The *Institutio* raises so many questions about the sources from which Galen drew his material and about his relation to this material, that a general survey of the work is desirable. Most of the questions are dealt with in detail in the commentary. Here a rounded view of their relation to the book as a whole will be undertaken.

As previously pointed out, the main topic of the work is the syllogism in its various forms: the categorical, the hypothetical, and the "relational." The material concerning the first form derives from Aristotle's *Prior Analytics*, with minor changes. Similarly, the treatment of the hypothetical syllogisms is based on the five indemonstrables, whose formulation we know is due to Chrysippus. The chapters dealing with relational syllogisms point to no such well-organized source. The examples Galen gives under this heading are cited in Alexander in different portions of his commentary on the *Prior Analytics* as if they were desultory discoveries of later logicians, apparently Stoics for the most part, and as if they were not brought under a single heading. In treating these Galen makes a claim to originality, whether of nomenclature or theory is not clear.

This basic material is embedded in preparatory explanations and additional comment. The analysis of arguments into propositions and of propositions into terms leads Galen to begin his work with the elucidation of these elements. Moreover, the fact that a technical language for logic had been elaborated by Aristotle and his successors and, after them, the Stoics, caused Galen to include at appropriate places definitions of these technical terms and comments on the different terms used by Peripatetics and Stoics for the same or similar logical forms. In addition, Galen indulges a tendency, rather marked in all his works, to define incidental terms that he uses in the course of his exposition.

The structure and content of the work must be examined against the background of the traditions within which Galen worked. Unfortunately there is no closely similar work with which to compare it. Its title
proclaims it an *Eisagoge*, an introduction to logic. Galen himself calls it an *hypographe*, an outline, as distinguished from a detailed exposition (ch. XI, 2). There is no other such introduction to logic preserved from the logical writers of antiquity, although ps.-Apuleius, *De Interpretatione* comes closest to it in form and content. That there were many such introductions is indicated by a passage in Aulus Gellius and by one in Proclus’s commentary on the first book of Euclid. In *Attic Nights*, XVI, 8, 1, we read:

Cum in disciplinas dialecticas induci atque imbui vellemus, necessus fuit adire atque cognoscere quas vocant dialectici *eisagogai*.

and in Proclus, *in Euclid*, p. 193, Friedlein:

*Kai ho ge apo tès Stoas hapanta logon haploun apopatikon axiosma prosagoreuein eiôthasin, kai hotan dialektikas hèmîn graphousin technas, “peri axiosmatôn,” touto dia tôn epigrammatôn déloun ethicousin.*

It is clear that the rest of the chapter in Gellius discusses Stoic terminology and that his “dialectici” are Stoics or writers drawing on the Stoic tradition in logic. These two passages imply that the production of introductions and handbooks of logic was a thriving industry among the Stoics.

Perhaps, in view of Mau’s contention, in the Hermes article already referred to, that logic had become standardized by the last century before Christ and that there was not a clear-cut distinction between the logic of the rival schools, it would be more proper to attribute the industry of writing handbooks to the “dialectici” and assume that these men, whoever they were, drew their material from Chrysippus and his followers, with some reference back to Theophrastus. Albinus’s summary of “dialectic” in chapters 5 and 6 of his *Introduction to Platonic Dialogues* (*Platonis Dialogi*, Teubner, VI, 156ff) is an example of this kind of thing, with rather heavier emphasis on Peripatetic contributions to logic. The handbooks came into being, no doubt, to satisfy different demands. Some would have been written by Stoics for Stoics, especially after the Roman government undertook to support professors of each of the philosophical schools in the principal cities of the Empire. Others would perhaps have served the teachers of rhetoric and of jurisprudence. Galen’s book, at any rate, is an actuality. As has already been suggested, it may have been unique among introductions because of its author’s independence of the schools and his orientation towards demonstration.

As an introductory outline, however, Galen’s book does not deal with the fundamentals of logic. It would be wrong to describe it as either Peripatetic or Stoic, if these two terms connote a sharp difference of opinion about the nature and purpose of logic. Galen stands apart from the philosophical sects and above them, as has already been said.
Whether there were logic books before Galen adopting the same neutral stand cannot be discovered. Most of the information we have concerning the material treated by Galen comes from Diogenes, Alexander, Sextus, and, to a lesser extent, from Plutarch. From none of these men do we have a systematic exposition of logic on any level. Diogenes, of course, gives valuable doxographic material derived from Diocles. Alexander wrote commentaries on Aristotle, as a Peripatetic and "second Aristotle;" his treatment of Stoic material is polemical; Sextus is equally polemical from the Skeptic position; Plutarch’s references to logic are incidental to his main philosophical purpose and he is, of course, a Platonist. Accordingly, while remarks of all these authors are of benefit in the elucidation of many particular statements in the *Institutio*, they are of little help in explaining the work as a whole.

The general form is dictated by the nature of the material and is, in fact, exhibited by any elementary textbook on logic, including the most recent textbooks of symbolic logic. Alexander has described this necessary form in his commentary on the *Prior Analytics* (p. 9, l. 25):

"Since the discussion of the syllogism is necessary for the discussion of demonstration, as we have already said, and since the syllogism is composed of premisses and the premisses of terms, with good reason he discusses these things, from which the syllogism gets its being, before talking about the syllogism." But this general form is complicated for Galen by the fact that he gives the terminology of both Peripatetics and Stoics. He must, therefore, combine his definitions of terms and propositions with a listing of the different names used for these elements by the two schools. His task is further complicated by the fact that he undertakes to introduce the reader to three kinds of syllogism: the categorical, the hypothetical, and the relational. Here the complexity of the subject becomes even greater, since, although the categoricals belong to the Peripatetics and the hypothetical to the Stoics, by right, one might say, of Prior Elaboration, adherents of each school had worked with both kinds of syllogisms. There are, therefore, both terminological duplications to be taken into account and also theoretical differences to be noticed. Although the latter are of little interest to Galen in this book, they underlie his treatment and occasionally call for comment. Finally, the third class of syllogism, because it had not been thoroughly worked out and presents in our sources a grab-bag appearance, seems to have required of Galen more original work in arranging his exposition than the other two classes.

If one may venture a theory of the composition of the book, it is this: Galen has at hand, through one source or another, the standardized version of the categorical syllogisms as derived from the *Prior Analytics* but reduced to school jargon form, and similarly such a version of the syllogisms of Chrysippus. Perhaps these versions were already combined
into one text. He was familiar with disputes between the schools about interpretations of the form and significance of the syllogisms. The terms *palaioi* or *archaioi* and *neoteroi* were already stereotyped designations for the parties in dispute, showing that the division had become rigid by Galen's time. As an expert in the theory of demonstration, Galen feels himself qualified to judge many of the points in dispute in reference to a rather practical standard of usefulness for demonstration, that is, usefulness to the practicing scientist. And lastly, many of his statements in the *Institutio* and his ways of exposition stem from personal traits, particularly his genuine love of teaching, his sympathy with learners, and his didactic habit of emphasizing a point by repeating it three times.

The *Institutio*, therefore, is not a compilation or an epitome but a genuine composition of the author, an original work, in the sense that Galen has selected his material with his mature understanding of logic always in control, and he has interwoven with it comments of his own, designed to emphasize what he finds important for the student of science to know. The book has interested students of logic since its rediscovery, primarily as a source of knowledge about ancient logic. It can be of equal interest to those who would like to see the quality of the mind of a scientist of the age of the Astonines. From it a good understanding of the culture both of a man and of an age emerges.

A careful reading of the *Institutio* makes possible at least a tentative apportionment of the material between that which Galen took from standard sources and that which he contributed of his own. Owing to the inadequacy of our sources for ancient logic, no certain line between these parts can be drawn. The following paragraphs are an attempt to sketch this probable apportionment. Detailed justification of some of the opinions offered will be presented in the commentary.

There are certain indications to be followed in the attempt to place particular sections of text. Foremost among these is the terminology, which Galen distinguishes as Peripatetic and Stoic. Then the illustrative examples which appear practically verbatim in other authors show not only where Galen is drawing on already formulated statements but also whether these statements come from a Peripatetic or a Stoic source. For instance, the type-names Dion, Theon, and Philon and the example "night or day" are found often in Stoic sources, while "Socrates" or propositions about virtue, justice, and honor bespeak the Peripatetics. A further means of discriminating parts, which must, however, be used judiciously, lies in the style of the sentences. Those sections which derive from standardized formulations are expressed in a terse sentence structure, worn smooth by constant repetition; when Galen is offering a comment or explanation of his own, the style is more lively, although sometimes a little less clear (Galen is generally a clear writer). A pattern seems to be exhibited in some of his chapters: the first part
presents the material taken from a source; this part is followed by remarks of the author. Lastly, as in his other works, Galen makes fairly frequent digressions. His habit of digression was a minor vice and he is aware of it, once scolding himself after he has made a long one (ch. XIV, sec. 9).

With these guide posts in mind, one may attempt, at last, an analysis of the book.

The first chapter would seem to be Galen’s own composition. The opening statement of the difference between self-evident knowledge and demonstrated truth, although a commonplace since Aristotle, is in verbal accord with remarks Galen makes in other works (partly, of course, because of Kalbfleisch’s conjectures based on these other passages) and there can be little doubt that Galen penned the sentence himself. The sentence in the second section which makes a general statement about the effect of demonstration on a respondent is obviously an independent construction, otherwise it would be clearer. (Here again emendation by Kalbfleisch is present. Mau in his translation omits the sentence, considering it hopelessly corrupt.) Then the example of a demonstrative argument, though derived from a Stoic source, has been chosen for this place with independence of thought. We meet the same example in Alexander, illustrating an entirely different point and expressed somewhat differently (in Anal. Pr., p. 21, Wallies). The elaboration of the example could be characteristic of Galen’s prolixity. The last two sections also are in Galen’s individual style. Although they simply define the terms argument, conclusion, and premiss, they show Galen’s fondness for comparing different terms for the same thing, and they also contain addresses to the reader, second persons of verbs, that are signs of his pedagogical manner and are not found in sections that are clearly repeating standard texts.

Chapter II deals with the categorical propositions. It classifies them in two ways: one by means of subject matter, the other by form; and it analyzes the composition of the latter out of terms. The style of the chapter suggests that Galen is working from a text, possibly one of the introductions peri axiomatón mentioned by Proclus. The technical terms are mostly Peripatetic, e.g., protasis for proposition, horos for term; but the name “Dion” and the grammatical word epirrhema look Stoic, while the name “categorical” for a kind of proposition is at least post-Aristotelian. (Mau ad loc. conjectures it is Galen’s own coinage.) Since the Stoics adopted much of the Peripatetic elementary logic, this combination does not preclude a Stoic source.

The first section classifies categorical propositions by subject matter in an odd way. In Kalbfleisch’s text an example of an affirmative proposition and its corresponding negation is given for each of the ten Aristotelian categories, preceded by a pair of existential propositions, which do not, as in the other cases, have the same subject. The implication is that the
term "categorical" was given to the proposition because such propositions had predicates from one or another of the categories. This point is discussed in the commentary. Similarly, the pairing of affirmative and negative propositions calls to mind the apparent school exercises of the Papyrus Letronii peri apophatikon (von Arnim, II, no. 180). Lastly, the subject matter is encyclopedic in nature and thus points to a source of the later period, when encyclopedic compilation of knowledge became common. All these considerations indicate that Galen may here be following a textbook that drew on a source giving a Stoic version of Peripatetic doctrine.

The content of the rest of the chapter is consonant with this theory. The discussion of terms is conducted in a language that uses a fully developed grammatical vocabulary, while the discussion of universal, particular, and singular propositions not only shows that the conventional names for these propositions are fully established but that they are beginning to have a well-worn look. The distinction between proper and common names is made deftly and routinely, relying on the distinction between divisible and indivisible terms, but without insistence, as if the language of genus, species, and individual had long been settled. The statement that particular negatives have two equivalent forms may be an addition of Galen's own, since he had written a book, On Equivalent Propositions, and elsewhere in this book shows an interest in the subject.

In Chapter III Galen takes up hypothetical propositions. Here the material seems to be somewhat original with the author. He gives two sets of names for propositions of this sort, one Peripatetic, the other Stoic, or at least used by the neoteroi who in this context seem to be Stoics. He also digresses to discuss the meaning of some auxiliary terms. He concludes the chapter with a criticism of those who pay more attention to verbal expression than to the facts signified; these again are the Stoics. The sentiment is dear to Galen and reflects his continuing struggle for relevance against meaningless disputes between sects. A pendant to this last section is a mention of two equivalent forms for the disjunctive proposition. It seems a fair conclusion that Galen has reworked the material of this chapter and has put more of his own opinions into it than into the preceding chapter.

Chapter IV continues the exposition of hypothetical propositions and connects them with the doctrine of consequence and conflict. If more were known about this doctrine, it would be easier to assess Galen's originality here. At any rate, Galen writes with some feeling in this chapter and criticizes Chrysippus by name and severely. (Dr. Edelstein has pointed out to me that this criticism is often an indication of a reference to Posidonius, who was very much opposed to Chrysippus. Posidonius figures in the De Hippocratis et Platonis Placitis, which is in great part a diatribe against Chrysippus.) Here Galen introduces a criticism of the
third indemonstrable of Chrysippus, a matter of some importance to him, since he returns to it again with emphasis when he discusses the hypothetical syllogisms. Again he ends the chapter with a note on usage which reads as if it were his own. This chapter, too, seems to be more Galen’s than a transcription from a textbook source.

The discussion of hypothetical propositions is carried on into Chapter V on a less elementary level. The disjunctive is connected with the notion of “conflict;” then three different types of disjunctives are named, the third, the “paradisjunctive,” turning out to express “incomplete consequence.” The discussion is partly confused by introducing propositions consisting of disjunctions of more than two members. Galen is led on by this turn of the discussion to anticipate treatment of the five indemonstrables, which, strictly speaking, belong later in the book. The paradisjunctive interested him especially. Twice later he returns to it. The term, apparently, was used in various senses by different authors and Galen may have wanted his understanding of it, which is a quite competent understanding, clearly established for his readers. (Mau, in his commentary, adopts a different view of what the paradisjunctive meant for Galen from that expressed here. Mau’s interpretation, especially of Chapter XV, is attractive, but I shall continue to hold to my interpretation.) In this chapter, then, Galen seems to have taken existing material, some of it containing conflicting doctrines, and developed it according to an understanding of his own. From one point of view the chapter is a long digression on the meaning of the term “disjunctive” and thus is an example of one of Galen’s favorite devices.

In Chapter VI Galen returns to the accepted order of treatment, when he takes up conversion of propositions and syllogisms. He first deals with conversion of both kinds of propositions, then with conversion of syllogisms, especially the rule used by Aristotle for reduction per impossibile. The material of the first five sections is standard and most of it comes ultimately from Aristotle’s Prior Analytics. But in sections 6 and 7 Galen has appended comment of his own; in section 6 he remarks that the rules of conversion apply also to “tropoi;” he then feels the need of explaining this term. It means, he tells us, hypothetical syllogisms expressed schematically with ordinal numerals standing for the propositions in the syllogisms. This leads him once more to list the five indemonstrables. Section 7 returns to the paradisjunctive, which is not one of the premisses of any of the five indemonstrables. So again Galen follows his pattern of giving additional comment after first presenting accepted doctrine.

In Chapter VII Galen goes on with the digression on hypothetical syllogisms and gives two descriptive terms that are applied to them. Then he refers to a discussion of the relative priority of categorical and hypothetical syllogisms, cites opinion on each side of the question, and,
true to his principle of standing above the battle, announces that in his view the argument is irrelevant. In section 4 he takes up the categorical syllogisms and the rest of the chapter is straight listing and exemplification of the three figures. The next four chapters list the valid moods of each of the three figures and, in Chapter XI, the further inferences and indirect moods possible in addition to the moods of the three figures. Nowhere, incidentally, is the “Galenic” fourth figure mentioned. In these chapters he follows regulation Peripatetic doctrine, with little excursion into bypaths, little or no development of original points of view.

Chapters XII and XIII discuss the subjects in which the categorical syllogisms are useful for demonstration and which syllogisms are useful for which different purposes. Usefulness for demonstration is the most important thing about syllogisms for Galen and once more the style betrays more feeling. He takes up again the supposed connection between categoricals and categories and he gives another encyclopedic list of subjects of investigation under the ten categories. Here, moreover, Galen makes a definite claim to originality, asserting that he has himself added the category of “composition,” which had been overlooked by Aristotle.

Chapter XIV takes up, now in proper order, the hypothetical syllogisms. In this chapter he makes the interesting assertion that the hypothetical syllogisms are useful for questions of existence, such as, “Do the gods exist?” “Is there a void?” As opposites of the categorical syllogisms, the hypotheticals must, in Galen’s opinion, deal with questions that transcend the categories. Galen does not adhere very strictly to this rule. In places in his other works he offers demonstrations of a certain opinion both by means of a categorical syllogism and a hypothetical (see, for instance, De Semine, Kuehn, IV, 609). The main part of the chapter, however, is concerned with the five indemonstrables of Chrysippus. Galen repeats what he has said in the earlier part of the book. Again he calls attention to the different vocabularies of Peripatetics and Stoics. He then proceeds to offer as his own a set of five indemonstrables, based on the kinds of consequence and conflict, and differing from Chrysippus’s especially in the theory of the third one of the group. He discourses at length upon this difference, and finally recalls himself, with an apology, from his digression. It is to be observed that he claims as his the theory he presents, asserting that his forms are only verbally similar to those of Chrysippus. One of his rare first person verbs occurs at the end of section 5 of this chapter. The value of his claim is uncertain. The question will be discussed in the commentary when the topics of consequence and conflict are treated. For the present purpose it is enough to note that the claim to originality precludes the chapter’s being a mere transcription.
Chapter XV bears the clearest evidence of Galen’s originality. It is devoted to the paradisjunctive, which Galen (if Kalbfleisch’s editing of the first sentence is sound) explains as based on incomplete consequence. We have seen his two earlier statements (ch. V, 1 and ch. VI, 7) about the paradisjunctive proposition. Here he discusses the syllogisms that have that proposition as a major premiss. What marks the treatment as largely original is, first, that his concept of the paradisjunctive is more clearly defined than the reference to it in Aulus Gellius, XVI, 8, and, second, that the example given to illustrate the syllogisms is a physiological one, dealing with the kind of question frequently encountered in Galen’s medical works (see De Fac. Nat., II, ch. vii). Furthermore, the amount of space he devotes to the forms shows that he believed it was something new and would not be easily understood. Then the two paradisjunctive syllogisms increase the number of such syllogisms from Chrysippus’s five to seven, although he had said nothing in his treatment of the latter, derived, no doubt, from a standard source, to prepare the reader for this increase. It may be, however, that he did not think that these two syllogisms were indemonstrable, although he says nothing about their being derivable from the five. (Note, however, that Mau, reading a different text, takes a radically different view of this chapter.) At the end of the chapter he gives an example from Plato of an argument possibly in this form. Since this is not a stock example he seems to have selected it himself, although, possibly, he owes it to Posidonius, whose influence begins to appear in the next chapters.

Chapters XVI, XVII, and XVIII seem to be more original than some of the earlier parts of the book. They deal with relational syllogisms. Galen explains why he chose the term relational and then gives an account of how he came to recognize that relational syllogisms depend for their force on a general axiom. The examples he gives are paralleled in Alexander (e.g., Anal. Pr., pp. 21–22), by whom they are attributed to the neoteroi or the Stoics, so that Galen’s claim is not to the discovery of these syllogisms. I would rather refer it to the interpretation of them and to the recognition that though they play a part in mathematical reasoning they extend to non-mathematical objects. According to Alexander, the Stoics called these forms “unmethodically concluding.” Galen refers to this term in his last chapter, obviously taking it to refer to some other types of argument than he discusses under relational syllogisms. So perhaps Galen’s originality lies in according to the forms of relational syllogisms a more rational status than other writers on logic had been willing to grant.

Chapter XIX is a brief rejection of certain forms handed down in the tradition, some Peripatetic, some Stoic, as not being, strictly, forms of argument at all. Since some of these same forms are referred to by Alexander as if they were valid to some degree, or as if there was respectable
opinion that held them to be so, this rejection of them must be taken as Galen's own judgment.

It is hoped that the foregoing sketch of the contents of the *Institutio* offers a basis for the following conclusions: the work follows, in general, the traditional order of treatment of the syllogistic branch of logic; much of its material is drawn from a standard textbook of logic in which an attempt was made to give both Peripatetic and Stoic formulations; this was not done with a view to reconciling conflicting theories, but in the belief that there was a single science of logic to which both the Peripatetics and the Stoics had contributed, with, it is true, some difference of terminology that had to be reconciled; Galen worked freely with this material, making comments of his own, and, in particular, carrying on his feud with Chrysippus; furthermore, Galen believed that he had made some discoveries of his own in logic, and he presents them in appropriate places; he is himself neither a Peripatetic nor a Stoic, but because of his dislike of Chrysippus and his familiarity with Plato and Aristotle, he tends to use a vocabulary that has more affinities with the Peripatetic than with the Stoic, although in dealing with the Stoic contributions he uses the Stoic terms interchangeably with the Peripatetic. Finally, because of his habit of digressing when a particular point interests him, the book offers many interesting side lights on the thought of the age of consolidation in which he lived and which, in large part, he made.

There is possibly an alternative conclusion to this analysis. The bulk of the material of the *Institutio* and its arrangement may have already been fixed before Galen's time by a single hand. This supposition would not detract from Galen's individuality in preparing this document, in the sense that he contributed comments of his own or that he knew the subject and knew how he wanted to convey it. It would, however, account for the similarity of some of the ordering of the material to things that appear in Cicero's *Topica* and Apuleius's *De Interpretatione*. It would also give a plausible reason for the references to bits of factual information seeming to reflect the state of knowledge of the first century B.C. and very little that was later than that.

If the supposition of an earlier hand shaping the material of the *Institutio* is considered seriously, then an obvious candidate for identification as that hand is Posidonius. In the first place Galen was familiar with the works of Posidonius. In the fourth and fifth books of the *de Placitis Hippocratis et Platonis* Posidonius is frequently cited as a witness against Chrysippus and several passages are quoted from his book, *peri pathón*. From these citations it is clear that Posidonius was a severe critic of Chrysippus, so that the strictures against the latter that occur in the *Institutio* might very well be Posidonian.

Secondly, there is the last sentence of Chapter XVIII of the *Institutio*, which attributes to Posidonius the naming of a class of relational syllogisms
as "conclusive with the force of an axiom." The meaning of the phrase may be left for the commentary. The sudden introduction of Posidonius's name here fits in best with the hypothesis that he has been in Galen's mind all the time. Now at the end of the treatment of logic he acknowledges his dependence.

That Posidonius treated of logical matters is clear from references in Diogenes Laertius. In particular, the last sentence of Book VII, ch. 54, "Alloi de tines tòn archaioterôn Stôikôn ton orthon logon kriterion apoleipousin, hós ho Poseidônios en tòi Peri kritériou phési," shows that he held a view of the foundations of logical thinking that is consistent with the view attributed to him in the Institutio.

The chapters of the Institutio dealing with relational syllogisms illustrate them with examples from arithmetic and geometry. Galen more than once refers to Posidonius's knowledge of mathematics. For instance in Hippocrates and Plato (Kuehn, p. 390) he says, "Posidonius, trained in geometry and more accustomed than the other Stoics to follow demonstrations...." Cicero also, in De Natura Deorum, II, 88, tells us that Posidonius had made a mechanical model that illustrated the motions of the sun, moon, and five planets. Therefore, there is nothing implausible in Posidonius's having elaborated the doctrines of relational syllogisms as they are found in Galen's final chapters.

Proclus's commentary on the first book of Euclid (edited for Teubner by Friedelein, p. 199) attests a book by Posidonius attacking Zeno the Epicurean's denial of the possibility of logical demonstration. The context shows that the issue between Posidonius and the Epicurean was, in effect, the validity of mathematical reasoning. The remark quoted by Galen in the Institutio could very well have been a part of such a discussion. However, it is more likely that it came from the peri kritériou. This would most likely be the case if most of the content of the Institutio was drawn from Posidonius and not just the latter portion, the discussion of relational syllogisms.

It is a commonplace of the history of philosophy that Posidonius was a Platonizing Stoic and that he was aware of Aristotle and respectful of his position. This statement is supported by numerous references in Galen's de Placitis Hippocratis et Platonis. (See for instance, p. 396 of Mueller's edition of this work or p. 401 of the same edition.) Therefore, the combination of Aristotelian and Stoic logic that the Institutio sets forth could very well have been already worked out by Posidonius.

A final point may be made. In Sextus Empiricus's Against the Logicians (Bk. I, sec. 93, which I cite under the general title Adversus Mathematicos) there is a quotation from Posidonius embedded in a discussion of the Pythagorean view that number is the logos which is the fundamental "criterion" of knowledge. As translated by Bury it reads: "Just as light is apprehended by the luciform sense of sight, and sound by
the aeriform sense of hearing, so also the nature of all things (hé tôn holón phusis) ought to be apprehended by its kindred reason (tou logou).”

If this quotation is authentic it goes far in explaining the phrase “by force of an axiom.” The ground of logical validity is found in nature, the nature of the soul and its kinship with the nature of the universe. Of course, since the sentence is quoted from an exposition of Plato’s Timaeus, it may represent Posidonius’s interpretation of Platonic doctrine and not his own. Still it is not out of keeping with what we know of Posidonius’s opinions and interests.

There is a little more to the quotation. Since it is embedded in a passage about Pythagoreans it may be that Sextus felt that Posidonius’s views on number were similar to the Pythagoreans’ views. If so, the largely numerical cast of Galen’s chapters on relational syllogisms might stem directly from Posidonius.

This alternative conclusion would leave Galen in his role as organizer of a scientific curriculum for his age and posterity. It would attach him closely to the Posidonian tradition and help light some corners of that tradition.