neither is it necessary to believe that the pentagle is meant as a deliberate symbol of Velia. In the eleventh century the pentangle, a traditional sign of good luck among the Arabs, could easily have come thence, and, as Professor Grierson informs me, stray imitations of a single antique coin type are by no means rare and need not imply a conscious understanding of the significance of the original. I therefore conclude that this coin can scarcely reveal the influence of the medical school of Velia upon that of Salerno, and its date of striking, around A.D. 1060, diminishes its value as evidence for the origins of the school of Salerno which was already famous as a medical centre in France before A.D. 1000.27

The latest and most interesting piece of evidence is not yet fully published, appearing only as a late notice in the last contribution to the debate I have seen. Ebner reports

²³ Saturnalia, vii. 15. L. C. MacKinney, *Early Medieval Medicine*, Baltimore, 1931, p. 131. For examples of the use of the word in a general medical context, see A. M. Brasavola's index to Galen, s.v. *physicus*.

²⁸ Kristeller, 159f. who has also indicated the Salernitan interest in natural philosophy in general, 161f.

²⁴ Ibid., 168f.

²⁵ Ebner, BCNN 1960-61, 45-46, 3-8; 1962, 47, 3-43.

²⁶ P. Grierson, 'The Salernian coinage of Gisulf II, 1052–1077 and Robert Guiscard, 1077–1085', *Papers of the British School at Rome*, 1956, 24, 37–59, translated into Italian and republished in *BCNN*, 1957, 42, 9–44. The important coins for dating are his type A., and nos. 26 and 30.

³⁷ This date is made clear by the story of the debate between a Frenchman and a Salernitan told by Richer, Kristeller, 143f. and by the visit of Adalbero II, bishop of Verdun, for treatment shortly after A.D. 985, Kristeller, 145f.

the discovery of a twelfth-century manuscript which mentions Velia and its inhabitants in a medical context.²⁸ Its late date, even later than that of the coin, obviously weakens the force of the argument, for it is possible that a local tradition connecting the two cities sprang up in the centuries after A.D. 1000. This link was not unknown: the translation of the body of St. Matthew from Velia and the ancient ruins of Velia were already known in the tenth century, and a medical connection would easily be derived by analogy from the archaeological and ecclesiastical ones. But before this manuscript there is only silence. The poems of Alfanus, a doctor and bishop of Salerno in A.D. 1070, which praise the medical learning of Salerno, although they name the city of Velia in a context that offered an appropriate opportunity for a reference to its fame as a medical centre, make no mention of it.²⁹ Until this new evidence is fully published, a detailed discussion of what it contains is impossible. For the present it suffices to say that unless more is offered than the mention of Velia in a medical manuscript of local origin, it is still open to doubt whether the schola medicorum at Salerno derived directly from the association of philosophers and doctors at Velia or merely stands at the end of a tradition that was only invented when the schola was already flourishing.³⁰ Enough is known of local and late traditions especially concerning Salerno to cast strong doubt upon them, and their witness is diminished in value the further it moves from the event they purport to describe.

An approach to the problem of the growth of the medical school of Salerno, or at least of the reputation of that city as a medical centre, which is based upon such fragmentary and dubious historical evidence is bound to appear unsatisfactory. It is much easier, as De Renzi himself found, to say what did not contribute than to say what did. There is no evidence for medical practice carried on at Salerno after Tiberius Claudius Diogenes until the seventh century, and although it is inherently probable that there were always some doctors there, this does not entitle us to posit a tradition of a medical centre and of medical scholarship reaching back to the Roman period.³¹ Indeed, if such an organization is required, Beneventum and the Lombards appear as strong, or as weak, candidates as the Eleans. In the second century Beneventum had a collegium of doctors which received bequests from satisfied patients and maintained a group of specially approved civic practitioners or archiatri.³² Comparative evidence from Aventicum, Pergamum and Turin suggests that some form of medical instruction was imparted within a collegium and, since at least one of the archiatri was of Greek descent, their learning would have embraced the classical medicine of Hippocrates and his successors.³⁸ From the seventh to the ninth centuries Beneventum either ruled or maintained contact with Salerno, and one of its kings, Arechis, made Salerno his seat of government. Paul the Deacon praised him in his

³⁸ Ebner, Cong. 1003.

²⁹ Ebner, ibid.; Alfanus, Patrologia Latina 147, 1219ff. especially 1257.

³⁰ Kristeller's analysis demonstrates that many incompatible traditions sprang up quickly around the Schola Salerni.

³¹ S. De Renzi, Storia documentata della Scuola Medica di Salerno, 2nd ed., Naples, 1857, 109f. 'In Salerno the graeco-roman civilisation never dwindled and it kept its institutions and culture even after the barbarian invasions . . . The school, already founded in the Roman period, was modestly preserved in the centuries we call barbarian', and his conclusion, 141-44. ²³ Corpus Inscriptionum Latinarum IX 1618 and 1655.

²⁸ Ibid. V. 6970 and XIII 5079 with which compare E. Howald and E. Meyer, *Die Römische Schweiz*, Zurich, 1940, n. 446; R. Herzog, *Sber, preuss. Akad. Wiss.*, 1935, 32, 967ff.

epitaph for his knowledge of *phisis* and because he adorned his country with learning, ramparts and palaces.³⁴ Greek medicine could have reached Salerno by this route or from the half-Greek city of Naples which controlled Salerno in A.D. 638 and where several doctors lived in the seventh and eighth centuries.³⁵ A direct and unbroken chain of medical learning and institutions from Velia to Salerno is unproven, possibly even disproved by archaeology, and although it seemed to be a plausible hypothesis, critical examination has revealed its many weaknesses. We know that classical medicine, descended ultimately from Hippocrates, influenced in some way the writings of the Salernitan doctors in the eleventh and subsequent centuries, but Velia remains at best only one of the possible ways in which it could have been transmitted.

It is now clear from the researches of Beccaria that the knowledge of classical medicine in the Dark Ages was much greater than De Renzi and Singer had supposed and that Salerno was not the only civitas Hippocratica.³⁶ Ravenna preserved the teaching of medicine on the model of Alexandria almost into the tenth century and was the centre for the translations of the writings of Oribasius from Greek into Latin in the sixth century.³⁷ The monastery of Monte Cassino acted not only as a refuge from invasion but also as the production and distribution centre for translations and copies of Galenic commentaries on Hippocrates, and Beccaria has convincingly argued for a Galenic canon which existed in the Dark Ages.³⁸ To Nonantola in the Po valley, to St. Gall, to Echternach and even to Anglo-Saxon England came translations of classical authors, either intact or as snippets of information preserved as rules of thumb or simple remedies.³⁹ The advice of Cassiodorus to the monks of his community at Squillace is well known. They should read Gargilius Martialis on the properties of foods, and keep copies of Dioscorides, the Latin translations of Hippocrates and Galen, especially the Ad Glauconem de methodo medendi, an anonymous medical encyclopaedia of excerpts, Caelius Aurelius On medicine, Hippocrates On herbs and treatments and any other works on medicine they can find.⁴⁰ In south Italy there seems to have been a regular summa of medicine, possibly deriving from Monte Cassino, which embraced both theory and practical instruction.⁴¹ The Basilian Greek monasteries of Lucania and Calabria also preserved Greek

³⁴ De Renzi, op. cit., 14, 155, and Document XVf.; E. Hirsch and M. Schipa, La Langobardia meridionale, reprinted with bibliographical addenda by N. Acocella, Rome, 1968, 84–86.

 ³⁶ De Renzi, op. cit. 101; G. Salvioli, L'Istruzione in Italia prima del mille, Florence, 1912.
 ³⁶ A. Beccaria, I Codici di Medicina del Periodo presalernitano, Rome, 1956; note also H. E. Sigerist, 'The Latin medical literature of the Early Middle Ages', J. Hist. Med., 1958, 13, 127-46, and E. Wickersheimer, Les Manuscrits de Médecine du haut Moyen Age dans les Bibliothèques de Decisione de Contractione de Contr France, Paris, 1966.

France, Paris, 1966.
³⁷ Beccaria, op. cit. 288-91 with full bibliography; H. Mørland, 'Die lateinischen Oribasius-übersetzungen', Symbolae Osloenses, Suppl. 5, Oslo, 1932.
³⁸ The basic manuscript work was done by H. Kühlewein in a long series of articles in Hermes 1882, 17, 448-88; Philologus, 1884, 42, 119-33: Hermes, 1890, 25, 113-40; ibid., 1905, 40, 248-74: summarized by P. Kibre, 'Hippocratic writings in the middle ages', Bull. Hist. Med., 1945, 17, 371-412; A. Beccaria, 'Sulle tracce di un antico canone latino di Ippocrate e di Galeno', Italia medievale ed umanistica, 1959, 3, 1-56 and 1961, 4, 1-75.
³⁹ Beccaria, I codici, 61f., 54f.,; C. H. Talbot, 'Some notes on anglo-saxon medicine', Med. Hist., 1965, 9, 156-69. The small 'Prognostica Galieni' edited by me in Med. Hist., 1970, 14, 96-100, can be brought into this tradition. For a summary of medicine and science in the pre-salernitan period, see A. Beccaria, 'Il ritorno della scienza classica nel primo medioevo', Rivista Storica Italiana, 1937, 51, 17-52.

51, 17-52. 40 Cassiodorus, Institutes, 1.28.6; 1.31.2. Cf. H. E. Sigerist, op. cit. (note 36), 131f.

⁴¹ B. Lawn, The Salernitan Questions, Oxford, 1963, 6ff.

manuscripts of medicine although their influence is only slightly known, and the frequent contacts between this part of the Byzantine Empire and the capital will have aided the retention of classical literature.⁴² As Beccaria has concluded, the material for an expansion of medical knowledge was already present in the ninth and tenth centuries, and the medical renaissance associated with Salerno must be explained partly by the literature available, partly by historical and social factors.⁴³

Lawn's exposition of the sources of the Salernitan Questions and of Gariopontus has shown how much they derive from an existing summa medicinae and from classical models, and it would be foolish to claim only one place as the sole influence upon Salerno.⁴⁴ Monte Cassino must obviously come into the reckoning, but while the summa that lies at the base of the Passionarius of Gariopontus can also be found in manuscripts written or preserved there, the Galenic method of commentary upon a set text of Hippocrates which was propagated in the early translations from the Greek does not appear in the first Salernitan writings.⁴⁵ I have already noted the connections of Salerno with Naples and other Greek cities of south Italy, but it cannot be excluded that some of the medical learning came directly from the East. Guaimar I, ruler of Salerno in A.D. 886, went to Constantinople to swear dependence and to receive from the emperor in return the title of patrician: the territory of the Byzantines in Italy abutted directly onto that of Salerno: and Alfanus himself visited Constantinople and the East in A.D. 1063 when he had ample opportunity of acquiring Greek codices and of examining Greek learning closely.⁴⁶ When faced with this competition Velia appears a poor contender, and the idea of an unbroken tradition from here to Salerno becomes very unlikely. If Velia was indeed a true civitas Hippocratica with its own distinctive methods and doctrine which were preserved for centuries from Parmenides onwards, we should expect to find some trace of them in the earliest Salernitan writings, some peculiarity of classical medicine that can be ascribed to the Parmenideans or Pythagoreans. But Beccaria and Lawn have shown that Salernitan medicine in origin is no different from the classical medicine preserved in north Italy, in Africa and in Spain, which is basically methodist therapeutics with some Galenic anatomy and theory. Salerno does not differ from Nonantola or Echternach in the learning it displays at this period. Whatever distinctive contribution was made to the Schola Salerni by the doctors of Velia, it did not find its expression in the later medical literature. The absence of a peculiarly Elean doctrine is striking: the explanation is simple: none existed in the tenth century.

The intellectual revolution in science as well as in medicine which derived from classical models existing widely in Italy and Europe required other encouragements

⁴³ As a preliminary survey, see A. Guillou, 'La Lucanie Byzantine', Byzantion, 1965, 35, 119-49, esp. 142 f. with the notes; and R. Devreesse, Les Manuscrits grecs de l'Italie méridionale, Studi e Testi, 183, Vatican City, 1955, 5–12. ⁴⁴ Rivista Storica Italiana, 1937, 51, 52.

⁴⁴ Lawn, op. cit. (note 41), 17f. ⁴⁵ Ibid., p. 30 and note 3. I accept his demonstration, 19–30, that the earliest Salernitan writings show no trace of Arabic influence and that the translations of Constantine the African had no effect during his lifetime; see also Kristeller, 151ff., H. Schipperges, 'Die Assimilation der arabischen Medizin durch das lateinische Mittelalter', *Sudhoffs Archiv*, Wiesbaden, 1964, Beiheft 3, 17-54; and F. Gabrieli, 'La cultura araba e la scuola medica salernitana', *Rivista di Studi Salernitani*, 1968, 1, 7-22. ⁴⁶ De Renzi, op. cit., 117; Lawn, op. cit., 19.

before it could be brought to completion in the ninth and tenth centuries. The explanation of why Salerno above all carried it out may rest upon such intangibles as its economic prosperity or the social and geographical position of the city which gave it an advantage over other contemporary cities with similar learning.

The problem of the origins of Salerno is in some ways a pseudo-problem. We know much more than De Renzi did of the medical learning available, of the chronology of the writings of the Salernitan doctors, and of the political and social background, and we can delineate with accuracy many of the sources of Gariopontus and the Salernitan Questions.⁴⁷ To derive all this from one unique source, be it the Romans, the Lombards, the monks or the travelling Jewish pharmacists of south Italy, is to overlook much and to force into a historical straitjacket many inconvenient or inexplicable facts. To attempt to explain the rise of Salernitan medicine and the Schola Salerni even primarily as the direct heritage of Velia is to return to the methods and conclusions of De Renzi, which, valuable though they were at the time, have long been outdated by developments in cognate subjects. Even if we accept the hypothesis that the doctors of Velia migrated to Salerno with their traditions and institutions unchanged—and I have given strong reasons for its rejection—we have at best only one more possible influence on the medical school of medieval Salerno, not a comprehensive explanation of its rise or of its greatness. It is necessary to stress that the part played by Velia can only be a single contribution to Salerno and that other factors must not be neglected. If they are, then there is a serious danger that the attention given to Velia and its doctors, whose interest and importance for the student of medicine and culture in Roman Italy is great, will obscure the advances that have been made by Kristeller, Beccaria and Lawn, and that in consequence the discussion of the early medical teachings and doctors of medieval Salerno will become the delight of local antiquarians alone rather than of the scholars of Europe. It was the great achievement of Kristeller that amid much that was obscure, much that was controversial and much that was false he was prepared to admit doubt and that he did not try to force the evidence into a preconceived pattern in defiance of historical rules. It is for his successors to continue in this path of scholarship in a manner worthy of the traditions of the Schola Salerni and the civitas Hippocratica.

⁴⁷ The methods of Lawn in his two opening chapters are exemplary and do full justice to the complexity of the material he deals with, op. cit., 1-39. I have not yet seen P. F. Russo, *Medici e veterinari calabresi (sec VI-XV): ricerche storico—bibliografiche*, Naples, 1962.