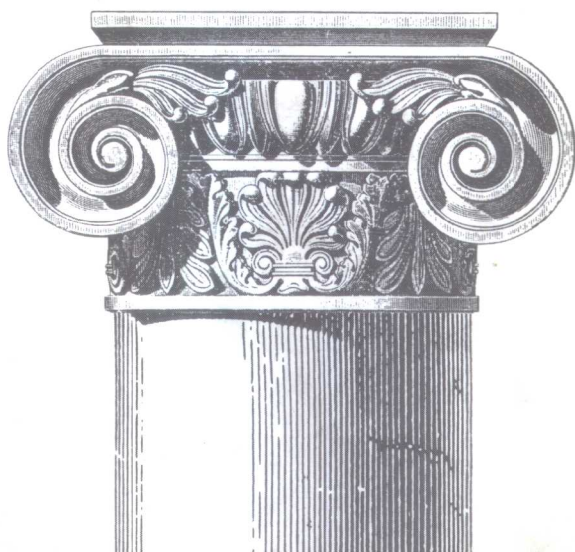


TRANSLATED WITH
INTRODUCTION BY
RAYMOND ERICKSON
AND EDITED BY
CLAUDE V. PALISCA

*Musica
enchiriadis
and Scolica
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Foreword by the Series Editor

The two treatises that share the puzzling term *enchiriadis*, which is poor Greek and worse Latin, are famous most of all for their discussion and illustration of the earliest written polyphony and the graphic representation of melody in the daseian notation. The examples in which the voices sing in parallel fourths, fifths, and octaves struck the earliest readers of the treatises as exotic in their primitive ignorance of the most inviolable rule of strict counterpoint, the prohibition of parallel perfect consonances. But this is how counterpoint began. A patient integral reading of the two treatises is rewarded by the revelation of much more: a rich world of musical thought that lets us penetrate the minds of ninth-century musicians and teachers. It is this kind of reading that the Music Theory Translation Series has aimed to stimulate.

The *Enchiriadis* tracts are the most important body of medieval music theory that has lacked adequate translation into a modern language. Apparently written in the second half of the ninth century, the two anonymous treatises are approximately contemporary with Hucbald's *De harmonica institutione*, which is translated by Warren Babb in one of the first volumes of our series, *Hucbald, Guido, and John on Music* (1978). In their pedagogic goals, the *Enchiriadis* treatises stand somewhere between Hucbald's work and Guido's in that they orient the reader in the current practice of plainchant and organum while building on the theoretical foundation of Greek theory as transmitted by Boethius in his *De institutione musica* (translated in our series as *Fundamentals of Music* by Calvin M. Bower, 1989). *Musica*

Translator's Acknowledgments

But as I now write this down, I am already beginning to notice how difficult it is . . . to choose just the right words—and how much ambiguity, how much misunderstanding, is inherent in the simplest utterance.—Stefan Zweig, Phantastische Nacht

The completion of this volume has taken much longer than expected, the result of frequent interruptions caused by other professional obligations. Nonetheless, it is my feeling that the final product is the better for having had such a long gestation period, even though there are also attendant risks. A translation is perforce an interpretation, but I have tried to achieve objectivity and accuracy by studying, as far as conditions permitted, the histories and uses of terms employed in the *Musica enchiriadis* and *Scolica enchiriadis* up through the ninth century and also by comparing the sometimes different uses of words by the authors of the two treatises. This approach, plus the use of Hans Schmid's critical edition of the *Enchiriadis* treatises, which was not available to previous translators, distinguishes this effort from earlier translations by Leonie Rosenstiel and Richard Holladay.

Originally I prepared extensive annotations to the translation summarizing the terminological studies, but it was felt that, in keeping with the format of this series, such information should be published elsewhere. One study by the translator, dealing with a small group of terms, is listed in the bibliography.

To what degree I have attained my objectives of accuracy and comprehensibility will be judged by others. But there is no question that many people and institutions have assisted me in the quest of them. A first word of thanks goes to Claude V. Palisca, who assigned me, as a first-year graduate student many years ago, the task of translating a portion of *Musica enchiriadis* and in 1979 invited me to undertake the present translation for the Yale Music Theory Translation Series. In the intervening years I have come to appreciate even more than before his Solomonic wisdom as editor and scholar, not to mention his Job-like patience.

A fellowship from the Alexander von Humboldt Stiftung made possible periods of research at the musicological seminar of the Albert-Ludwig University in Freiburg and the Bavarian Academy of Sciences in Munich, both important centers of terminological studies. In Freiburg, under the sponsorship of Hans Heinrich Eggebrecht, I worked closely with Fritz Reckow and visited a seminar on the *Musica enchiriadis* given by Professor Eggebrecht, founder of the *Handwörterbuch der musikalischen Terminologie*, that rekindled my interest in the treatise. In Munich, under the sponsorship of Theodor Göllner, I benefited from the daily contact with Michael Bernhard, editor of the *Lexicon musicum latinum*, and also had available to me the unique source materials of the *Thesaurus linguae latinae* (under Peter Flury) and the *Mittelateinisches Wörterbuch* (under Theresia Payr). At home in New York, I had available the fine music library of the Aaron Copland School of Music at Queens College (headed by Joseph Ponte, ever alert for new materials of interest to me), and also drew on the rich resources of the New York Public Library and the libraries of Union Theological Seminary and Columbia University. I am also very grateful to Calvin Bower for sending me a prepublication typescript of his translation of Boethius's *De institutione musica*.

Along the way, various individuals have read drafts of portions of this volume, and have made suggestions that I have willingly adopted. Nancy Phillips, whose New York University dissertation is a landmark in the study of the *Enchiriadis* treatises, early on gave important corrective advice and generously offered assistance. Although I have come to different conclusions about the interpretation of some terms in the treatises, her work caused me to think about many of these problems in the first place and I gratefully acknowledge my indebtedness to her. Prof. Robert Newman, now a classicist at the University of Hawaii, took considerable time to read carefully rough draft translations of both treatises while he was an NEH Fellow working on the *Thesaurus linguae latinae*. Fritz Reckow, Claude V. Palisca, and I have used draft versions, open to student comment, in courses at Ohio State University, Yale University, and the Graduate School of the City University

of New York (where I credit in particular the sharp eye of Mark Anson-Cartwright). Charles Atkinson has been generous with both his friendship and advice, having read the introduction and part of the translations. Brien Weiner, when an undergraduate at Queens College, worked with me closely for over a year as a tutee and research assistant, discovering in the process many infelicities in the translations as well as typographical and other errors. Subsequently, Halina Goldberg read the final draft version and Emerson Chen was of great assistance in the computer generation of the musical examples. Also thanks to Grace Romeo of the Queens College Word Processing department for the remarkably accurate typing of the Latin text of both treatises in a form I found very useful for the initial stages of this work. Last, but certainly not least, I wish to thank Harry Haskell, music editor of Yale University Press, for his commitment to this book and for the support and cooperation he has given me while gently shepherding the volume through the final editing and production stages.

There are personal as well as professional debts to acknowledge. In Germany, my work was encouraged and stimulated by the hospitality offered by Fritz and Elke Reckow, Wolfgang and Edith Ruf, and the Dietmar Dagefoerde family in Freiburg, and by Evelyn Aschenbach, Horst Rek, and Gudrun Schiller in Munich. But the biggest debt of all I owe to Carole DeSaram, who married not only me but also an uncompleted book that necessitated several periods of separation, patiently endured, before the work was completed. It is to her that this volume is rightfully and lovingly dedicated.

Abbreviations

MANUSCRIPTS

- A** Valenciennes, Bibliothèque municipale MS 337 (325), olim St.-Amand; tenth century
- Ca** Chartres, Bibliothèque municipale MS 130 (148); eleventh century
- Do** London, British Library Arundel MS 77; late eleventh century
- H** Bamberg, Staatsbibliothek Cod. HJ. 20 (Var. 1); tenth century
- K** Cologne, Stadtarchiv MS W 331; tenth or early eleventh century
- N** Munich, Bayerisches Staatsbibliothek Clm. 14649 (Rat. Emm. E 33); eleventh century
- P** Paris, Bibliothèque nationale MS lat. 7210; early eleventh century
- T** Munich, Bayerisches Staatsbibliothek Clm. 18914 (Tegerns. 914); eleventh century
- We** Düsseldorf, Landes- und Stadt-Bibliothek MS H 3 (olim Werden); late ninth century

PUBLICATIONS

- GL** Heinrich Keil, ed. *Grammatici latini ex recensione Henrici Keilii*. 7 vols. Leipzig: Teubner, 1855–80.
- GS** Martin Gerbert, ed. *Scriptores ecclesiastici de musica sacra potissimum*. 3 vols. San-Blasius, 1784. Repr. Milan: Bollettino Bibliographico Musicale, 1931.

xviii *Abbreviations*

- HdMT* Hans Heinrich Eggebrecht, ed. *Handwörterbuch der musikalischen Terminologie*. Wiesbaden: Franz Steiner, 1972—.
- PL* Jacques-Paul Migne, ed. *Patrologiae cursus completus, series latina*. Paris: Brepols, 1844–86.

Introduction

The treatises known commonly today as *Musica enchiriadis* [ME] and *Scolica enchiriadis* [SE] are products of ninth-century reverence for and interest in the received wisdom of antiquity.¹ But even more they reflect concern for the training and education of singers engaged in daily worship.² Indeed, the pragmatic stance of these documents, evident in the inclusion of exercises and of music from the repertory—features totally absent from the ancient formal treatments of music—testifies to Carolingian practicality. This introduction will survey the contents of the two treatises and their relation to each other; their sources of inspiration, authority, and vocabulary; and some resonances of the treatises in post-Carolingian times.

1. The Latin text used for the translations is the modern critical edition of the treatises by Hans Schmid, *Musica et scolica enchiriadis una cum aliquibus tractatulis adiunctis* (Munich: Verlag der Bayerischen Akademie der Wissenschaften, 1981). References to specific passages in that edition will be made by page and line number in forms such as “3.5–8” (page 3, lines 5 through 8), “14.5,8” (page 14, lines 5 and 8), and 93.*descriptio* 3 (page 93, *descriptio* 3). In cases of possible ambiguity, the page number will be preceded by “Schmid.” In Schmid’s edition *Musica enchiriadis* occupies pp. 3–59, *Scolica enchiriadis* pp. 60–156.

2. SE specifically addresses itself to the needs of the *peritus cantor*, the skilled and informed singer; cf. 60f. 10f.

ORIGINS

The Literary Sources

The two treatises quote or paraphrase (usually without attribution) many Latin writings on music that had come down to the ninth century; in fact, the breadth and sometimes clever use of these borrowings is unmatched in the medieval music-theoretic literature. The principal late classical sources represented, in approximate chronological order, are:

Censorinus, *De die natali* (A.D. 238)

Calcidius, translation and commentary on Plato's *Timaeus* (4th century)

Augustine, *De musica* (A.D. 387–9)

Fulgentius, *Mitologiae* (5th–6th centuries)

Boethius, *De institutione arithmetica* and *De institutione musica* (before 510)

Cassiodorus, *Institutiones* (540)³

The *Enchiriadis* treatises also draw on Vergil's *Aeneid*, the Vulgate (Paul's Epistle to the Romans), Augustine's *De ordine*, and Boethius's *Consolatio philosophiae*.⁴

Notably absent from these lists is Martianus Capella's *De nuptiis Philologiae et Mercurii*, the most popular treatment of the liberal arts. Vitruvius's *De architectura*, Quintilian's *Institutio oratoria*, Macrobius's *Commentarium in somnium Scipionis*, Favonius Eulogius's *Disputatio de somnio Scipionis*, and Isidore of Seville's *Etymologiae* also contain discussions of music that are not directly quoted.

Despite their incorporation of received ideas, the *Enchiriadis* treatises are highly innovative. In them are found for the first time—if one accepts a

3. The principal passages drawing on these sources are as follows: Censorinus, *De die natali liber*, ed. Nicolaus Sallmann (Leipzig: Teubner, 1983), 10.4–6 (Sallmann, p. 16); Schmid 23.1–7. Calcidius, *Timaeus a Calcidius translatus commentarioque instructus*, ed. Jan Hendrik Waszink (London: Warburg Institute, 1962), 1.44 (p. 92); Schmid 3.1–7. Augustine, *De musica*, ed. Giovanni Marzi (Florence: G. C. Sansoni, 1969), 1:2,2 (p. 86); Schmid 60.1. The section on rhythm beginning Schmid 86.384 also owes much to this work despite the absence of direct quotations. Fulgentius, *Opera*, ed. Rudolf Helm (Stuttgart: Teubner, 1970), 3.10 (pp. 77f.); Schmid 57.1ff. Boethius, *De institutione arithmetica*, ed. Gottfried Friedlein (Leipzig, 1857; repr. Frankfurt a. M.: Minerva, 1966), 1.1 (Schmid 107.165–8; 108.185–90); 1.21 (Schmid 118.42–8); 1.22 (Schmid 118f.52–8); 1.24 (Schmid 120.73–82); 1.29 (Schmid 121f.100–11). See also this translation, note to 115ff. 1–39. Boethius, *De institutione musica* (in Friedlein edition just cited), 5.10 (Schmid 33.29–36); 5.9 (Schmid 45.14–47.39); 2.20 (Schmid 116. descriptio 1 [fig. 40]); 3.1 (Schmid 128.222f.); 1.32 (Schmid 132.286–93; 2.18 (Schmid 132f.295–311). Cassiodorus, *Institutiones*, ed. R. A. B. Mynors (Oxford: Clarendon Press, 1937) 2.3.6 and 2.3.21 (Schmid 107.160f.); 2.3.5 (Schmid 119.60–5); 2.4.5 (Schmid 121.91–6).

4. These borrowings occur at 33.27, 107f.172–4, 114.264–77, and 125.172f., respectively.

mid-ninth-century date of origin⁵—the first fixed-pitch notation, the earliest (and sometimes only) notated versions of the chants cited, the earliest description of polyphonic singing, and the first technical discussion of modal theory based on final and ambitus.

Dating: Preliminary Observations

The earliest source for one of the *Enchiriadis* treatises, *We*, contains only a small fragment of SE from late ninth-century Werden; the first more or less complete source is the tenth-century manuscript A, originally from St.-Amand. Thus, the dates and provenance of the *Enchiriadis* treatises are still a matter of conjecture. A date much before 850 is unlikely for ME, if, as has been argued, the *De institutione musica* of Boethius began to be studied only in the second quarter of the ninth century.⁶ Boethius's was the most difficult and technical of all the known Latin treatments of music theory and would have required time to digest, yet ME's author shows great savvy in his use of it. Since SE relies much more on the *De institutione arithmetica*, which in the early ninth century was better known than Boethius's treatise on music, it is not inconceivable that SE could have originated before ME.

However, ME as we know it may not be in its original form. The so-called *Inchiriadon*,⁷ a late recension of ME, is likely based on an early version of ME; its use of Boethius is less technical than either ME or SE, and parts of it or its original model could easily have arisen before 850. Thus, using the degree of technical content based on Boethius as a criterion, one could as-

5. Although most scholars have dated the *Enchiriadis* treatises in the tenth or, more recently, in the late ninth century, Nancy Phillips, "Musica and Scolica *Enchiriadis*: The Literary, Theoretical, and Musical Sources" (Ph.D. diss., New York University, 1984), p. 511 (henceforth, Phillips *Sources*), notes that "none of the evidence . . . requires a date so late in the [ninth] century." Her analysis of the content of the treatises has led her to postulate that "either or both of the treatises could have been written in the middle of the century, or even slightly earlier" (p. 516).

6. Marie-Elisabeth Duchez, "Jean Scot Eriugène premier lecteur du *De institutione musica* de Boèce?" in *Eriugena: Studien zu seinen Quellen*, ed. Werner Beierwaltes (Heidelberg: Carl Winter Universitätsverlag, 1980), p. 166.

7. Schmid, pp. 187–205. It carries the title *Inchiriadon Uchubaldi Francigenae* and is followed by a tract *De organo*, which describes a style of organum more advanced than that of ME. Much of the *Inchiriadon* has direct parallels with chapters 1–10 of ME, although the ordering and wording of passages common to both works are somewhat different. For more on the *Inchiriadon*, see Heinrich Sowa, "Textvariationen zur Musica *Enchiriadis*," *Zeitschrift für Musikwissenschaft* 17 (1935):194–207; Phillips *Sources*, pp. 96–106; and Hans Schmid, "Zur sogenannten Pariser Bearbeitung der Musica *Enchiriadis*," in *Tradition und Wertung: Festschrift für Franz Brunhölzl zum 65. Geburtstag* (Signaringen: Jan Thorbecke, 1989), pp. 211–8.

sign the model for the *Inchiriadon* and also for Aurelian's *Musica disciplina* to a period before the intensive study of *De institutione musica*, whereas ME and Hucbald's *De harmonica institutione* clearly manifest themselves as products of that study. These and other factors will be considered in due course.

Authorship

The question of who wrote the *Enchiriadis* treatises remains unanswered. A number of factors indicate, however, that ME and SE have different authors.⁸ It is also possible that one or both may have more than one author. Although it seems certain that the treatises are products of a single intellectual and musical milieu—different in various degrees from, say, that of Aurelian, *Alia Musica*, or Hucbald⁹—many subtle differences in the texts indicate different authorship.

For example, ME (5.52f.) speaks of “the tetrachord of the *graves*” but SE (83.337) of “the *grave* tetrachord,” and ME of *neuma* but SE of *neuma regularis* for the same melody.¹⁰ The use of the term *tonus* with respect to “mode” is somewhat different in the two treatises,¹¹ and the change of locus for the organal voice described in chapter 18 of ME has no parallel in SE. Phrases like *absolute canendo* (33.41) and *mutatio mirabilis* (34.44) are missing in SE (the absence of the latter phrase especially notable since SE uses both words independently). On a larger scale, there is in SE, part 1, an emphasis on pentachords that does not exist in ME, and there are differences in the forms and details of the illustrations. There is also an aura of piety in SE that is not found in ME. SE's author is not content to view the quadrivium primarily as the path to philosophy—as do Boethius explicitly and ME's author implicitly (chapter 18)—but finds its existence a reason for thanking and praising God.¹²

Finally, the term *organum* is not used in exactly the same way in the two treatises. In ME it is equated with both “two-voice song” or *diaphonia* (37.7) and the organal voice (39.5ff.); in SE, *organum* is never actually de-

8. For a survey of the views on the question of authorship, see Phillips *Sources*, pp. 396–410. The various attributions in the MS tradition are likely false, so the treatises are considered here to be anonymous. Phillips *Sources*, pp. 397–401, also thinks that the authors of ME and SE are different and gives examples of the differences in style.

9. See below, under “The Enchiriadis Treatises in Relation to Other Pre-Guidonian Sources.”

10. See the translation, note to 14.5.

11. See the translation, note to 13.1f.

12. See 107f.169–74 and note to 107f.172–4.

fined, appears only three times, and refers only to the organal voice or its function (for example, 95.46).

The Titles

The commonly used title *Musica enchiriadis* for the first of the two treatises translated here actually has little historical justification. In fact, the evidence suggests that the work bore no title in its earliest stage. The title that Schmid uses at the head of his edition, *Liber enchiriadis de musica*, does occur in several sources,¹³ although *enchiriadis* presents other problems, being an apparent corruption of some form of *encheiridion*, the Greek word for manual or handbook, or possibly the medieval form of that word.¹⁴ But regardless of what title, if any, the treatise may have originally had, what we call *Musica enchiriadis* was clearly intended to be a handbook for singers, providing not only practical information but also rationalizations of contemporary performance practices.

The title *Scolica enchiriadis de musica*, on the other hand, appears quite consistently in the MS tradition, although the early manuscripts A and K (only) have *Scola*.¹⁵ The plural term *scolica*, again of Greek derivation, carries the connotation "excerpts,"¹⁶ and, indeed, it has already been noted

13. Schmid 3, critical notes, indicates that this title appears only in two manuscripts (in one instance a later addition) and that fifteen manuscripts, including the early A, have no title.

14. Phillips *Sources*, 379f. Phillips infers the latter possibility from Robert Browning, *Medieval and Modern Greek* (London: Hutchinson, 1969), although she wrongly interprets *enchiriadis* as a genitive plural ("of the handbooks"). David Schulenberg (private communication) has suggested that *enchiriadis* might be a latinized feminine genitive singular from *encheirias*, a non-existent word formed by the confusion of *encheiria* and *encheiresis* (both implying "taking in hand"). Schmid, 60, critical note to title of SE, proposes *enchiridiadis*, found in the tenth-century MS H, as probably a transliteration of the Greek adjective *ἐφχειριδιῶδης*. Nonetheless, it seems highly unlikely that the authors of the *Enchiriadis* treatises knew Greek.

15. Schmid 60, critical notes to title. A large group of manuscripts has *de arte musica* and there are a few other variants, but Schmid indicates that only one source lacks a title altogether.

16. The ninth-century *Scolica graecarum glossarium*, consisting of notes on lectures on the Greek language, defines *scolica* as "proper and briefly excerpted treatments of a subject" (*Scolica dicuntur causae summam excerptae et propriae*). See M. L. W. Laistner, "Notes on Greek from the Lectures of a Ninth-Century Monastery Teacher," *Bulletin of the John Rylands Library* 7 (1923):433. See also Isidore of Seville on the three types of written works: "The first kind are excerpts, which are called *scholia* in Greek. In them, those things that are perceived to be obscure and difficult are made succinct and brief" (*Primum genus excerpta sunt, quae Graece scholia nuncupantur; in quibus ea quae videntur obscura vel difficilia summam ac breviter praestringuntur*), Isidore of Seville, *Etymologiarum sive originum libri XX*, ed. W. M. Lindsay (Oxford: Clarendon Press, 1911), 6.8.1. (The other two types of written works defined by Isidore are homilies and "tomes, which we call books or volumes.") The *Scolica graecarum glossarium* has numerous direct quotations from Isidore.

that SE contains many direct quotations and close paraphrases of other sources. However, another explanation for the title is that there was a direct model for it: in one of its MS traditions the *Rhetoric* of Fortunatianus has the title *Scolica enchiriadis*.¹⁷ The possible connection is strengthened in that the *Rhetoric* is also in dialogue form, begins in similar fashion to SE,¹⁸ and includes excerpts from a variety of (unnamed) authors. Moreover, this treatise is also found in an early source (manuscript *H*) containing both ME and SE. Thus, *Scolica enchiriadis* carries the dual implications of “excerpts” and “handbook.” Of course, ME, since it also contains quotations and paraphrases, could also qualify for this title, since dialogue format is not implied by either *Scolica* or *enchiriadis*.

ORGANIZATION

Musica enchiriadis

ME is a remarkably cogent, concise, original, and carefully argued document. In terms of content, it is organized in two large parts, with an epilogue. The first nine chapters contain basic definitions and concepts concerning monophonic chant, with particular emphasis on a method of notation, on modality, and on grammatical analogies between language and music. The second large section, chapters 10–18, concerns the perfect consonances or “symphonies” and their application to improvised polyphonic singing, called *diaphonia* or *organum*. Finally, there is a strange concluding nineteenth chapter, related in spirit to the closing passage of chapter 18 and, as we shall see, possibly not the concluding chapter of ME after all, in which the Orpheus myth is reinterpreted and the mysterious power of music celebrated.

The very opening of ME anticipates the structure of the entire treatise: it is stated that the larger constructs of music (like those of language) are the result of successively compounding single elements. What unfolds in the course of the chapters that follow is an explanation of how this successive compounding is done or may be analyzed. In chapters 1–9 the concern is melodic or “horizontal” constructs. First, four discrete pitches (the four finals) are combined to form a tetrachord that both governs all the modes

17. The first to note this connection was Phillip Spitta, “Die *Musica enchiriadis* und ihr Zeitalter,” *Vierteljahrsschrift für Musikwissenschaft* 5 (1889):467. For a more up-to-date discussion see Phillips *Sources*, pp. 381–4.

18. “Quid est rhetorica? Bene dicendi scientia. Quid est orator? Vir bonus dicendi peritus.” (What is rhetoric? The science of speaking properly. What is an orator? A good man skilled in speaking.) Karl Halm, ed., *Rhetores latini minores* (Leipzig: Teubner, 1863), p. 81. For more on rhetoric, see “Grammar and Rhetoric” below.

and can be replicated, yielding in the process the pitch-set of the *Enchiriadis* scale. Then is shown how modal melodies are compounded of musico-grammatical phrases (*comma*, *colon*, *particula*). Chapters 10–18, in turn, treat the harmonic or “vertical” compounds of tones—from the symphonies of individual pitches to the simultaneously sounding melodies of organum, which represents the highest degree of complexity.

An important feature of the treatise is its balance between theoretical and practical. Once the *Enchiriadis* scale and notation are explained (chaps. 1–3) and the modes are defined in terms of final and ambitus (chaps. 4–5), the focus shifts in characteristically Carolingian fashion to the practical: how to recognize by ear the identity of any tetrachordal step by its intervallic context (chaps. 6–7). Practical exercises are provided. It is stressed that the key to identifying any individual step is knowing its relation to proximate semitones.

In chapter 8, this is given visual expression by a series of diagrams designed as a set of parallel lines (“as it were, strings”), each line preceded by the appropriate daseian sign.¹⁹ A melody is then given in successively higher transpositions, resulting in a different final (and a different interval series) for each transposition. Then four pairs of antiphons, one pair for each final, are used to illustrate and contrast authentic and plagal melodies. In all this, modal differences can be perceived by singing, hearing and seeing.

The “preliminary exercises, as it were, and basic beginnings” having been covered, some essential technical terminology is now introduced (chap. 9): defined are the technical musical terms *harmonia*, *sonus*, *phthongus*, *tonus*, *epogdous*; *semitonium*, *limma* or *diesis*; the mathematical proportions *sescupla*,²⁰ *sesquialter*, *hemiola*, *sesquitertia*; *modi* or *tropi*; the grammatical/rhetorical terms *particula*, *comma* and *colon*; and two more musical terms, *diastema* and *systema*. With the return at the end of chapter 9 to certain terms and concepts not encountered since the opening of chapter 1, the overall shape of this first part of ME, which concerns plainchant, is nicely rounded off. On the other hand, an adumbration of the discussion of organum to follow may be seen in the definitions of mathematical proportions that are mentioned for the first time in the treatise.

The second large section of ME comprises chapters 10–12, which define the perfect consonances or symphonies (*symphoniae*), and chapters 13–18, covering the theory and practice of organum. The symphonies are divided

19. The text implies that originally the lines were drawn in four different colors, one for each tetrachordal step.

20. The term *sescuplus* has two meanings in the *Enchiriadis* treatises. See the end of “The Harmonics Tradition” below.