- J. JOUANNA, Hippocrate: Pour une archéologie de l'École de Cnide, Paris, Les Belles Lettres, 1974, pp. 664.
- H. GRENSEMANN, Knidische Medizin. Teil I; Die Testimonien zur ältesten knidischen Lehre und Analysen knidischer Schriften im Corpus Hippocraticum, Berlin and New York, Walter de Gruyter, 1975. pp. xxiii, 275 (=Ars Medica II. Abteilung, Band 4,1), DM.128.

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The Hippocratic Corpus—that collection of anonymous medical texts from the fifth, fourth, and later centuries B.C.—is like an archaeological site. Some of the buildings are still complete, but we have lost the architectural context in which they once stood. Some are mere fragments, parts of a façade, or foundations from which we have to reconstruct imaginatively the original elevation. There are traces too of remodelling and rebuilding, which indicate that the site was occupied over a considerable length of time: we must attempt to date these periods. We can be certain of very little, except that these are the material remains of a coherent intellectual community with a continuity of tradition, but also with a vigorous impulse toward innovation. What we know of Greek philosophy, literature and art in the fifth and fourth centuries indicates that the pace of intellectual change was phenomenally rapid, and this must surely have been true of medical science as well. But we are not yet in a position to write a history of Greek medicine in those two centuries, only a description.

That is the importance of the two studies reviewed here. The sub-title of Jouanna's book explicitly draws the archaeological analogy, while Grensemann too refers to "Schichten", layers or strata, in the texts which he analyses. Both attempt a reconstruction of the so-called "School of Cnidos". We know that medicine was taught (in some sense), from at least the early fifth century, at Cnidos, the peninsular Greek settlement in south-west Asia Minor, just as it was on the nearby island of Cos, with which Hippocrates himself was associated. Modern historians from the time of Littré and Ermerins have imagined a certain rivalry between the schools of Cos and Cnidos, on the model of the rivalries between the later schools of Hellenistic times. They suppose a situation which is familiar enough in the history of science: the Coan school, perhaps Hippocrates himself, criticizes the Cnidians for their "unscientific" approach to medical treatment, for their obsession with the listing of symptoms and with the minute subdivision of diseases to the neglect of a sophisticated and flexible treatment. The Cnidians provide (in modern jargon) the "paradigm" in reaction to which the Coans evolve their own new approach to medicine, an approach based upon prognostic understanding of the course of the disease rather than upon its static description, and upon understanding of the individual constitution (PHUSIS) of the patient. This historical outline is plausible, but it must be admitted that the evidence is very small: it largely consists of the passage in which the author (Hippocrates himself?) of the treatise Regimen in acute diseases criticizes the authors and the later "remodellers" of the work which he calls the Cnidian sentences. What we can discover about Cnidos itself depends on those texts—those discontinuous but related

fragments—in the Hippocratic collection which are possibly related to the *Cnidian* sentences. This is the material on which Grensemann and Jouanna base their reconstructions.

That some texts in the Hippocratic collection are "Cnidian" rather than "Coan" was suggested long ago by Foesius. But which texts? The antics of modern scholars in deciding this question have been satirized (justifiably) in a recent article by W. D. Smith ('Galen on Coans versus Cnidians', Bull. Hist. Med., 1973, 47: 569-585), who believes (unjustifiably) that the whole question is unreal. Grensemann and Jouanna (who wrote prior to the publication of Smith's article and in ignorance of each other's work—Strasbourg and Hamburg are farther apart than Cnidos and Cos!) take a new approach to the question, based on that of a neglected doctoral dissertation published by J. Jurk in 1900. Format, rather than content, is the prior and decisive factor. Now there are a number of texts concerned with therapy in the Hippocratic collection which are remarkably similar in format (Diseases 2, Diseases 3, Internal affections, Affections, Diseases 1, Diseases of women 1 and 2, The nature of women, Sterile women). The name of the disease, or a general descriptive phrase, is given, followed by a list of identifying symptoms, a brief remark on prognosis (usually), then detailed prescriptions for medication and treatment. The language in which these parts are introduced is highly formulaic and unvarying from chapter to chapter, but where variations do occur they are systematic, to an extent which provides a useful clue to the presence of a different hand. Much of the work of both scholars is in the description of these typical formulae and in listing the passages where they occur. It must be stressed that this analytical work would have been backbreakingly difficult, if not impossible, without the existence in Hamburg of a full lexicon to the Hippocratic corpus. Moreover, the texts concerned are still to a large extent without modern editions: Grensemann promises an edition in a subsequent volume of the texts (parts of Diseases of women and Diseases 2) which he identifies as the earliest discernible stratum, while Jouanna provides his own edition, with full apparatus criticus and an extensive commentary, of all the texts which he discusses. This preliminary work was both essential and laborious, and for this alone one must be grateful for Jouanna's book. The reader will therefore see, or should perhaps be forewarned, that the method of both these studies is linguistic or philological. It is a help that all citations in Greek or Latin are translated.

These texts, so similar in format, also share parallel passages in which the same disease is described in approximately identical terms. These passages indicate that they are related to a common source (any reader who is inclined to be sceptical should consider the striking instance given by Jouanna, p. 411). But was that source the Cnidian sentences, and do these texts therefore tell us what Cnidian medicine and the "school" of Cnidos was like? In view of Smith's objections, we must go carefully here. We possess—pace Smith—three brief fragments of the Sentences. One of these is virtually identical with a passage in one of the putative Cnidian texts (Diseases 2.68. Galen quotes the parallel passage as from Euryphon of Cnidos, but in a context which makes it clear that here at any rate he is accepting the ascription of the Sentences to Euryphon). They all show the same formal and linguistic characteristics as the "Cnidian" texts. Moreover, the brief description of the Cnidian

Sentences given by the author of Regimen in acute diseases shows that they too had this format: name, semiology, prognosis, therapy. At this point it will occur to the reader with modern analogies in mind that it is in the nature of textbooks to be rigid in format and formulaic. He will want to see therapeutic works which are demonstrably not Cnidian and which have a different format, before assenting to the proposition that format is the main criterion for allotting these texts to the school of Cnidos. Yet—apart from the surgical works, which are a special case—there is none such in the Hippocratic collection: there is no control group. This is a serious objection to the main identifying criterion used by both these scholars, and I do not at the moment see how it is to be evaded.

The objection of course does not apply to that part of their work which both scholars would presumably regard as more important: the attempt, similarly inspired by Jurk's dissertation, to sort out different layers or strata in these texts. Grensemann begins with the gynaecological texts contained in Vol. 8 of Littré's edition. These are, as Jurk pointed out, compilations of material of differing provenance. Using highly polished tools of linguistic and logical analysis, Grensemann is able to sort this material into three layers, which he calls A, B and C. The author (himself a compiler of even earlier material) of A is Euryphon the Cnidian physician, whom Grensemann dates to about 470 and whom he includes among the above-mentioned "remodellers" of the Cnidian sentences. Now the characteristics of authors A, B, and C respectively, which Grensemann very carefully defines, can be found in other texts of the Hippocratic collection, sufficiently at any rate to discard B and C and to isolate A, which is Grensemann's main purpose. A includes most of Diseases of women 2, and Diseases 2 chapters 12ff., and is the only stratum which can be positively called Cnidian. This is all admirably done; and apart from any other result, it will enormously increase our understanding of the hitherto rather unapproachable gynaecological texts. Where I have my doubts is in Grensemann's attempt to arrange A, B, and C chronologically. This is done on two assumptions, neither of which is made fully explicit: first, since A stands closest to the Sentences, what is not A cannot be earlier than A, therefore it must be later (why should it not be contemporary? After all, the author of Regimen in acute diseases refers to the authors of the Sentences, both editions, in the plural); and second, what is simpler is chronologically prior, and what is more complex is chronologically posterior. If one looks at the examples which Grensemann prints, one feels that this is right: some passages have a distinctly "archaic" appearance. But it is an aesthetic assumption, and is therefore exposed to a certain kind of attack.

Jouanna, on the other hand, is more interested than Grensemann in the development of the Cnidian school. Just as Grensemann begins by isolating layers in the gynae-cological works, Jouanna begins by attempting to demonstrate the chronological priority of Diseases 2.12-31 over chapters 1-11 of the same text. These are parallel passages which describe the same diseases in the same order: both passages agree in symptomatology, but while 1-11 contain extensive aetiologies, but no therapy, 12-31 (and the remainder of the treatise) provide therapy but no detailed aetiology. Jouanna argues that the aetiology of 1-11 must be later, because it shows development in the theory of humours which (he believes) can be independently dated, and are not yet

established in 12ff.: namely, 1-11 regards phlegm as a cold humour, though its original meaning was "burning" or "inflammation", and recognizes the existence of black bile as an independent humour (for a criticism of an earlier version of this thesis see R. Joly, 'Sur une chronologie des traités Cnidiens du Corpus Hippocratique', Episteme, 1972, 6: 3ff.). From this basis, Jouanna proceeds to give a general picture of the development of the school which I find extremely interesting and of great suggestive value. The early Cnidians had views on the aetiology of disease, but they did not emphasize these views nor develop them into a systematic theory. For them, diseases are caused by humours (bile, phlegm, and others as well), but these humours are regarded "quantitatively" rather than "qualitatively"—humours cause trouble simply when there is too much of them. The later humoral theory, in which humours are correlated with the "opposites" hot and cold, moist and dry, and react to the presence of these opposites in climatic conditions, comes into the picture not earlier than circa 410-400 B.C. (the date of the treatise The nature of man). It was taken over by the Cnidian school, and thereafter influenced to an increasing extent not only the content of their treatises, but also their format (aetiological passages are first added to the original format name-symptomatology-therapy (as in Internal affections) and later combined with both symptomatology and therapy (Affections and Diseases 1) so that the original format is progressively altered). Jouanna traces these developments through the texts which he believes to stand in a relation of direct descent to the Cnidian sentences, and which therefore reflect the changing doctrine of the Cnidian school.

It will be seen that Jouanna's thesis is exposed to the same logical objections as that of Grensemann. Similarity of format does not in itself constitute a text as the product of a Cnidian school, although that and parallel passages do show that the text has at least a literary relation to the *Cnidian sentences*. Moreover, divergences in form, or, as in Grensemann's case, divergences in complexity do not necessarily indicate chronological divergences. (There is of course some non-formal evidence of Cnidian doctrine, but of set intent neither Grensemann nor Jouanna make this their main criterion. We do not know how far such doctrines—the practice of succussion in diseases of the chest, for example—may have been adopted by the Coans: here again, the absence of specifically Coan therapeutic works is crucial). However, logical objections are not necessarily decisive—it depends, as Aristotle said, upon the subject matter. Jouanna's reconstructed "elevation" is aesthetically plausible, and his work, for the subsequent development of the school, and Grensemann's for its early fifth-century stage, together provide a model with which, in future, one will at least be able to work.

FELIX GRAYEFF, Aristotle and his School. An inquiry into the history of the Peripatos with a commentary on 'Metaphysics' Z, H, Λ and Θ, London, Duckworth, 1974, 8vo, pp. 230, £4.95.

In view of their volume and diversity, scholars have frequently wondered whether Aristotle was author of all the works now attributed to him. Dr. Grayeff, a philosopher, is certain he was not, and claims that the bulk of the Aristotelian corpus consists of lectures delivered by his successors in the Peripatetic school, during two