DOUÇAINE VIVANT: THE LIFE, DEATH, AND RESURRECTION OF A CYLINDRICAL SURVIVOR

by

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ABSTRACT

Thirty years ago, ocean archaeologists excavating the sunken wreck of the Tudor flagship the *Mary Rose* uncovered a "mystery instrument," later revealed as the only extant douçaine. This exciting discovery catalyzed this work and a new career direction for the author. The douçaine is a cylindrical bored early double reed instrument mentioned frequently in literature and chronicles from the thirteenth to early seventeenth centuries. Unfortunately, none of the known references included a definitive description or iconographical depiction. Despite the emergence of the extant douçaine, relatively little scholarship exists on the instrument. Furthermore, only one contemporary instrument maker uses the extant *Mary Rose* model design precisely to produce douçaines commercially. There are fewer than thirty such replicas in the world played by a handful of musicians.

The presence of an eighth front finger hole separates the fingering system of the douçaine from all other known early and modern wind instruments. The complex and unique fingering system therefore presents a challenge to even experienced musicians who learn to play the douçaine. The fingering chart and first installment of a modal technique method contained in the thesis will aid musicians' efforts to embrace the

unique technical challenges of the douçaine when playing medieval, early modern, and contemporary music.

In conjunction with performances and recordings on the instrument, this thesis will help to lift the douçaine out of obscurity among music historians, contemporary musicians, and enthusiasts.

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INTRODUCTION

Thirty years ago, ocean archaeologists excavating the sunken wreck of the Tudor flagship the *Mary Rose* uncovered a "mystery instrument," later revealed as the only extant douçaine. This exciting discovery catalyzed this work and a new career direction for the author. The douçaine is a cylindrical bored early double reed instrument mentioned frequently in literature and chronicles from the thirteenth to early seventeenth centuries. Unfortunately, none of the known references included a definitive description or iconographical depiction. Despite the emergence of the extant douçaine, relatively little scholarship exists on the instrument. Furthermore, only one contemporary instrument maker uses the extant *Mary Rose* model design precisely to produce douçaines commercially. There are fewer than thirty such replicas in the world played by a handful of musicians. In conjunction with performances and recordings on the instrument, this work will help to lift the douçaine out of obscurity among music historians, contemporary musicians, and enthusiasts.

The addition of this instrument to the field of medieval music and the implications of its addition have yet to be explored to any considerable degree. The douçaine's unique tone color as a cylindrical bored, double reed instrument will provide a profound change in a field dominated by vocalists, string players, and the occasional recorder. Until the discovery of the douçaine, historians generally dismissed medieval iconography depicting double reed instruments playing with string instruments as artistic liberty, because the

hitherto known double reed instruments, the shawms, were far too loud to be played with the quiet string instruments of the period. However, the douçaine's cylindrical bore results in a subdued presence, ideal for balancing with voice, lute, recorder, harp, and vielle.

Chapter One of this thesis focuses on the historiography of the pre- and post-*Mary Rose* discovery of the douçaine. The lack of a concise definition of the instrument, despite the extensive references in literature and chronicles, frustrated pre-*Mary Rose* music historians, such as Anthony Baines and Barra Boydell. Within the primary sources, Tinctoris offered a vague description of the instrument in his treatise *De Inventione et Usu Musicae,* dating from approximately 1487.[1] The description did not include a depiction of the instrument. When Praetorius produced a similar work over a century later, there was no mention of the instrument, as it had nearly disappeared. Post-*Mary Rose* historians, such as Charles Foster and Kenneth Kreitner, still have to contextualize every reference to the douçaine, as there were at least forty-three spellings for early double reed instruments that use the same Latin root, *dulcis.* While these are double reed instruments with similar names, the *dulcis*-based terms do not always refer to the same instrument.

Chapter Two contextualizes medieval and early modern musicians' use of the douçaine by exploring civic, court, and freelance employment opportunities, guilds, and other factors that affected the lives of people who likely played the instrument.

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[1] While Tinctoris was equally vague with other instruments, his descriptions are the only surviving evidence of its kind from the fifteenth century.

Chapter Three provides a technical method for the instrument, consisting of my original, advanced modal technique method and fingering chart. Due to the complex fingering system of the *Mary Rose* instrument, technical studies are helpful to deal with the unique fingering issues. While Charles Foster's replica of the original *Mary Rose* bass has a range of at least 1½ octaves, it is not widely known that the alto, tenor, and bass replicas are all capable of playing a range wider than a tenth. This method is specifically for the tenor, as it was the primary version used in the Middle Ages, my area of interest. The method addresses the need for long tones, as preparation for playing the long, sustained tenor lines in polyphonic music. The modern player must also develop an ear for the ecclesiastical modes for idiomatic improvisation. Therefore, the method includes figures common in improvised and composed early music, transposed into the ecclesiastical modes that were used at the time, as well as major and minor keys that gained prominence in the early modern period. None of the exercises feature more than four flats or four sharps, because exceeding the natural scale of the instrument renders early wind instruments less effective in tone and pitch. While many players will find some exercises seemingly impracticable, the more challenging examples are for the player to achieve maximum flexibility to accommodate the instrument's limited range and vocalists' tendency to transpose pieces to fit their own range. Furthermore, since I am commissioning and premiering new music for the instrument, it is vital to have solid technique on the instrument beyond what is required for medieval and early modern repertoire. This method will be helpful for other players as the instrument becomes more popular in the field.

Despite the discovery of the douçaine on the *Mary Rose* in 1980, there is currently little historical and musicological analysis on the instrument, and only negligible performance and recording use in the field of early music. Instrument maker Philip Neuman hypothesizes that the douçaine has not caught on more in the early music field due to a long-standing gravitation of early wind players to Renaissance and Baroque music. My study of the douçaine in medieval and Renaissance music will show how the instrument was commonly used in the Middle Ages and evolved during the Renaissance. I hypothesize how and why it disappeared by the onset of the baroque era. This thesis and my future recordings and performances will facilitate the douçaine's inclusion to a greater degree in the music and repertoire of contemporary musicians in early music. The purpose of this work is to provide the historical context in which the douçaine was used from the thirteenth to possibly as late as the seventeenth centuries, while giving musicians the tools to insure that the instrument is used and valued by contemporary musicians, thus avoiding a second extinction.

CHAPTER ONE:

A HISTORIOGRAPHY OF THE DOUÇAINE

What Is a Douçaine?

The 1940 release of Curt Sachs' *The History of Musical Instruments* sparked a new era in musicology, as the book was the first comprehensive history of musical instruments from five continents, ranging from the prehistoric era to the twentieth century.[1] Despite such wide breadth covered in the book, Sachs fuelled one of the greatest musicological mysteries of the twentieth century: what is a douçaine? Primary sources reveal the apparent commonness of the instrument, particularly in fourteenth-century France, fifteenth-century Flanders, and sixteenth-century England. However, despite the frequent mention of the douçaine in literature, chronicles, and inventories, confusion stemmed from forty-three or more spellings of double reed instruments from the same Latin root, the lack of an extant model until 1980, no concise descriptions in literature, and no positive identification in iconography.

Before the discovery of the *Mary Rose* instrument, musicologists such as Baines, Boydell, and David Munrow were in a near frenzy to identify the douçaine. As the number of discovered references increased, scholars' frustrations multiplied proportionately. All of this changed with the discovery of the one extant model in 1980,

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[1] Curt Sachs, preface to *The History of Musical Instruments* (New York: W. W. Norton, Inc., 1940), i.

when a cylindrical bored, double reed instrument emerged during the excavation of the *Mary Rose,* the vice-flagship of King Henry VIII.[2] While initially identified as a shawm (the more common conical bored, loud, early double reed instrument), Herbert Myers' discovery of the cylindrical bore revealed the *Mary Rose* instrument as the only extant douçaine.[3] Historical instrument makers Charles Foster[4] and Philip Neuman[5] produced the first replicas. From the outside, the *Mary Rose* douçaine looks like a shawm, hiding its cylindrical bore and resultant quiet presence.[6] Therefore, historians now reinterpret iconographical, literary, and chronicle evidence to assert that various designs of the cylindrical bored, open double reed douçaine existed in Europe from at least the thirteenth to the seventeenth centuries.

The most explicit pre-*Mary Rose* description of a douçaine by any historian was to be found in musicologist Johannes Tinctoris' c. 1487 treatise, *De inventione et usu musicae*. Tinctoris used the Latin term *dulcina* to describe the *tibia* now known to be the cylindrical bored douçaine.[7]

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[2] Frances Palmer, "Musical Instruments from the Mary Rose: A Report on Work in Progress," *Early Music* 11, no. 1 (January 1983): 54. The ship sunk in 1545.

[3] Herbert W. Myers, "The *Mary Rose* 'Shawm,'" *Early Music* 11, no. 3 (July 1983): 358.

[4] Charles Foster, "Tinctoris' Imperfect Dulcina Perfected – the Mary Rose Still Shawm," *The Galpin Society Journal* (May 2005): 46.

[5] Philip Neuman has been producing replica douçaines commercially since 1983 but to date has produced fewer than thirty.

[6] The conical bore results in a loud sound while the cylindrical bore produces a relatively soft sound.

[7] Despite the discrepancy of the Tinctoris instrument's eight holes to the *Mary Rose* instrument's nine holes, historians consider both as douçaines. While the later instrument's extra finger hole is widely seen as a later development, I will later suggest the contrary.

> The tibia has two main orifices, one extremely narrow, through which the breath is impacted against the sound-producing reed or *ancia*; the other wide, whence the sound is emitted.
>
> ...If Varro is correct, in ancient times the tibia had four holes, though others, Acro records, say that it had three. However nowadays the tibia called *celimela* [shawm] has seven holes. Provided that its holes are correctly placed, any composition can be played on it and it is completely perfect.
>
> On the other hand that tibia called the *dulcina,* on account of the softness of its sound, has seven holes in front and one behind, like a *fistula* [recorder]. Since not every kind of piece can be played on it, it is considered to be imperfect.
>
> ...A single tibia is like a voice in being able to deliver only one part in a composition, and hence, just as singers perform different parts according to the varying height and depth of their voices, so do tibia players use instruments varying in size. Some are high, suitable for treble parts, and others are low, for the middle and lowest parts.[8]

Despite this vague description from circa 1487, historians have long considered this the most definitive pre-*Mary Rose* description of the douçaine. At least by the time of Baines in 1957, every post-Sachs reference to the douçaine cites Tinctoris, whose use of the Latin term *dulcis* lead musicologists into an etymological nightmare, which can only be analyzed contextually, involving the reinterpretation of iconography.

Unfortunately, historians have not discovered any surviving illustrations explicitly identifying a douçaine. The cylindrical bore is the definitive difference between the douçaine and the conical bored shawms, but one cannot observe from iconography whether an instrument has a cylindrical or conical bore.[9] Myers describes the difficulty in discerning the two. The bass douçaine's "superficial resemblance to a tenor shawm

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[8] Anthony Baines, "Fifteenth-Century Instruments in Tinctoris' *De Inventione et Usu Musicae," The Galpin Society Journal* 3 (March 1950): 20. Baines provides the English translation of the Latin original.

[9] Myers, 358.

helps to explain the difficulty of recognizing the douçaine in iconographic sources. Context remains the only clue."[10]

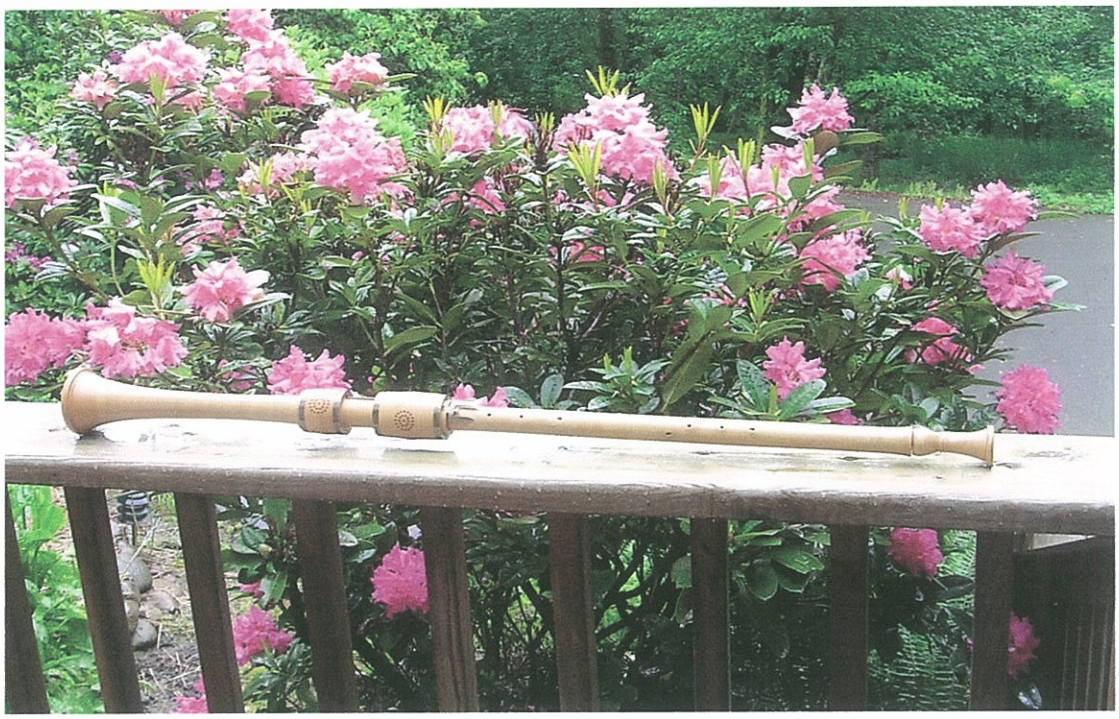

Figure 1.1 Bass Douçaine
Photo and replica of the *Mary Rose* bass douçaine are by Philip Neuman.

[10] Ibid.

Figure 1.2 Soprano, Alto, and Tenor Shawms
Photo and shawms are by Robert Cronin.

Myers cites and agrees with Baines' suggestion regarding the rigorous medieval distinction between loud and soft instruments: "When a picture appears to show a shawm-like instrument intruding amongst strings, it must be some sort of douçaine: the

literary evidence admits no alternative."[11] A reinterpretation of iconograghy provided by Myers and musician and historian David Munrow support Baines' and Myers' thesis.[12]

Munrow extensively (and Myers, to a lesser extent) employed this type of iconography.[13] The following two examples from Munrow's book and Myers' article illustrate this point. In both *Mary, Queen of Heaven* (1485-1500) and *Allegory of Music* from *Les échecs amoureux*, the "shawm-like instruments" appear amongst strings, opening the possibility that they could be douçaines.

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[11] Anthony Baines, *Woodwind Instruments and their History,* rev. ed. (New York: W. W. Norton & Company, Inc., 1962), 235. The distinction between *haut* (loud) and *bas* (soft) is consistent and practical, as lutes, recorders, vielles and harps would struggle to be heard among shawms and trumpets. Myers specifically compares the bass douçaine to the tenor shawm, as the *Mary Rose* extant douçaine is a bass. Foster describes the bass as diatonically playing down to an F (a fifth below a typical tenor shawm's lowest note, a C), with an extra key to play a low C (one octave below the tenor shawm).

[12] H. Colin Slim, *Painting Music in the Sixteenth Century* (Brookfield: Ashgate Publishing Company, 2002), 328. While not pictured here, illustrations among the *Cantigas de Santa Maria* reveal the douçaine's presence in thirteenth century Spain, where King Alfonso X commissioned over four hundred such works. The *cantigas* are morality plays/music dramas featuring the Virgin Mary as a character. The *Cantigas* are well preserved with notation and iconography. H. Colin Slim provides sixteenth century examples of music iconography involving angels and satyrs playing shawm-like instruments among quiet string instruments.

[13] David Munrow, *Instruments of the Middle Ages and Renaissance* (London: Oxford University Press, 1976).

Figure 1.3 Mary, Queen of Heaven
Flemish painting *Mary, Queen of Heaven* (*c.*1485) by the Master of the St Lucy Legend (Washington DC, National Gallery of Art, Samuel H. Kress Collection).[14] Observe the angels in the upper-left and right corners.

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[14] Myers, 359.

Figure 1.4 Allegory of Music

Allegory of Music: illustration from a late fifteenth-century manuscript of the poem *Les échecs amoureux.* (Bibliothèque Nationale, Paris) Compare these shawms (played by the second and third minstrels on the left) to the tenor douçaine in the following photo.[15]

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[15] Ibid., 24. Munrow describes the lady sitting on the swans as playing a dulcimer, while in the background (*l* to *r*) the instruments are pipe and tabor, shawm, bagpipes, and a group of singers. The "shawm" is most likely a tenor *douchaine* (douçaine) mentioned in the anonymous fourteenth century poem *Les échecs amoureux*.

Figure 1.5 Tenor Douçaine
Photo by Kirk Higginson, tenor douçaine by Philip Neuman.

While these paintings and photos seem to prove Baines' and Myers' point that the instruments depicted are most likely douçaines, Munrow's purpose in using these examples has nothing to do with identifying the instruments as douçaines. Munrow uses an upper, left-hand portion of *Mary, Queen of Heaven* to assert that an angel is playing a conical bored *altpommer,* while using the painting from *Les échecs amoureux* to identify a dulcimer. Had Munrow considered Baines' advice on context, he may have used these paintings to alleviate part of the confusion, even before the discovery of the *Mary Rose* instrument a mere four years later. While Munrow did not use the iconographical evidence to support any claims about the douçaine, he nevertheless made an assertion about the instrument. Munrow pieced together literary evidence with the description in Tinctoris' treatise to assert that the instrument was soft, with a reed (although he is unsure if the reed was single or double), cylindrical bored, and likely a tenor instrument with the range of an octave and one step (ninth).[16]

Issues of etymology and nomenclature permeate references to early reed instruments. As Munrow observed, references in literature consistently refer to the douçaine as soft and sweet but do not actually define or describe the instrument. Again, this aspect was evident in Sachs' observations in 1940. Similar to the way Tinctoris used the general terms *tibia* and *lyra* for his Latin reading audience, Sachs refers to all double reed instruments as oboes and single reeds as clarinets.[17] To those familiar with modern and historical reed instruments, Sachs' use of the terms "oboe" and "clarinet" may seem

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[16] Ibid., 11.

[17] The use of the terms clarinet (for single reed) and oboe (for double reed) is common practice among contemporary musicologists.

quaint, but in 1940, it is doubtful that many of his readers would have heard of specific names of period instruments, such as the shawm. Considering the comprehensiveness of his book, Sachs was looking to reach a wide audience, ranging from high school to graduate students, scholars, and musicians.

While Baines, Sachs, Munrow, and others were able to develop theories based on literary and iconographical sources and Tinctoris' treatise, the linguistic shift from Latin to vernacular among medieval writers has resulted in confusion among historians trying to identify the douçaine in many sources. Historians have frequently cited the Old French literary references, such as Adrenet le Roy's *Cleomadis* (c. 1285),[18] the anonymous fourteenth century poem *Les échecs amoureux,* and Guillaume de Machaut's *Remède de Fortune* (ca. 1367),[19] as proof of the instrument's sweet and soft qualities.[20] However, until a replica was made of the *Mary Rose* instrument, the most specific information available to historians was contained in Tinctoris' earlier referenced treatise in Latin. To contrast the relative brashness of the shawm, the etymological root for quiet double reed instruments is the Latin *dulcis*, meaning sweet. However, there are at least forty-three spellings and three different types of double reed instruments using the term. Douçaine, *dulcian*, and *dolzaina* are three such terms for double reed instruments from the Middle Ages and Renaissance but currently represent three distinctly different instruments. The douçaine is the cylindrical bored *still* (quiet) *shawm* discovered on the

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[18] Barra Boydell, *The Crumhorn and Other Renaissance Windcap Instruments* (Buren: Frits Knuf, 1982), 415. Boydell cites this as the earliest recorded reference to the douçaine, eighty-five years after Albrecht von Halberstadt's "soft oboe". Unfortunately, Sachs does not give the original term.

[19] Boydell, 385.

[20] Munrow, 11.

excavated *Mary Rose*. The *dulcian* (also known as a curtal and *fagott*) is the conical, double bored, late-Renaissance predecessor to the modern bassoon (*fagott* in German). The *dolzaina* is both a short, shrill, high (descant) conical folk shawm still in use in Spain (particularly in Catalonia), and a cylindrical bored bass instrument used in Italy and Germany in the late sixteenth and early seventeenth centuries. If only it were that simple! Over such a long time span (thirteenth to seventeenth and twentieth to twenty-first centuries) and across so many countries, the terms and spellings appear somewhat generically and interchangeably between these instruments.

Boydell addressed the etymological issue in his book, *The Crumhorn and Other Renaissance Windcap Instruments*. The book was released shortly after the discovery of the *Mary Rose* douçaine and serves as the last significant pre-*Mary Rose* historiography on the instrument.[21] Boydell included a chronological appendix on the douçaine, in which well over twenty spellings of the instrument's name were included. As the change to the vernacular so greatly affected spelling in the Middle Ages and Renaissance, the impact on historians researching the instrument is only fully realized upon observing a compilation of all found spellings. The forty-three compiled spellings so far include: *doçainne,*[22]

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[21] Boydell's research was obviously completed and submitted before the discovery of the *Mary Rose* instrument.

[22] Boydell, 387. Maillart writes in his mid-fifteenth century *Le Roman du comte d'Anjou*:
"*Tout la ville est esmuè*
Chascun de festoier s'esforce;
Partout sonnent cloces a fforce
Tymbres, tabours, trompes, araines
Nacaires, cors, musez, doçainnes"
The whole town is excited, everyone rejoices, everywhere bells play loudly, tambourines, drums, trumpets, drums, nakers, horns, bagpipes, douçaines. Here, the *douçaine* is the only quiet instrument listed. Maillart may have been taking artistic liberty in using *doçainnes* to rhyme with *araines*.

dolcan,[23] *dolcesuono, dolcian,*[24] *dolcima,*[25] *doltzana,*[26] *dolzaina,*[27] *dolzana,*[28] *dolzano,*[29] *dolzeina,*[30] *dolzian, dolzone,*[31] douçaine, *douceinne,*[32] *doucet,*[33]

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[23] Munrow, 43.

[24] Sachs, 317. A last family of names comprises such terms as *dolcian, doucine, dulzian.* These spellings do not occur in Boydell's appendix. Sachs may have simplified or misspelled. He does not list a source for these spellings.

[25] Boydell, 399. A 1596 inventory of the instrument collection at Ambras included: *Tolzanae, 8 stuckh, als 2 päsz, 4 tenor, 4 discant; auch darzue ain paszdolcima, khauft worden von Hheronimo Geroldi's erben.* Boydell translates: 8 *Tolzanae*, namely 2 basses, 4 tenors, 4 (sic) altos and also a bass *dolcima* bought from the estate of Hheronimo Geroldi. Boydell reports that Kinsky equated the *Tolzanae* to the Italian *Dolzaine*, but does not speculate on the *dolcima.*

[26] Ibid., 393. In Augsburg, 1566, the inventory of music and instruments belonging to Raimund Fugger the Younger included: *1 Doltzana. In einem viereggeten laggelten Trüchle (...) Mer 1 klain Doltzana zue Venedig gemacht worden.* Boydell indicates that: "this inventory also included a number of *fagotti* which excludes the possibility of these *doltzane* being *dulcians* (curtals) unless differing only in some minor detail." The *klain Doltzana* is most likely a tenor or alto. Boydell and Kinsky agree that these are most likely Italian *dolzaine.*

[27] Ibid., 388. This spelling is a great source of the confusion between instruments. *Dolzaina* refers both to the conical, descant folk shawm still in use in Spain and the presumed cylindrical bored instrument in Italy and Germany in the sixteenth and seventeenth centuries.

[28] Ibid., 391. In Verona, the accounts of the Accademia Filarmonica show that on 9 May 1546, a *fagotto* and a *dolzana* were bought. "The *dolzana* does not recur in any of the inventories of the Accademia, although the *fagotto* does." Boydell's (secondary) source, W. Jansen, (*The Bassoon*) suggested the *dolzana* listed here was merely a muted *fagotto*, a theory later refuted here.

[29] Ibid., 402. In early seventeenth century Kassel, a pavan composed by Count Moritz of Hessen specifies *dolzano,* while other pieces by the same composer in the same collection specify *fagotti.*

[30] Ibid., 397. When the *Hofkapelle* in Graz was discontinued on the death of Archduke Karl (19 July 1590) many of the instruments were sold. Annibale Perini, court organist, became the organist of the Stiftskirche in Graz, where he was involved in the purchase of some of the instruments formerly belonging to the court. A document dating 1591 records the payment: "*umb 5 schwarze helle Zinkhen 16 fl., umb ain dolzeina 8 fl., umb ain fagott 18 fl., umb 5 stile Zinkhen 12 fl.* These recur in an inventory of the Stiftskirche of 1594 where the *dolzeina* is listed as: *ain Dulceina.*" The separate listing of the *dolzeina* and *fagot* indicate that they were clearly not the same instrument. The *dolzeina* was most likely the Italian cylindrical type. The *dulceina* spelling is a little closer to the *dulcian* spelling, leaving the speculation that this could have been double bored.

[31] Munrow, 43.

[32] Ibid., 11.

[33] Myers, "Reeds & Brass", from *A Performer's Guide to Medieval Music,* edited by Ross W. Duffin, (Bloomington: Indiana University Press, 2000), 393.

doucete,[34] *douchaine,*[35] *douchainne,*[36] *doucheyne,*[37] *doucine,*[38] *doulcenne,*[39] *douseyne,*[40] *doussaine,*[41] *doussainne,*[42]

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[34] Boydell, 385. In early fifteenth century England, John Lydgate paraphrases the anonymous fourteenth century poem *Echecs Amoureux* in his *Reson and Sensuallyte*: "*And for folkys that lyst daunce*
Ther wer trumpes and trumpetes,
Lowde shallys and doucetes,
Passyng of gret melodye"
Boydell notes that the douçaine/*doucete* is associated here with "loud shawms", etc. for dancing, while in the preceding case the association was with specifically quiet instruments.

[35] Reinhard Strohm, *Music in Late Medieval Bruges* (1985; repr., Oxford: Clarendon Press, 1999), 91. This spelling occurs in the anonymous late fourteenth century French Poem, *Les Echecs Amoureux*. This was also the spelling in both French and Flemish in the chronicles in Bruges in the fifteenth century.

[36] Boydell, 386. In Lille at the *Banquet du Voeu* (Feast of the Pheasant) on 17 February 1454 when Philip the Good planned to organize a crusade to free Constantinople: "*et apprenez le chant de l'eglise cessé, fut joué (...) d'un leu, d'un douchainne, aveuc ung autre instrument concordant, laquelle chose il faisait bon a oyr...*" Boydell notes that this listing of *douchainne* was mistranslated as *crumhorn* by both Curt Sachs in 1910 and Gustave Reese in 1954.

[37] Ibid. This is the Flemish spelling used in a chronicle after the entry of Philip the Good into Bruges on 11 December 1440. *"Up die stagie waren iij speillieden, een harpe, een luyth ende een doucheyne."*

[38] Sachs, 288, 317. See footnote for *dolcian.*

[39] Boydell, 386. In the course of a journey to Regensburg in 1454, Philip the Good passed through Ulm where the following payments were made: "*A un joueur de doulcenne (de Wissemberch) pour don a lui fait par Mgr. le vingt-huitieme jour dudit mois quand il est venu jouer devant lui, 22 solz 6 deniers parisis (...) A deux joueurs de lutz et de douçaines (...) 22 sols 6 deniers.*" "To a player of the douçaine (from Wissenberg) for a gift made to him by my Lord on the 28th of this month when he came to play before him, 22 *sols*, 6 *den. par.* (...) To two players of lutes and douçaines, 22 *sols* 6 *den.*" Boydell does not bring attention to the two spellings in the same entry. He may have translated the second entry to douçaine, as it is clear from the context that the *doulcenne* and douçaine are the same instrument.

[40] Ibid., 388. A contract dated 13 February 1505, made with the south Netherlands organ builder Daniel van der Disteln (for an organ in the cathedral in Antwerp) mentioned one register which was to be: "*...ghelyc cromhorens of douseynen.*" Boydell deduced the implication that douçaines sounded similar to crumhorns.

[41] Ibid., 400. In London, 1611, Randle Cotgrave's *Dictionarie of the French and English Tongues* mentions but fails to define *doussaine*: "Doussaine *f. A certain musical instrument.*" Boydell sees the entry as an indication that the instrument was known in France but not in England.

[42] Ibid., 385. This is the spelling used by Guillaume de Machaut in *La Prise d'Alexandre* and *Le Remède de Fortune*.

duçaina,[43] *duçayna,*[44] *dulcan,*[45] *dulçayna,*[46] *dulcayna, dulceaño,*[47] *dulceina,*[48] *dulçema, dulcet, dulceuse*[49]*, dulcian,*[50] *dulcin,*[51]

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[43] Ibid., 388. In Seville, 1516, a procession in honor of Queen Joanna and her son Charles (later Charles V) was accompanied by: "*...muchos atabales y trompetas y duçaynas y chirimias.*" "many drums and trumpets and douçaines and shawms." The fact that *dulçaynas* and *chirimias* are listed as different instruments infers that either the cylindrical bored instruments were somehow loud enough to hold their own with the shawms (perhaps using harder reeds) or this is merely an early spelling of *dolzaina/dulzaina*, the descant folk shawm still in use in parts of Spain, such as Catalonia. If the latter is the case, the instruments still may have had enough of their own identity by 1516 to be listed separately from the other shawms.

[44] Kenneth Kreitner, "The Ceremonial Soft Band of Fifteenth-Century Barcelona," *Uno gentile et subtile ingenio*: *Studies in Renaissance Music in Honour of Bonnie Blackburn*, ed. Gioia Filocamo and M. Jennifer Bloxam (Tournhout: Brepols, 2008), 9.

[45] Munrow, 43.

[46] Boydell, 390. In Barcelona, 1533, during a visit of Emperor Charles V, instruments referred to included: "*ministriles altos y baxos, de chirimias e sacabuches e dulçaynas y trompetas y atabales y otros minystriles.*" "players of loud and soft instruments, of shawms and sackbuts and douçaines and trumpets and drums and other players." Whether or not the other Spanish references indicate an early presence of the conical, descant *dolzainas*, this reference clarifies the presence of the quiet, cylindrical instrument in sixteenth century Spain.

[47] Ibid., 384, 406. In Spain, 1330, Juan Ruiz describes in his *Libro de buen amor*, a procession in the streets of a town:
"*Dulceano entero sad con el panderete,*
Con sonajas de azofar faze dulce sonete,..."

[48] Ibid., 397. See footnote for *dolzeina*.

[49] Ibid., 391. The 1547 inventory of the musical instruments of King Henry VIII included: "*Item. v shorte Instruments caulled Dulceuses in v seuerall cases to them couered with blacke leather. Item. viii Dulceuses couered with blacke leather, some of them havinge tippinges of Siluer.*" "Kinsky regarded the description "shorte" as specifically referring to the doubled back bore of a bassoon/curtal type of instrument, and regarded this as 'possibly the earliest evidence for the *Dolzian*.' Galpin also interpreted these as curtal-types." The *dulceuses* mentioned here are clearly the same as the *Mary Rose* instrument, but may have been tenors or altos. For a low instrument, such as the *Mary Rose* bass, the instrument would have been considered small for a bass instrument. My replica of a tenor is only twenty-seven inches long.

[50] Ibid., 400. In Madrid, 1602, an inventory of instruments belonging to King Philip II (died 1598) included *una dulcayna*.

[51] Ibid., 394. In Stuttgart (Württemberg *Hofkapelle*), 1571, Lurentius Baisch was paid for repairs he had carried out on various pommers (another kind of conical shawm), crumhorns and *Dulcin*. "*Dulcin* can probably be identified with the *Fagotto* listed in the inventory of the Württenberg *Hofkapelle* of 1576 which listed no instruments with names cognate with *dulcin*."

dulcina,[52] *dulzaina,*[53] *dulzan,*[54] *dulzana,*[55] *dulzayna,*[56] *dulzian,*[57] and *dulzin.*[58] Those are just the Ds.

Although his research preceded the discovery of the *Mary Rose* instrument, Boydell's appendix contains a wealth of information on the douçaine. His research cites chronicles from all over Europe, spanning from the thirteenth to the seventeenth centuries and allows him to address many pre-*Mary Rose* controversies about the douçaine. For example, he immediately stifles any notion that the douçaine was a capped reed instrument.[59] According to Boydell, the established replica instrument maker Hermann

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[52] Baines, *Woodwind Instruments,* 20. Boydell, 387. Boydell notes this as the earliest reference to the *dulcina* or douçaine in a musical source. It is significant that, amongst the few wind instruments mentioned by Tinctoris…the *dulcina* is at least partially described. This supports the view that it was not uncommon at the time, at least in some parts of Europe.

[53] Gunther Joppig, *Oboe & Fagott* (Bern: Hallwag, 1981), 32.

[54] Boydell, 394-95. In Leipzig, instruments and reeds bought for the town musicians included one *Dulzana* (1572), two *Dulzan* (1579), one *Dulzan* (1578), and four *Röhr zu den Dulcianen* (1597). The 1597 entry suggests that the total of four *Dulzan(e)* bought on the previous occasions [sic] were being referred to by 1597 as *Dulcianen*. It has also been suggested that the 1597 reference is to curtals while the earlier references are to the earlier and distinct Italian *dolzaine*. One can only hope that the player of the 1572 instrument did not play on the same reed for twenty-five years.

[55] Ibid., 411. See footnote for *dulzan.* The term is used for both singular and plural.

[56] Ibid., 387. In Jaen, 1461, at the wedding of the Condestable Miguel Lucas de Iranzo, instruments mentioned include: "*une copla de tres ministreles de dulzaynas, qui mui dolce y acordamente sonaban.*" "a group of three douçaine players who played most sweetly and harmoniously."

[57] Sachs, 317. See footnote twenty-four for *dolcian.*

[58] Boydell, 395-96. In 1575 and later years in Nürnberg, the inventory of the town musicians included: "*Item ein Dulzin in eim futt Stuck 1.*" This *dulcin* had been purchased in the same year from Antwerp. This and later inventories in Nürnberg can be accepted as being to instruments of the curtal (*dulcian*) type. Any doubt is removed by the two inventories of 1609. In the first, dated 9 February, are listed in an addition to the original list: "*Item 3 gmaine Dulcin*" and in a listing of instruments at Our Lady's Church: "*Item 1 Octav Dulcian in einem schwarzen hültzern Futteral. Item 1 Quart Dulcian, gleichfals in einem schwartzen hültzern Futteral.*" In a separate inventory from the same date, the instruments recur: "*Zwen große Dulcin oder Fagott in schwarzen hülzernen Futteraln, dern ainer ein Oktav-, der ander ein Quart Dulcin, so beede Jörg Haas gemacht, haben ihre Stefft.*" This indicates that *dulcin* and *dulcian* were interchangeable in German usage.

Moeck and musicologist Georg Kinsky equated Tinctoris' *dulcina* with the windcapped *cornamuse,*[60] mentioned in Michael Praetorius' encyclopedic *Syntagma Musicum II* from 1618.[61] Boydell does not say why he does not accept the capped reed theory, but rather states this as his reason for including the *dolzaina*/douçaine section as an appendix, rather than a chapter in a book otherwise dealing with capped reed instruments. The fact that the *Mary Rose* instrument was an open reed instrument vindicates Boydell's assertion. Herbert Myers concurs, as the *Mary Rose* instrument was made circa 1545, concurrent with capped reed instruments (a recent development at the time), and the douçaine had already been present for at least three centuries.

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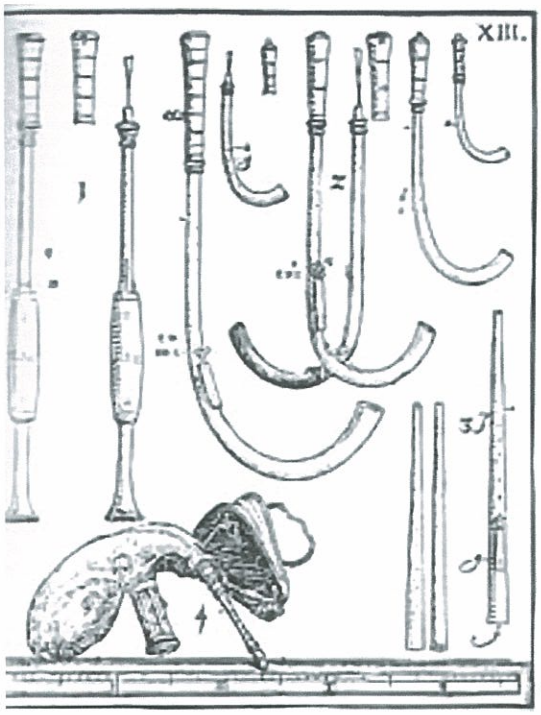
[59] Ibid., 384. While there is no evidence that the douçaine ever had a wind cap, some historians and historical instrument makers considered the possibility. There are currently wind cap instruments marketed as douçaines. This trend began in the 1970s.

[60] Ibid., 304, 384. Myers, "Reeds & Brass", 400. The term *cornemuse/cornamuse*, incidentally, is used for both a capped reed instrument and a French bagpipe.

[61] Ibid., 388.



[62]

Figure 1.6 Praetorius, *Syntagma Musicum II*, Capped Reeds

Myers states: "Some have tried to identify these [douçaine/*dolzaina*] with the crumhorn or other capped reeds, but their theory has been emphatically rejected by Barra Boydell: mention of the douçaine long antedates evidence of both the wind cap and peculiar shape of the crumhorn."[63]

Despite the etymological confusion produced by the multitude of *dulcis*-based spellings of double reed instruments, and the nomenclature, whereby certain terms mean different instruments in different countries, the term douçaine offers a level of specificity for current music historians and musicians. While in French, the conical- and double

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[62] Boydell, 272. This example, from Michael Praetorius' *Syntagma Musicum II* (1620) shows several examples of crumhorns (J-shaped) with wind caps both on and off. Also shown are various flutes, a bagpipe, and other wind cap instruments.

[63] Myers, "The *Mary Rose* 'Shawm,'" 358.

bored *dulcian* (curtal, in English) is referred to as a douçaine, in modern English, the douçaine is a single- and cylindrical bored, quiet double reed instrument in use from the thirteenth to the early seventeenth centuries in Europe. The literary references trace the instrument's early use from Franco-Flemish areas to later incarnations in Italian and German lands. However, written evidence of a quiet oboe present in the Holy Roman Empire by the year 1200 calls to question the time and place of origin for the douçaine.

The Origins of the Douçaine

To discern when douçaines may have made their way to Europe or if the development in fact took place in Europe, historians take into account the origins of other double reed instruments. For this purpose, historians use the term shawm generically to denote any early double reed instrument. While it is up for speculation whether the shawms brought back from the Crusades were new to Europe or a reintroduction of an instrument known earlier, Myers is clear that they were certainly a novelty at the time. He describes the shawms as having a thumb-hole and as part of the *haut* (loud) band:

> Both the shawm and trumpet . . . were elements of the ceremonial loud band of the Arab world, which was adopted in Europe by the thirteenth century . . . unknowable is when the shawm began its transformation from the typical Arabic design (with a thumbhole and with its reed untouched by the lips) to the lip-controlled and usually thumbhole-less form typical in the West. We can only speculate that both the availability of a different reed material in the West and the Western proclivity for a more articulated musical style played parts in the story.[64]

Accounts such as this by Myers may lead one to believe that Arabic music and instruments were brash, and it took sophisticated Europeans to tame them. However, the

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[64] Ibid., 385.

Europeans also used these instruments, or adaptations of them, for the "ceremonial loud band" that he mentions. The "more articulated musical style" is merely a reference to the *bas* (quiet) ensemble developed in Europe. Throughout the Middle Ages and Renaissance, the distinction is always made between loud and soft instruments, with no mixing of the two, as conical bored double reed instruments were not tame enough for the soft ensembles until the advent of the double bored *dulcian*/curtal/*fagotto* beginning in the mid-sixteenth century.[65]

A re-evaluation of Sachs' research opens the possibility that the advent of the *bas* ensemble pre-dates the Crusades and may not entirely be a result of European "more articulated musical style." This opens the possibility of an early presence of the douçaine (or similar instrument) in European *bas* ensembles. While he does not go in depth regarding early double reed instruments, Sachs makes a helpful reference to soft double reed instruments in early thirteenth-century Germany: "Albrecht von Halberstadt (c. 1200) speaks of the soft oboe when he calls it 'sweet' (*sûze*). It seems that the latter names, *bombarde* and *doucine* (Italian *dulzaina*), express the same contrast of timbres and instruments."[66] According to this reference, the quiet double reed instruments were in Europe by the beginning of the thirteenth century.[67] However, Sachs' description of an Asian cylindrical reed pipe opens a whole new possibility.

> The cylindrical oboe (Japanese *hichiriki*, Chinese *kuan*) is made of hard wood, bone or horn, has 7 + b fingerholes and a long double reed measuring about three

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[65] Munrow, 44.

[66] Sachs, 288.

[67] Ibid.

> inches. The instrument is said to have come from Kutcha in East Turkestan. This is possible; but it probably originated farther west. It has been used in the Caucasus and Phoenicia, in ancient Egypt and the modern Islamic countries and in ancient Greece; the Arabic name *irâqia,* (from the Irak) points to western Asia.[68]

Forty years before the identification of the douçaine from the *Mary Rose* excavation, Sachs' description of the Asian cylindrical oboes is remarkably similar to the imperfect *tibia* in Tinctoris' treatise. The main difference between the two accounts is the description of the three-inch double reed on the Asian instruments, while there is no specific information on reeds given by Tinctoris. With Sachs' claim that the cylindrical bored double reed instruments were in use over such a wide breadth of eastern and western Asia, he opens the possibility that the instrument could have found its way to Europe earlier, along with the louder conical instruments. Although abundant evidence suggests that double reed instruments evolved over time in Europe,[69] Sachs' assertion predates and slightly contrasts Myers' theory that European sophistication tamed the instruments. Although Sachs does not offer specific dates, his reference to ancient Greece and Egypt indicate that cylindrical bored double reed instruments were in use by the first millennium B. C. E., albeit in a crude form.

Despite Sachs' earlier assertion, the consensus among later historians is that the double reed instruments did not make their way to Europe until Europeans brought them home from the Crusades beginning in the twelfth century, although it would seem likely that shawms were present in Spain after the Muslim invasion in 711. According to Sachs,

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[68] Ibid., 212.

[69] The wind cap, a European invention, is a good example of this.

the instruments certainly existed by that time, but Munrow contradicts Sachs regarding the Arabic development of the shawm.

> The shawm is probably a Mohammedan invention and is said to have been developed in Baghdad during the time of the Calif Harun-al-Rashid (763-809). Whilst the scholar Curt Sachs put the invention at least some 600 years earlier, in the second century AD, it seems fairly certain that the shawm spread into Europe from the east, as a result of the Crusades, the trade through Constantinople, and the Moorish occupation of Spain.[70]

Munrow does not explain why he disagrees with Sach's theory on the shawm's time of origin. Sachs' research on Asian instruments far exceeds that of musicologists such as Munrow, Boydell, and Baines, who have largely focused on Europe. In light of the similarities between the *Mary Rose* douçaine and the Asian instruments Sachs describes, his claim of the earlier development seems most logical. Given the cylindrical bore, long double reed and equal number of holes, an in-depth comparison of the *hichiriki* and Tinctoris' *dulcina*, may reveal many more similarities, such as range. Given the current popularity of ethnomusicology within the musicological profession, such a study seems likely at some point.

Range of Instrument and Use in Ensembles

Until Foster built a commissioned replica of the *Mary Rose* instrument in 1996,[71] there was little debate about the douçaine's range. Even without an extant model, Baines and Boydell both deduced from Tinctoris' description that the instrument had a cylindrical bore and deep pitch for its size. Boydell speculated a range of a ninth,

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[70] Munrow, 8.

[71] Foster, 46. Foster received permission to physically examine the extant instrument in1996. Philip Neuman apparently made his early replicas without physically handling the original.

comparable to a crumhorn, based on the cylindrical bore and number of holes.[72] Even with the limited range, the instrument would have been useful in intimate settings, where a subdued presence is appropriate. The tenor in C, even if it only had the range of a ninth, would have possessed the ideal range to play the majority of the contratenor and tenor parts in the polyphonic works of fourteenth century composers such as Guillaume de Machaut (1300-1377) and Francesco Landini (1325-1397). However, fourteenth century dance music and fifteenth century three-part polyphony generally demand a range greater than a ninth. Therefore, there is a distinct possibility that at least some douçaines as early as the fourteenth century had an eighth front hole and resultant extended range to meet the needs of the music. So far, historians have not openly challenged the range limitation suggested by Tinctoris' description. The most open challenge has come from instrument maker Philip Neuman, the only commercial producer of douçaines to incorporate theextra hole from the *Mary Rose* model. Neuman makes douçaines in three sizes, basing his alto, tenor, and bass designs on the example of the *Mary Rose* bass. This enables players to perform a larger repertoire of medieval and early modern music than a Tinctoris-inspired instrument could accommodate.[73]

The range of most medieval dance music would seem to support Neuman's choice to make extended range instruments (different from Tinctoris' description). Timothy McGee provides a glimpse into instrumental dance music of the thirteenth and fourteenth centuries by compiling all the surviving compositions known or suspected to be

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[72] Boydell, 407.

[73] Neuman, Lyn Elder and possibly others still make wind capped douçaines (in defiance of Boydell) to meet the popular demand for the relatively buzzy tone provided by the wind cap.

instrumental dances from before circa 1430.[74] An instrument with the range of a ninth would only have been able to play twelve of the forty-seven dances preserved in his book. The common consensus from McGee and other historians is that the vielle (medieval fiddle) and to some extent the lute (plucked string instrument) were the preferred instruments for dance music. The references to the douçaine's use in the medieval sources are consistently in groups with these instruments.[75] Therefore, the douçaine would likely have had a greater range than a ninth in order to have performed the polyphonic and dance music of the time with these instruments.

Since no historian has physical evidence of the douçaine other than the instrument from the *Mary Rose,* it is purely conjectural when the eighth front hole was developed. It is also possible that Tinctoris, while well traveled, may have based his observations on the work of one instrument maker, not several, leaving open the possibility of an eighth front hole on some, but not all, douçaines. Based on Tinctoris' description, Baines claims that the douçaines could not be over-blown.[76] Based on the eight-holed (seven in front, one in back) instrument described by Tinctoris, scholars agree that an over-blown twelfth would be useless without the transitional notes between ranges, such as for the throat tones on the modern clarinet.[77] Neuman's keyless, medieval altos and tenors (with eight

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[74] Timothy McGee, *Medieval Instrumental Dances* (Bloomington: Indiana University Press, 1989), i.

[75] Boydell and Strohm offer a multitude of contextual listing of the douçaine among other soft instruments.

[76] Baines, *Woodwind Instruments,* 234. Over-blowing is a common technique among wind players to change the speed or direction of the air to get a higher tone. Conical instruments over-blow at the octave, cylindrical instruments over-blow the twelfth, and brass instruments over-blow many more intervals, depending on the design of the instrument.

[77] British historical instrument maker Eric Moulder makes tenor douçaines based on the Tinctoris description, rather than the *Mary Rose* model. I briefly played one of Moulder's instruments, and was able to over-blow the twelfth (low C over-blows up to G), but the feature is useless without the transitional notes E and F.

holes in front and one in back) easily over-blow the twelfth. On the tenor, with good embouchure control, a transitional open F is possible, although an F-sharp is not. The addition of the over-blown G makes many more parts playable, particularly fifteenth-century compositions. The specific playable notes on Neuman's tenor compare proportionately to Foster's replica of the original *Mary Rose* bass, described below. The practical needs of musicians to deal with the tessitura (range) of fourteenth- and fifteenth-century music and the *Mary Rose* instrument design of the sixteenth century are the driving forces in that development.

The tessitura of medieval music rarely extends below the C below middle C. The most common douçaine at these times would have been a tenor in C. While Myers suggests that an alto douçaine may have been in use as early as 1367,[78] a tenor range douçaine would have been the most useful at the time, because a range to C would cover at least the lower tessitura of the majority of the dances and tenor and contratenor ranges of the polyphonic works. The range also compares to a typical vocal tenor tessitura, as well as the lower range of the vielle and lute.

While the tenor may have still been the preferred sized douçaine, instrument makers developed it and other winds into families of instruments in the fifteenth century. As Tinctoris described at the end of his passage on the *dulcina* and other *tibia*, the concept of the like-instrument consort developed largely in the fifteenth century, when wind instruments were typically made in sets of four, to cover soprano, alto, tenor, and

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[78] Myers, "Reeds & Brass", 394. Machaut mentions *doussaines* and *demi-doussaines* in *La prise d'Alexandre.*

bass parts.[79] The douçaine was present in this way, alongside recorders, shawms, and eventually curtals, crumhorns, and *sordunes*.[80] Concurrent with this development, however, Baines, Reinhard Strohm, and other historians note that the douçaine seems to have been the favored reed instrument in mixed ensembles, particularly with lute and harp.[81] The expressive quality allowed by the free, open reed may have ensured the douçaine's presence in such ensembles, and ensured that the instrument was worthy of mention in literature, chronicles, and later by historians.

Baines confirms the trend of like-instrument consorts, while singling out the douçaine as one of the wind instruments of choice for mixed-instrument ensembles, offering iconographic evidence of such configurations. In discussing iconography, such as *Mary, Queen of Heaven*, Baines mentions the:

> choirs of angels exhibiting every kind of instrument, soft and loud . . . the distinction between *bas* and *haut* remains as evident as ever. When a picture appears to show a shawm-like instrument intruding amongst strings, it must be some sort of douçaine; the literary evidence admits no alternative.[82]

He describes the wind consorts beginning to appear from about 1350, although most sources associate such ensembles with the fifteenth century and later. Baines maintains that:

> more commonly wind and strings [sic] were mixed, as recorder and psaltery or rebec; lute and douçaine; psaltery, gittern and flute; pipe and tabor, recorder and

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[79] Boydell, 386.

[80] Myers, "Reeds & Brass", 394.

[81] Boydell, 386. Boydell's secondary source is Severen L. van Gilliodt's *Les Ménestrels de Bruges* (Bruges 1912).

[82] Baines, *Woodwind Instruments,* 235.

> harp; pipe and tabor, douçaine, lute and harp; etc., etc., these groups being both for chamber music and for quiet afternoon dancing in the garden.[83]

The intriguing combination of douçaine, harp, and lute, mentioned above by Baines and verified below by Strohm, indicates that the douçaine and portative organ may have played similar roles by playing the relatively *sostenuto* tenor line while the plucked strings played the more florid contratenor and cantus parts. Strohm depicts Philip the Good's arrival in Bruges in 1440 after a long captivity in England. Strohm's narrative describes live depictions of biblical scenes, accompanied by musicians dressed as angels. In nearly every instance, a douçaine (here spelled *douchaine*) is present:

> Near the St Obrecht hospital, the story of Abraham and Isaac with the angel was displayed; three minstrels performed on harp, lute and *douchaine.* Further on, another platform with prophets as before. 'Tree of Jesse' followed. A similar stage with the story of Esther followed - the symbolic meaning of this was the intercession of the duchess Isabella for 'her' people–accompanied by harp, lute and *douchaine*. The same instruments were used on the next stage with St Mary Magdalene . . . Next to the Dominican convent, an angel announced the birth of Christ to the shepherds, singing from the top of the building, and accompanied by lute, harp and *douchaine* . . . Zacheus in the Tree followed, particularly fitting in its symbolic content, and then a large podium with the city of Jerusalem–symbolizing Bruges–all painted. King David played the harp, and the musicians around him had organs, lutes, harps and *dulcians*…[84]

The mistranslated term *dulcian*[85] notwithstanding, douçaine players had prominent roles in these festivities and merited mention by the chronicler.

Contrasting Strohm's mention of the douçaine's presence in the Bruges "angel bands," Kreitner rejects the possibility of douçaines in the ten-piece fifteenth-century

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[83] Ibid.

[84] Strohm, 81-82. Strohm's primary source is *Cronicke van Vlaenderen,* MS 436, *Stadsbibliotheek Brugge*, fol. 208v-214v.

[85] Reviewers consistently chastised Strohm for using the term *dulcian.* The *dulcian* is the double bored predecessor to the bassoon, developed over a century after these scenes from 1440 in Bruges.

Barcelona "angel bands" for the annual procession for the feast of Corpus Christi.[86] Kreitner examined 150 angel-concert pictures from the kingdom of Aragón but did not find evidence of the mixed ensembles with (presumably) douçaines, such as those from Bruges.[87] While Strohm's depiction of the "angel bands" in Bruges inspired Kreitner's project, his findings for Barcelona simply did not provide the evidence he sought for douçaines in the Corpus Christi processions:

> as I face the prospect of accepting or rejecting them for the Corpus band, I waver. The douçaine is something of a mystery; in the fifteenth century, the word seems to have meant a cylindrical bore shawm that would have looked like a regular shawm on the outside but whose softer sound would not have swamped the lutes and harps of the *bas* ensemble. This makes it very seductive for my purposes; the problem is that the one contemporary Spanish source to give a remotely vivid picture of the douçaine, the famous *Hechos del Condestable*, shows it appearing in situations with the loud band and playing in a homogenous douçaine consort for dancing, but never anywhere near the other soft instruments.[88]

Since Kreitner only found iconography where musicians play (presumably) douçaines in homogenous groups rather than with strings, he considers that in Barcelona, the douçaines may have had a specialized, ceremonial use apart from the typical soft band instruments.[89]

For an instrument to have been in such wide and varied use by the mid-fifteenth century, particularly in the demanding three-part compositions, it seems logical that the instrument would have had a range greater than a ninth. The possibility of the over-blown twelfth mentioned earlier should therefore be taken seriously, and it is likely the reason

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[86] Kreitner, 4.

[87] Ibid.

[88] Ibid.

[89] Ibid.

that instrument makers such as Neuman have added the eighth front hole on even the medieval alto and tenor douçaines, offering a basic range of a tenth and extended range of a twelfth or more. Strohm and Baines, meanwhile, still do not address the issue of range in their examples. While there is no record of the actual pieces played at the time (fifteenth century), three-part polyphonic music of the time typically required ranges of greater than a ninth.[90] Unfortunately, there are no extant records to support an instrument over-blowing the twelfth until the late-seventeenth or early-eighteenth century.[91]

From the late fifteenth century into the sixteenth century, the advent of four-part (treble, alto, tenor, and bass) texture offers a scenario for greater use of the limited range instruments. Even when using vocal music for instrumentalists, the ranges in four-part writing frequently cover a narrower tessitura than the three-part. Such writing would not always demand instruments with the range of much more than an octave and therefore provides an explanation of the presence of Tinctoris' narrow ranged "imperfect dulcina." Baines provides a helpful timeline and description of the four-part, treble-to-bass consorts of the late fifteenth century:

> With the rise of the Flemish School of composition, our regular four parts came in treble, alto, tenor and bass, with the last written down to the bottom of the bass stave. To fit these, the *four-piece treble-to-bass consort* would have grown up roughly during the interval 1460-1490, producing the bass recorder, the consort of crumhorns and other new instruments described in the next chapter.[92]

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[90] The tessituras in works by Guillaume Dufay (c. 1400-1477) and Johannes Ockeghem (c. 1420-1497) often range from an octave and a third to an octave and a fifth. Few works of this period were playable on instruments with the range of an octave and a step.

[91] Foster, 49.

[92] Baines, *Woodwind Instruments,* 236.

Baines further includes the douçaine as following this trend of development beyond the alto-tenor range mentioned in Machaut's works, into descant and bass versions.

Evolution of the Douçaine

The issues of range and the development into four-piece treble-to-bass consorts reveal that the design of the douçaine evolved during the fifteenth century, if not before. Music historian Frances Palmer draws a similar conclusion to Baines, in that the instrument was continually undergoing development to address the design and range issues brought about by the cylindrical bore. According to Palmer, the douçaine (initially identified as a shawm) was the first musical instrument brought to the surface from the *Mary Rose* in 1980.[93] Palmer notes the cylindrical bore, the thumbhole set higher than the first finger hole and the peculiarity of the left hand fourth hole, set apart from the others. Palmer makes the connection with fifteenth and sixteenth century references.

> The shawm is described in Tinctoris' *De Inventione et Usu Musicae* (c1487), it is illustrated in Virdung's *Musica getutscht* (1511) and in Agricola's *Musica instrumentalis deudsch* (1529, enlarged 5/1545), and it appears in the second volume of Praetorius' *Syntagma musicum* (2/1619). Logic suggests that an instrument of the 1540s might share the features mentioned in these descriptions and perhaps show a transitional stage in a sequence of technical development.[94]

The key point Palmer makes is that the design of the instrument was in transition. The recovery of the douçaine from the *Mary Rose* affords the opportunity to reassess the few details offered by Tinctoris. As previously noted, instrument maker Philip Neuman has used the discovery of the *Mary Rose* bass douçaine to challenge Tinctoris with the

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[93] Palmer, 54.

[94] Ibid.

modified replicas of the keyless altos and tenors. The evidence suggests that even as early as the fifteenth century, a variety of designs may have existed and changed over time to suit the needs of the musicians and the repertoire. Douçaines with the range of a ninth were suitable for like-instrument consorts, while the extended-range instruments were needed for mixed ensembles and music with wider tessituras.

The design of the *Mary Rose* instrument also invites considerable attention to the Italian-German *dolzaina* (not the conical bored Spanish folk shawm that bears the same name) in use into the seventeenth century. Pre- and post- *Mary Rose* music historians have questioned whether the late sixteenth and early seventeenth century Italian and German *dolzainas* are the same as, or related to, the *Mary Rose* douçaine and the medieval douçaines mentioned in literature. Foster's work with the *Mary Rose* instrument provides vital information to link the instruments. Foster examined the *Mary Rose* instrument at the *Mary Rose* Museum in Portsmouth. He was subsequently invited to write a comprehensive account, make a playable replica of the instrument (and three tabor pipes also found) for display at Portsmouth, and to make recordings both individually, and in a band, in the company of replicas of the two fiddles and tabor, also found on the *Mary Rose*.[95] Foster included a fingering chart and drawings of the surviving component parts of the original. The original and Foster's replica include keys both at the top for transitional (high) notes and at the bottom for the lowest notes. The replica over-blows at the twelfth for the range of an octave and a sixth, with an additional low C, a fourth lower than the penultimate low note, F.[96] While his further

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[95] Foster, 46.

[96] Ibid., 50.

experimentation in depressing all the keys resulted in over-blowing two octaves, he recorded this finding in his narrative, not the fingering chart.[97]

While Foster claimed the instrument fell into disuse shortly after the *Mary Rose* instrument (replaced by the *dulcian*),[98] a contextual look at the slightly later German and Italian *dolzaina* indicates a link to the *Mary Rose* douçaine. Boydell asserts that the *dolzaina* in sixteenth and seventeenth century Italian and German sources is actually a cylindrical instrument, developed from the *Mary Rose* douçaine.[99] He further conjectures that the double bored conical *dulcian* (predecessor of the bassoon) may actually have been an imitation of a double bored cylindrical *dolzaina*.[100] He continues that while reach was not a major issue on the relatively smaller, cylindrical bored instrument, the *dolzaina* was possibly double bored with added keys, thus extending the range and fixing the problem of transitional notes before over-blowing the twelfth.

Brian Klitz's article on a seventeenth-century composition for *dolzaina* (composed by G.B. Buonamente in 1636, scored for *violino, dolzaina,* and *basso continuo)* does not directly contradict Boydell's theory of a cylindrical, double bored instrument. Klitz offers several sixteenth- and seventeenth-century accounts of *dolzaina* and *fagotto* (*phagotus, chorist fagott*) appearing together.[101] The Buonamente piece is roughly within the range of Foster's *Mary Rose* replica. Furthermore, it stands to reason

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[97] Ibid., 49

[98] Ibid.

[99] Boydell, 407.

[100] Ibid., 414.

[101] Brian Klitz, "A Composition for *Dolzaina,*" *Journal of the American Musicological Society* 24, no. 1 (Spring 1971): 113.

that instrument makers dealt with chromatic discrepancies on the instrument between 1545 and 1636. If this was a double bored *dolzaina*, Boydell's theory would explain why there would have been confusion between the cylindrical *dolzaina* and conical *dulcian* among the chroniclers.[102] The following example from Michael Praetorius' *Syntagma Musicum II* from 1620 illustrates the double bored *dulcians*. Note the difference between these instruments and the straight designs of the douçaines in Figures 1.1 and 1.5, and the shawms in Figure 1.2.

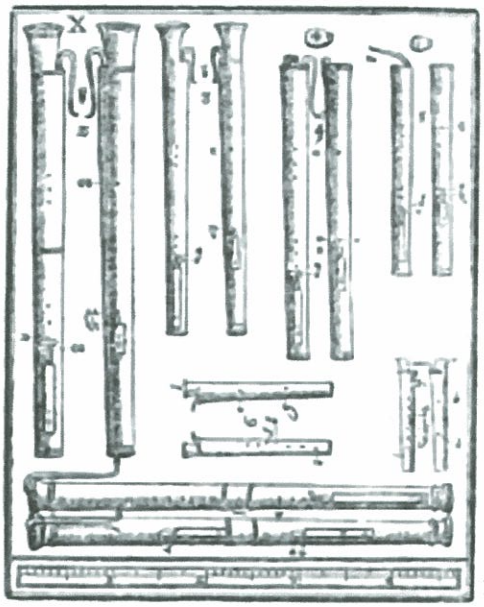

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Figure 1.7 *Syntagma Musicum Curtals*
Five sizes of curtal from Praetorius' *Syntagma Musicum*: each instrument is shown twice, back and front. Left to right: *Doppel-Fagott* or quart-bass, *Chorist-Fagott* or bass, *gedäckt Chorist-Fagott* or covered bass, and covered tenor. The alto and soprano are shown beneath the others.[104]

Among the many examples of *dulzaina/dolzaina* and *dulcian/fagott*/curtal in co-existence, historian Lewis Lockwood describes what he believes is the first "bassoon" at

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[102] Boydell, 413.

[103] Ibid.

[104] Ibid.

the court of Cardinal Ippolito I d'Este when composer Adrian Willaert was in residence. "Teseo [Albonesi] ascribes to his uncle Afranio the invention of a new form of wind instrument called the *phagotus*, which he supposedly developed at some time between 1515 and 1521."[105] Since the previous earliest reference to the *fagotto* term was 1565,[106] the instrument discussed here may have been an early experiment with the aforementioned double bored, cylindrical instrument. Boydell contends that in 1520, an inventory on the death of Cardinal Ippolito d'Este included a *dolzaina* and that this was the first use of the term *dolzaina* in Italy.[107] Myers agrees that this *dolzaina* could be cylindrical, as the conical bored shawms were still loud instruments in 1520, and the *dulcis* root was still used to distinguish between the loud and soft: "the idea of the cylindrical bore seems to have the most going for it, particularly since it would offer the greatest contrast to the shawm itself."[108]

By the late sixteenth-century, the *dulcis*-based terms increasingly imply the conical, double bored *dulcian/dolzaina,* particularly in Germany. It is therefore crucial to contextualize every listing to identify which instrument is implied. The listing of both a *dolzaina* and *phagotus/fagott* (implying double bore) provide the most decisive evidence that the (likely) cylindrical instrument co-existed with the conical, double bored instrument of the same or similar name. Baines offers such an intriguing example of the *dolzaina* and *fagotto* appearing together during composer Orlando di Lasso's time in

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[105] Lewis Lockwood, "Adrian Willaert and Cardinal Ippolito I d'Este: New Light on Willaert's Early Career in Italy, 1515-1521," *Early Music History* 5 (1985): 98.

[106] Ibid.

[107] Boydell, 388-89.

[108] Myers, "Reeds & Brass," 393.

Munich.[109] Baines' source is Trojano, one of the singers who worked there with di Lasso in 1569. Trojano lists the instrumentation for di Lasso's dinner music (Munich, 1569).

1	2	3
harpsichord	4 viols	8 viols
trombone	4 great-consort recorders	8 *viole da braccio*
recorder	4 mixed wind:	(violins, violas, cellos, etc.)
lute	*dolzaina*	8 mixed wind:
corna-musa	*corna-musa*	*fagotto*
mute cornett	flute	*corna-musa*
viol	mute cornett	mute cornett
flute		cornett
		tenor cornett
		flute
		dolzaina
		bass trombone[110]

In this chronicle, the evidence of the instrument's separate mention in conjunction with the wind capped *corna-musa* and *fagotto* clearly differentiate this *dolzaina* from both the wind capped and conical/double bored instruments. However, Baines still expresses utter confusion regarding the douçaine-*dolzaina* itself:

> The douçaine-*dolzaina* class of instruments proves almost perversely mysterious. Of every other important Renaissance wind instrument, several good pictures are known; yet of the douçaine, by all accounts one of the most important, we know not one definite illustration. Of every leading wind instrument of the sixteenth century, we have not only pictures, but specimens; but of the *dolzaina*, so often mentioned, we have neither.[111]

Baines' frustration notwithstanding, the evidence of the *dolzaina* and *fagott* (*dulcian*/curtal) appearing side by side in di Lasso's group increases the likelihood that the *dolzaina* listed here was a late cylindrical instrument, likely the same or similar to the

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[109] Baines, *Woodwind Instruments,* 256.

[110] Ibid., 256

[111] Ibid., 256-58.

instrument in Buonamente's piece discussed by Klitz, and the earlier *Mary Rose* instrument. Baines specifies that di Lasso was using Italian musicians, to whom *dolzaina* would have meant not only a different instrument from the *cornamuse* but different from the conical, double bored *fagotto* (*dulcian*/curtal) as well.

In sum, the apparent commonness of the douçaine and the consistently flattering literary references to its soft, sweet tone fueled historians' drive to successfully identify the instrument in pre- and post- *Mary Rose* historiography. While the *Mary Rose* instrument enabled historians to define the douçaine as cylindrical bored with an open double reed, the etymological confusion has kept historians guessing which written references apply to which instrument. The discovery and identification of the *Mary Rose* douçaine did not equate to a simple "problem solved" regarding identification of early double reed instruments. While historians' application of evidence (ranging from the thirteenth-century literary sources to the seventeenth-century composition by Buonamente) indicate the presence of open double reed, cylindrical bored instruments spanning five centuries in Europe, at least forty-three *dulcis*-based spellings and the presence of other instruments named from the same Latin root still require historians to carefully consider the context of each source. Contextual evidence of year or period, country of origin, and loud or soft band must always be taken into account while researching *dulcis* instruments in chronicles and literature. Furthermore, a deduction that any given source reveals a douçaine does not assert that all douçaines were of the same design. For approximately five centuries, the douçaine evolved to meet the needs of the music and musicians, but when instrument makers were able to develop the *dulcian* into an instrument of greater dynamic and diatonic range than the cylindrical bored douçaine,

the latter most likely faded into obscurity. Had there been a strong ethnic link in traditional music (such as the Armenian duduk, and Japanese hichiriki, which are both limited range, cylindrical bored double reed instruments still in use), rather than courtly art music, the instrument may have survived anyway. Furthermore, with the advent of opera between 1600-1630, the douçaine did not have the volume to compete with the dulcians, which could play both soft and loud. Similarly, the violin family surpassed the viol family largely due to the sheer volume of sound produced by the former. Instruments needed to play loudly enough for larger concert halls. The instruments that could meet the need thrived while others fell into disuse.

Considering the douçaine's longevity, fingering and range challenges presented by the cylindrical bore, and its historical role in both *bas* and like-instrument ensembles, the question now is: who would have played such an instrument? While there are not any discovered sources dealing with the lives of douçaine players specifically, deductions are possible when analyzing records of other medieval and early modern musicians who would have likely doubled on the instrument.

CHAPTER TWO:

THE LIVES OF *BAS* AND *HAUT* WIND PLAYERS IN LATE MEDIEVAL EUROPE

In the fourteenth and fifteenth centuries, a variety of employment opportunities for musicians existed with the nobility, the church, cities, and freelance work. Unfortunately, very few records exist chronicling or describing the lives of the musicians themselves. However, contemporary music historians are beginning to reinterpret primary sources such as chronicles, payrolls, inventories, iconography, and letters to begin to understand the lives of these musicians. Due to the recentness of this line of inquiry, this historiographical analysis will focus primarily on three scholars who are among the few to have addressed musicians' lives for this period. Strohm's *Music in Late Medieval Bruges*, Keith Polk's *German Instrumental Music of the Late Middle Ages: Players, patrons and performance practice*, and Lewis Lockwood's *Music in Renaissance Ferrara* all offer insight into the musicians, instrumentation in ensembles, and patronage and employment systems. Supplementary evidence from Barra Boydell's *Crumhorns and other Renaissance Windcap Instruments* will both support and contradict Strohm, Polk, and Lockwood. Meanwhile, Strohm, Polk, and Lockwood all know, consult and cite each other in their works. Their collective analyses reveal a diversity of

careers among late medieval and early modern musicians.[1] Some musicians lived on the fringes of society, while others enjoyed well-paying, successful careers.

The purpose of this analysis is to glean from these broader analyses of music and musicians in the late Middle Ages how players of the douçaine would have fit into the overall musical culture in Europe during this time, when a rigorous distinction existed between *haut*[2] and *bas*[3] musical instruments. The evidence presented by Boydell and Strohm and my reinterpretations of evidence from Polk and Lockwood will reveal that players of the douçaine could enjoy success in court or civic careers, even as tenorists,[4] but were unlikely to have specialized in the instrument. The analysis will include: the status and hierarchy of musicians according to pay scale, court, civic, and freelance employment opportunities, and lived experience of musicians.[5]

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[1] Lewis Lockwood, *Music in Renaissance Ferrara 1400-1505* (Oxford: Oxford University Press, 2009), 319. While all three authors cover the fifteenth century (albeit with fourteenth century background and some delving into the sixteenth century) in their respective books, they disagree about what to call the period. Strohm states in his *Introduction* that he does not find it necessary to express his respect for Flemish music of the fifteenth century by using the keyword Renaissance. In doing so, Strohm rejects the qualitative connotation of the term. In contrast, Lockwood not only uses the term Renaissance in his title, but embraces the qualitative aspect of the term, which he explains in his *Epilogue*: "deals with the transformation of an established culture we can call 'pre-musical' to one in which art music had achieved the status of a major cultural resource." Those are fighting words among performers and scholars of early music. The dismissal of music before one's period of interest is a shocking trend in the field of classical music.

[2] Loud, outdoor wind instruments, such as shawm (conical bored, double reed, predecessor to modern oboe), trumpet and sackbut (predecessor to modern trombone).

[3] Quiet, indoor instruments, such as strings, portative organ, douçaine, recorder.

[4] Keith Polk, *German Instrumental Music of the Late Middle Ages: Players, Patrons and Performance Practice* (Cambridge: Cambridge University Press, 1992), 79. Polk offers the best description of musicians' specialization on parts, rather than instruments. The tenor line would be the pre-existing musical line over which were composed the contratenor and descant parts. The tenor and contratenor parts had the lowest range, and the tenor line players were the lowest paid.

[5] Since wind players were not in direct service to the church in this period, religious employment opportunities receive only peripheral mention, as appropriate.

An immediate problem arises with the focus on douçaine players. While Strohm mentions the douçaine numerous times in his book, neither Polk nor Lockwood mention the instrument at all, as if it never existed. Both Strohm and Boydell offer primary source evidence that the douçaine was not only present in France and the Low Countries but in Lockwood's Ferrara and Polk's German lands (Holy Roman Empire) as well. For this reason, I will reinterpret evidence and analysis presented by Lockwood and Polk as if the douçaine was present, on a case-by-case basis as appropriate.[6]

Status and Hierarchy Among Musicians

Pay records for musicians indicate that court musicians were the highest paid, followed by civic and church musicians, with the freelancers taking whatever leftover opportunities came their way. At court, the pay difference between *bas* and *haut* players depended on the musical preference of the noble but generally favored the *bas* players. The next breakdown is by part specialization, revealing that descant players were at the top of the pay scale, followed by contratenor and tenor players.

In Lockwood's Ferrara, the d'Este family dominated the government, resulting in court musician classification for all musicians. During this period, there were no civic musicians in Ferrara. The hierarchical analysis will therefore focus on pay and part

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[6] Lockwood and Strohm originally released their books in 1984 and 1985, respectively. Understandably, reviewers frequently included the two books together in the same articles. The historians cite each other, yet Lockwood makes no mention of the douçaine as a member of *bas* ensembles in Ferrara. He would have most likely been privy to the 1980 discovery of the one extant model, discovered on the *Mary Rose,* as the discovery of the instrument was highly publicized. Furthermore, Strohm and Boydell both reveal a gift of a set of four douçaines made by Loys Willay of Bruges for the Marquis of Ferrara in 1426 on behalf of Philip the Good. While Lockwood's initial research on music in Ferrara occurred between 1968 and 1974, by the early and mid-1980s (and certainly by the time of the 2009 revised edition), he would have been aware of the douçaine's place in fifteenth century Ferrarese *bas* ensembles. Therefore, in the matter of douçaines and the people who played them in Ferrara, conclusions will be made based on Lockwood's references to *pifferi* in the most general sense of wind instruments, rather than the most specific, shawms.

distribution among court musicians. Lockwood provides pay records for Borso D'Este in Ferrara in 1456.

	LM per month
Fiescho sonatore	12
Pietrobono dal Chitarino	8
Francesco Malacise (tenorista)	2
Niccolo Tedescho cantarino	24
Blasio Montolino	4
Paolo Grillo (harpist)	4
Corrado d'Alemagna piffaro	30
Zoanne d'Alemagna piffaro	8
Trumpeters (Tomaso de Faenza; Guasparo; Perino; Nicolo da Modena; Baptista da Norsa)	10 each
Agostino trombone	10[7]

This pay record indicates that Corrado d'Allemagna, a descant/lead wind player, was the highest paid musician, receiving thrice or more pay than the rest of his ensemble (Zoanne and Agostino). Francesco, the tenorista, is by far the lowest paid player. He is most likely a member of the *bas* ensemble, since there are already three loud band players listed. He could have played douçaine, portative, lute, or vielle. If Corrado played the quiet/cylindrical version of the shawm (since the Italian term *pifferi*, in its general sense means wind instruments), it is possible that both the highest (Corrado) and lowest (Francesco) paid court musicians in Ferrara both played douçaine at this time. Twenty years later, a pay record indicates that Corrado is still the highest paid at 26 LM (down from his pay in 1456), and the by-then-famous (and venerable) vocalist/lutenist Pietrobono is only up to 18 LM.

Lockwood indicates from secondary sources, such as W. Gundersheimer's book *Ferrara: the Style of a Renaissance Despotism* (Princeton, 1973), that officially recorded

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[7] Lockwood, *Music in Renaissance Ferrara*, 198.

pay was not a musician's only form of remuneration. Both visiting and resident nobility would bestow gifts to musicians, and in some situations, this greatly increased a musician's pay. Lockwood states, "in general, we should assume that the instrumentalists were treated as expert specialists, and that the demand for their services at court balls, festivities, receptions for noble visitors, and other special appearances, regularly lined their pockets beyond the bare salary figures . . . reasonably frequent for some of them."[8]

While Polk has abundant German primary source material in the financial accounts among archival records, he uses the evidence to determine instrumentation rather than hierarchy of status among the musicians. Although he does not provide specific data to compare the pay between *bas* and *haut* musicians, he establishes that by 1440, the lute duo was the established leading *bas* ensemble for the German nobility.[9] While he refers to one of his own articles to obtain a list of players and the respective noble houses, the inference here is that the lutenists would also have been at the top of the pay scale and hierarchy for secular musicians.

Polk and Lockwood indicate that certain musicians rose to relatively high positions in society. For example, some solo fiddle players earned the title of master, were well paid, and on occasion granted the honor of civic livery. Polk describes this honor as a gesture usually reserved for more obviously ritual ensembles, such as the civic wind ensembles (shawms and possibly sackbuts/early trombones).[10] Both Polk and Lockwood highlight the previously mentioned Corrado (piffaro) de Allemagna

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[8] Ibid., 201.

[9] Polk, 26.

[10] Ibid., 31.

(Allemania), a German shawm player in service at the d'Este court in Ferrara from 1441 to 1481 to illustrate this opportunity for advancement. Lockwood described Corrado as one of the most conspicuous performers of winds in Italy. By 1445, Corrado was sent on business trips by Marquis Leonello (who reigned at the time), and by 1447 Corrado had received citizenship in Ferrara. Lockwood describes Leonello's preference for the *bas* ensemble, which would indicate that Corrado would have likely played douçaine, as well as shawm, since douçaines had been present in Ferrara since at least 1426. Lockwood claims that "the principal instrument played by the pifferi was evidently the shawm."[11] The key word here is evidently. Lockwood expands greatly on Leonello's preference for the quiet ensembles, so Corrado would more likely have achieved his high pay and status by playing douçaine in the quiet ensembles than leading the loud shawm band.[12] At any rate, Corrado provides an excellent example of the expectation that even high-profile musicians were expected to be proficient on more than one instrument to suit the needs of the employer.

Guilds, citizenship, and the presence of foreign musicians impacted musicians' social status in Bruges, Ferrara, and the Holy Roman Empire. For Bruges, Strohm does not use pay records to construct a hierarchy among musicians based on the instruments played. Instead, he locates a musicians' hierarchy within the guilds. Strohm's focus is on

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[11] Lockwood, *Music in Renaissance Ferrara*, 74.

[12] The set of four douçaines sold to the Marquis of Ferrara in 1426 were most likely a soprano, alto, tenor and bass set. The fifteenth century saw the beginning of European taste in like-instrument ensembles. It is known from Machaut's lai *Le Remede de Fortune* that douçaines were in at least two sizes by the 1360s as the reference in the lai was of *doussaines et demi-doussaines.* Although evidence suggests the higher douçaines may have been less common, especially in mixed ensembles, a celebrated descant wind player such as Corrado would have most likely played descant or alto if he played douçaine.

civic and freelance musicians, rather than those working for the nobility. He avers that the practice of polyphonic music in Bruges was shared between various classes, despite strict social distinctions.[13] He uses the term minstrel to refer to late medieval professional musicians who were neither clerics nor employed by the church. Unlike Polk and Lockwood, Strohm asserts that the profession always had to struggle for social recognition, which the church in particular denied to it. While the term minstrel is too general to reflect this problem, terms such as *jongleur* reveal a much more concise social distinction.[14] Strohm describes a wide gap between a traveling minstrel without regular employment (*histrio*) and courtly musicians who were well paid (*valets de chambres* or *faiseurs*). He further elaborates that over longer periods of time and wider areas, the terminology is not consistent, describing the social status of the writer, the language used, and the function of the document. Strohm refers to church and court accounts, city registers, narrative sources, and poetry, for example.[15]

One way in which minstrels were shown respect at the civic level was in the city subsidized minstrel schools in fourteenth century Bruges. The city employed only four to five musicians as official *menestruelen van der stede*, while all the others had to find day-to-day work. Strohm reasons that it was to the benefit of all minstrels in Bruges that the city also subsidized musical instruction on a relatively large scale. From 1482 to 1489, at least, various payments are recorded to Adriaen Willemart and Anthuenis Pavillon for teaching several children to play the flute, trumpet, and other instruments, which seem to

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[13] Strohm, 8. He does not expand on or define the social distinctions.

[14] A *jongleur* would have been no more than a street performer.

[15] Strohm, 74.

have been bought for them at the expense of the magistrate. The children lived in the houses of their teachers.[16]

According to Strohm, guild membership was mandatory in Bruges, to the point of absurdity. He gives an example of a twelve-year-old child playing in public and subsequently forced to join the musicians' guild, where the minimum age for members was 15.[17] Lockwood and Polk describe different situations in both Ferrara and the Holy Roman Empire, where musicians would join guilds in non-musical fields, while avoiding guild politics. The musicians were usually too few in number to form their own guilds and be of any political consequence on a local or civic level. More at issue for Lockwood and Polk were citizenship and foreigners. The local musicians were typically freelancers who did not possess citizenship, while the civic musicians were nearly always foreigners, well paid and granted citizenship. A further divide developed with the already resentful local musicians in Ferrara and the Holy Roman Empire by the foreign civic musicians' first right of refusal on weddings, dances, and other public and private affairs. Strohm never indicates that these were issues in Bruges. Since musicians were proficient on more than one instrument, these factors would not have affected douçaine players more than other musicians. Local, non-citizen tenorists, however, would have been the most vulnerable, whether one played douçaine, shawm, or sackbut, as evidence shows that the tenorists were the lowest paid members of ensembles.

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[16] Ibid., 90.

[17] Ibid., 89.

Employment Opportunities, Instrumentation, and Lived Experience

To increase employment opportunities, musicians typically played more than one instrument. While pay records indicate that some musicians played both soft and loud instruments,[18] unless a musician played instruments from both categories, the *haut* and *bas* musicians would not work together at all, according to Polk.[19] He uses musicians Jean Fernandez and Jean Cordoval as typical examples of such versatility. "When they first appeared in the payroll lists in 1433 they were termed lutenists. In 1436 and 1437 they are payed as players of the vielle. Each is indicated as a '*joueur de bas instruments*' in 1445 and 1449."[20] Polk uses payroll records to assert that both "lutenist" and "player of the vielle" are general terms for '*joueur de bas instruments*' and therefore do not indicate specialists. He further avers that the apparently vague designation quite accurately conveys a notion of the diversity demanded of these performers at court.

Musicians working for the lesser nobility needed even more flexibility than those working at the prestigious courts. Lesser nobles, with fewer resources available, struggled to support two lutenists. In fifteenth century Germany, pairs of lutenists were the vogue for quiet ensembles for the nobility, but they were also very expensive.[21] Polk describes the pair of players attached to the court of the Count of Henneberg as two players of *pfeiffern und lauten* when they visited Nördlingen in 1493 and again in 1494. Polk's source is the *Kammerrechnungen* in Nördlingen, which he describes as very valuable. He

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[18] Polk, 27.

[19] Ibid., 111. Polk means musically, not socially. The practical reason for the distinction is one of balance, as the soft, indoor instruments were too quiet to balance with loud, outdoor instruments.

[20] Ibid., 13.

[21] Ibid., 26.

asserts that most, but not all, such entries relate to lutenists employed by lesser nobles. As far as musical roles, he suggests that the musician who played descant (upper part) in the lute duo might well have applied similar improvised embellishment techniques when he picked up the shawm to play the upper line in the context of a shawm duo. Polk further infers that lute pairs were often employed by women patrons, such as the Duchess of Saxony and the Countess of Weinsberg.[22] While Polk's analysis of this primary source material (regarding the lute duos of lesser nobility) does not seem flawed, it does seem incomplete, given Strohm's and Boydell's evidence of the douçaine's presence in western Europe at the time. Polk does not suggest at any time that the lute and a reed instrument formed ensembles, as in the numerous accounts by Strohm in Bruges. Polk has indicated that the terms in German accounts are often quite generalized, therefore the term *pfeiffern* (pipes) could easily have included douçaines. Furthermore, since Strohm consistently places the douçaine in ensembles with lutes in Bruges, it would make sense that the duos mentioned by Polk could do the same thing. Instead, Polk describes other duos featuring lute paired with various fiddles or the portative organ. He offers the following lists for typical instrumentation in *bas* ensembles.

Instruments available for ensemble use, classified by range in a contrapuntal texture

Discant (and high contratenor)

Standard	quintern, fiddle, rebec, portative organ, lute
Possible	harp, recorder
Unusual	psaltery, dulcimer

[22] Ibid., 27.

Tenor (and low contratenor)

Standard	lute, harp
Possible	portative organ, dulcimer
Unusual	trumscheidt, muted trombone

Two-part combinations

Soprano	Tenor
Small lute/quintern	lute
Portative organ	lute
Fiddle	lute
Rebec	fiddle
Small lute/quintern	large fiddle

Three-part ensembles

Soprano	tenor	contratenor
Quintern	lute	lute
Quintern	lute	harp
Portative	lute	harp
Quintern	fiddle	lute
Portative	fiddle	lute
Rebec	fiddle	lute[23]

Polk's specific definition of instrumental ensembles comes partly from a detailed statement of the instruments desired for the Corpus Christi procession in Nuremberg: "and the performers shall be: one on the lute, one with a portative, and one with a quintern: And, if one should perhaps have a harp, that also, and in addition one person who will sing with the sound of these instruments."[24] His three tables summarize what he found as a very narrow range of choices, which predominated the documents, such as the above from Nuremberg. Polk further summarizes these findings to stress the predominance of the lute in nearly all ensembles in German lands. He admits that other

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[23] Ibid., 43-44.

[24] Ibid., 42.

ensembles would have been possible, but that for fifteenth century German ensembles, the list of options was not wide and would have seldom strayed beyond what he lists in the tables.

Polk's findings do not support the likelihood of the douçaine's presence in German lands during the fifteenth century. However, Barra Boydell finds mention of douçaines in the Holy Roman Empire as early as a 1454 journey by Philip the Good from Flanders to Regensberg. A payment record lists 22 sols 6 deniers paid to a lute and douçaine duo, when passing through Ulm.[25] While this evidence does not prove that German musicians were playing douçaines, it does indicate a timeline of the instrument's known presence in the Holy Roman Empire. Boydell next finds mention of douçaines in the area in references from the mid- to late- sixteenth century, after the scope of Polk's work. The nationality of the minstrels comprising the lute/douçaine duo remains unknown.

Strohm indicates that while primarily identified with secular music, minstrels could still perform sacred music and work for the clergy. He describes that the task of the minstrel could encompass many non-musical activities. According to the circumstances, a *jongleur* minstrel could appear as an actor, fool, poet, or circus artist, while a *valet de chambre* court minstrel might also serve as a messenger, diplomat, or spy. The town musician served as a wait or bell-ringer on the town's belfry, or as a member of the forces of law and order. Every political legation or army included professional trumpeters. Strohm describes the high responsibility of these jobs, which could help save or destroy

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[25] Boydell, 386. It is not mentioned if this was a particularly high, low or average sum.

lives, as rewarded by society with a high social status.[26] This conclusion does not directly support his thesis that minstrels had to struggle for recognition. However, his description of such a wide range of duties would indicate more of a competitiveness in musicians wanting to rise above the status of *jongleur* to get the good jobs with the city or nobility. As in any guild of the time, individuals who rose to prominence in their field earned financial rewards and respect. However, Strohm re-contextualizes this with the model of the *wheels of Fortune*.[27] He later asserts that the amazing diversity of conditions under which musicians lived was possibly the one thing they all had in common. He summarizes that the *wheels of Fortune* seemed to turn faster for musicians, and points to the irony of musicians' typical fondness for the symbol.[28]

Despite the generous civic support, Strohm asserts that most musical instruction in Bruges occurred within the families. He describes the family bonds inside the profession as of even higher practical value than for other trades. Notably, Strohm indicates that the musical practice often extended to women, as many minstrels were married to a singer, dancer, or instrumentalist with whom they could perform.[29] While Polk is clear that women were listed as singers, not players in Germany,[30] Strohm makes no distinction in which instruments were played by women, insinuating that it could be

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[26] Ibid., 75.

[27] The medieval and ancient legend personifies Fortuna as a goddess who spins the wheel of Fortune at her whim. The wheel of Fortune is an allegory for randomness of fate.

[28] Ibid., 88.

[29] Ibid.

[30] Polk, 28.

any of them, although the city records for civic musicians seem to be exclusively male. The reasonable deduction is that freelance musicians could be women.

Strohm's source for the importance of family-educated musicians is the instructional manual *Livre des mestiers de Bruges*, dated c. 1370. Strohm describes it as "one of the loveliest documents on life in the late medieval town."[31] Strohm initially describes the manual as an educational tool, written by a Bruges schoolmaster for the education of children in two languages, French and Flemish. The document enumerates all things noteworthy in the environment synoptically in both languages, which the children had to memorize. Even with growing literacy, memorization and the oral tradition continued to be important. The middle part of the poem follows the alphabet, each letter dedicated to a different craft. The stanza under 'T' reads:

Tierris, le jougleur	Tierrin, de gokelare,
et ses fieus, li tromperes	ende sijn sone, de trompere,
ses fillastres, li viellerres,	zijn stiefkind, de vedelare,
et ses serouges, le ghisterneur,	ende sijn swagher, die ghitternere,
ont mout de boins	hebben vele goeder
instrument; il ont	instrument; si hebben
ghiternes, herpes,	ghitteernen, herpen,
salterions, orghenes,	salterien, orghelen,
rebebes, trompes, chiphonies,	rebeben, trompen, chiphonien,
chalemies, bombares,	scalemeyen, bombaren,
muses, fleutes, douchaines,	cornemusen, floyten, douchainen
et nacaires.	ende nacaren.[32]

Tierrin the juggler
and his brother, the trumpet player,
his stepchild, the vielle player,
and his brother-in-law, the ghittern player,
have the good

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[31] Strohm, 91.

[32] Ibid.

instruments; they have
ghitterns, harps,
psalteries, organs,
rebecs, trumpets, chiphonies (rag-and-bone man),
shawms, bombards,
cornemuses, flutes, douçaines
and nakers.

Strohm describes this as the only stanza that so strongly emphasizes family bonds in a craft, and implies that the same clan (the family of Tierris) could own this wide range of instruments. He further describes the document as a humorous and ironical piece of literature, but emphasizes the importance to children that no instrument of the time was too 'high' or 'low' for being taken up by a young person. The insinuation is not the *bas* and *haut* (soft and loud), but rather of class distinction. Despite a hierarchy in the guild, the instruments were not restricted to any one social class. For the purpose of this study, the presence of the douçaine (*douchaine*) as an instrument common to the area, and time, not restricted to any social class, is invaluable. Strohm lists two Bruges instrument makers who made douçaines at the time: Loys Willay and Pierre de Prost. Strohm summarizes that "Bruges was a place where musical instruments were at all times available on the market, and the population was neither too poor nor too uneducated to use them."[33]

Overall, Strohm, Polk, and Lockwood confirm how musicians' lives ranged from dismal to successful, depending on their source of employment and skill on more than one instrument. Although Polk and Lockwood do not mention the existence of the douçaine in their books, evidence provided by Strohm and Boydell indicate that douçaine players were likely to have been in *bas* ensembles if hired by the nobility or cities.

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[33] Ibid., 92.

Lockwood indicates that in Ferrara, wind players were on equal social footing with vocalists and with players of lute, bowed strings, and keyboards.[34] In Bruges, the instrument would have been available to men, women, and children, regardless of social class, and players would have been guild members in order to receive pay. In Ferrara, a douçaine player could have been the lowest or highest paid player at court. In Ferrara and the German lands, the douçaine players could have been among the *pfeifern* and *pifferi*, and among the highest and lowest paid musicians. Descant musicians (particularly lutenists) in the employment of upper nobility were the highest paid, while freelance tenorists would have been the lowest paid.

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[34] Lockwood, *Music in Renaissance Ferrara*, 157.

CHAPTER THREE:

VADE MECUM OF THE DOUÇAINIST

Vade mecum is a musical term used to imply something that a musician carries with him everywhere, such as a technique method. The following exercises comprise the beginning of such a method. While stemming from a modern instrument approach, both historical and modern wind players will benefit from these exercises. One with a background as a modern oboist or clarinetist will find the examples helpful for learning the ecclesiastical modes, while the experienced shawmist and recorderist will find the method valuable for learning and incorporating the complex fingering system of the douçaine.[1] Major and minor keys are also included. Many of the patterns are similar to figures in written and improvised music from the medieval and early modern periods, while also establishing solid technical facility to perform modern and traditional music. None of the modes or keys in this method feature more than four flats or four sharps, to avoid getting too far off the natural scale of the instrument. Some of the resulting patterns may still seem nearly impracticable for the nature and use of the instrument in medieval and early modern music. These exercises are included for ambitious players to achieve a high level of competency, with the flexibility to adapt repertoire to the narrow range of the instrument, or transpositions to fit the range of collaborating vocalists. I have used the commonly known Greek rather than the Latin terms, as well as the numeric references

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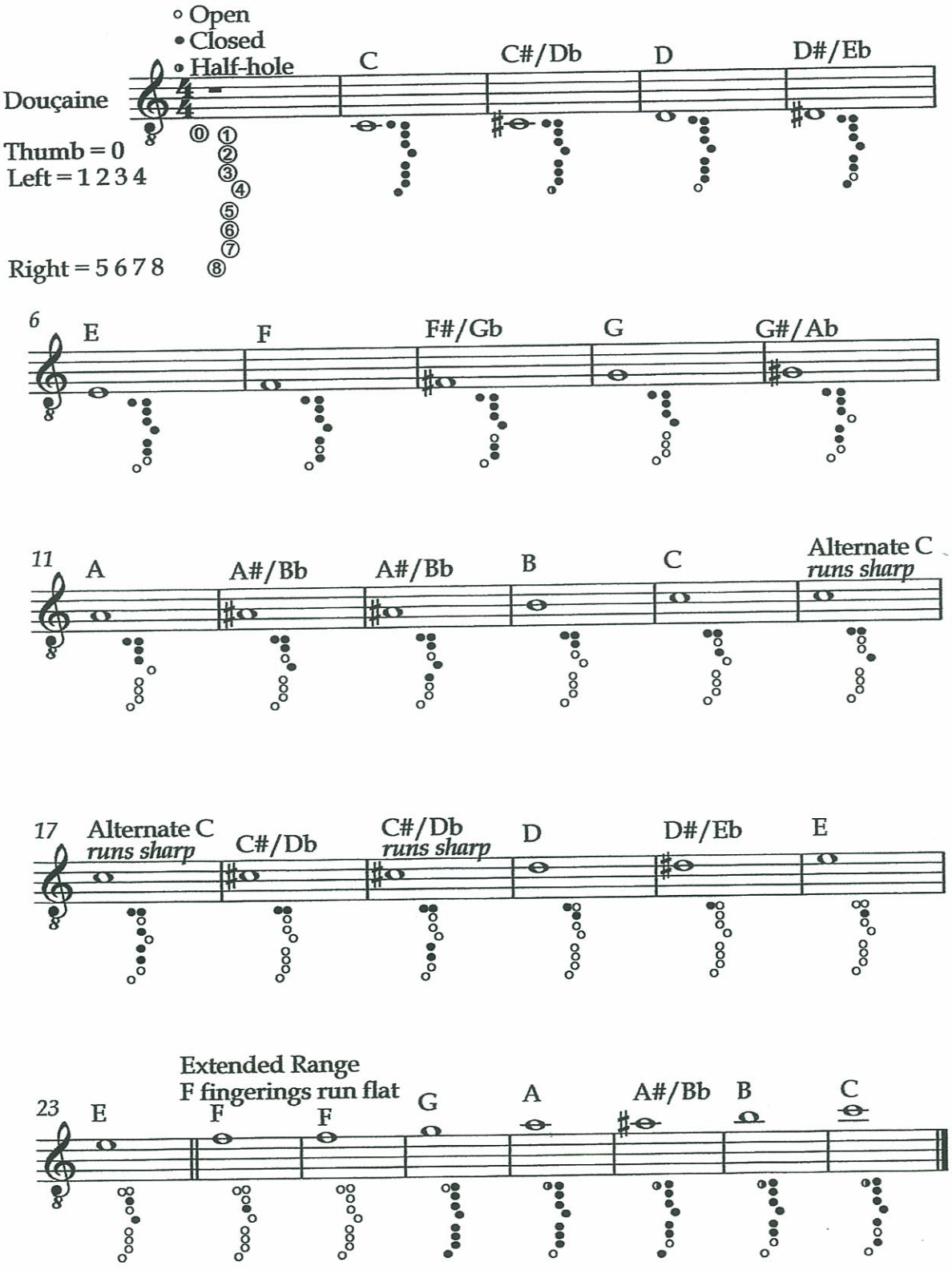
[1] The left hand little finger hole and cylindrical bore result in drastically different fingerings from the recorder and shawm.

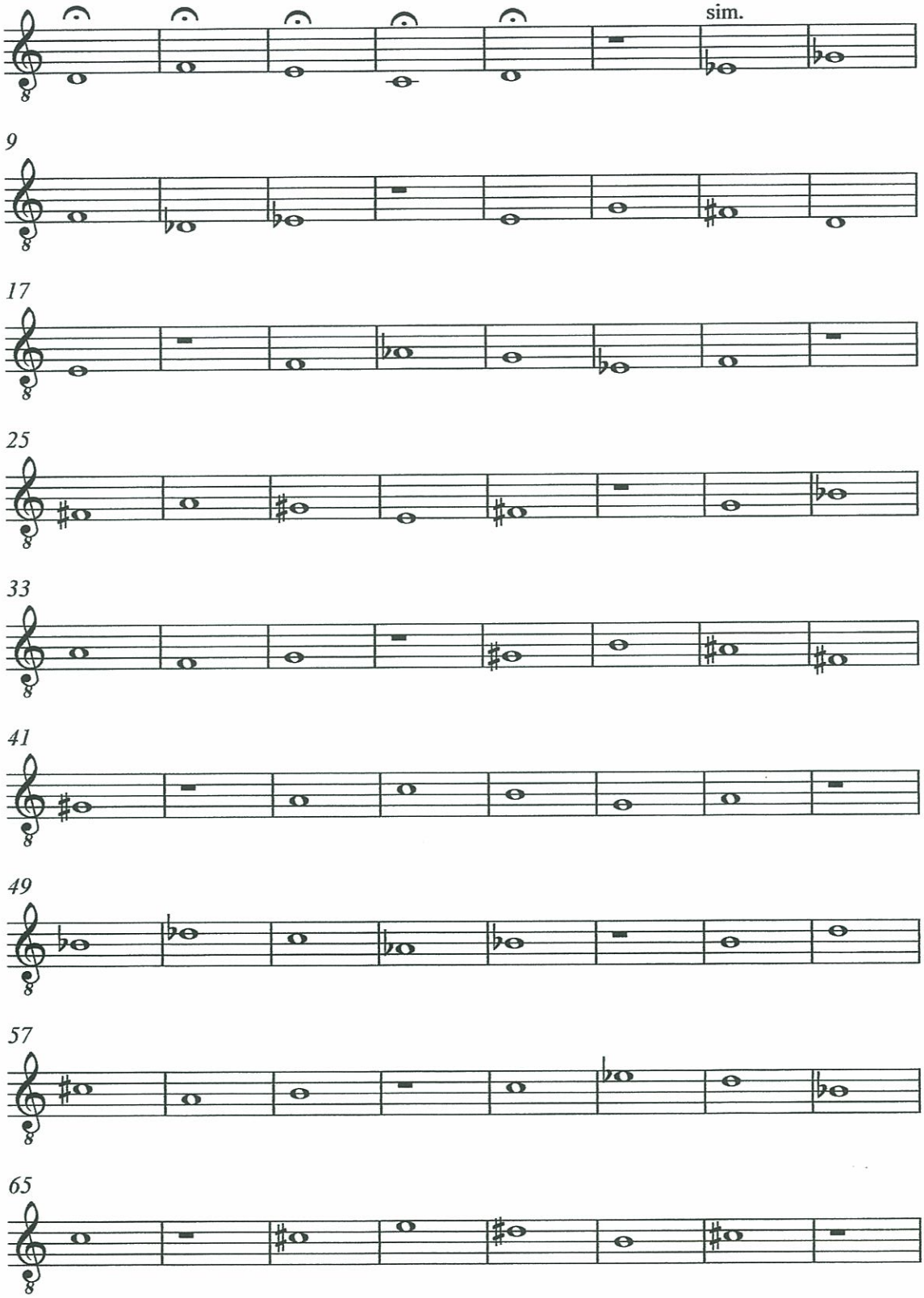
where appropriate. While I have included more than one identifiable mode or key on some exercises, I have avoided flatted Bs in several modes that would commonly include them.

Fingering Chart for Tenor Douçaine

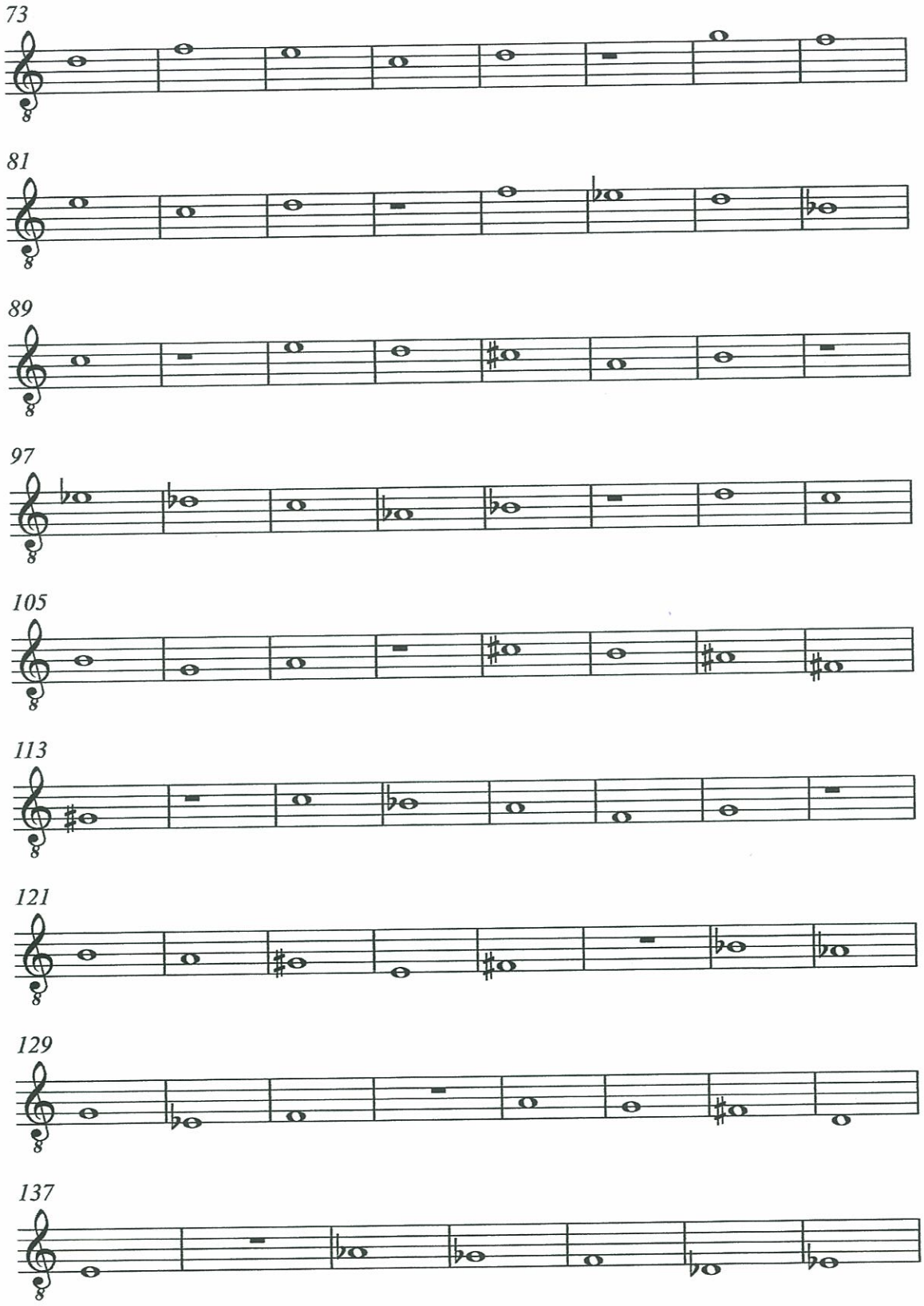


Vade Mecum for the Tenor Douçaine

Hold each note for at least 6 seconds and play each set of five in one breath.



V.S.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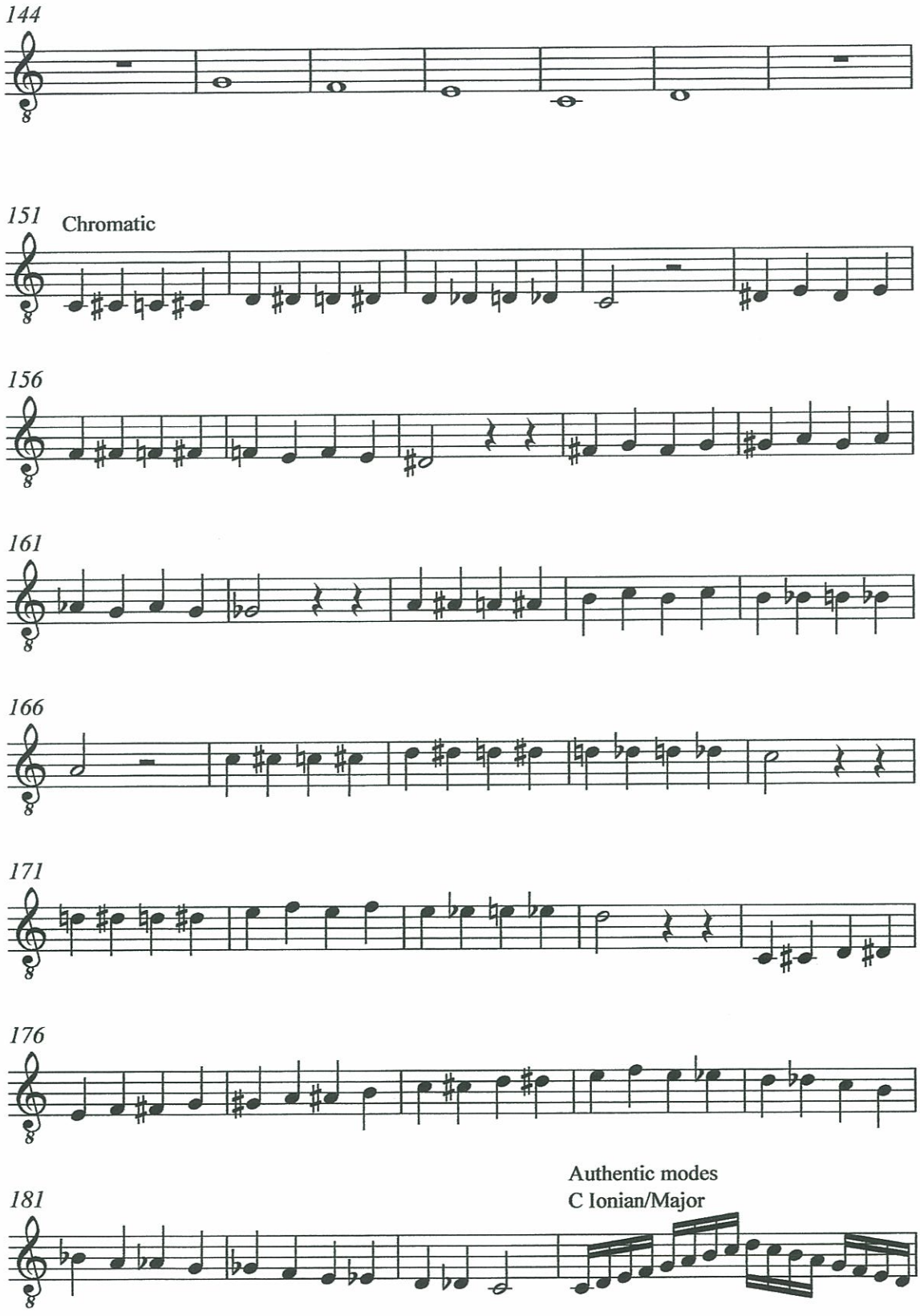
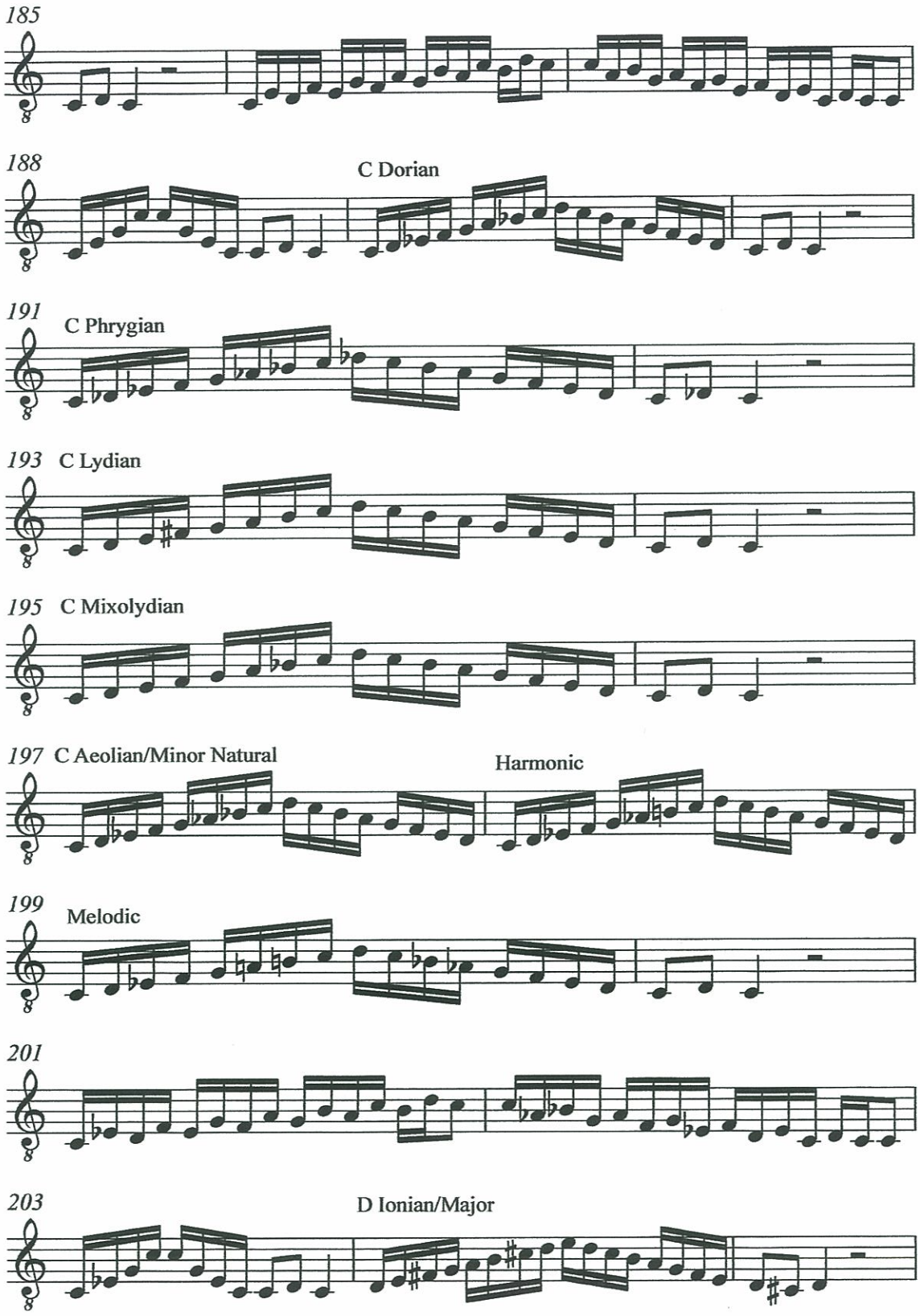
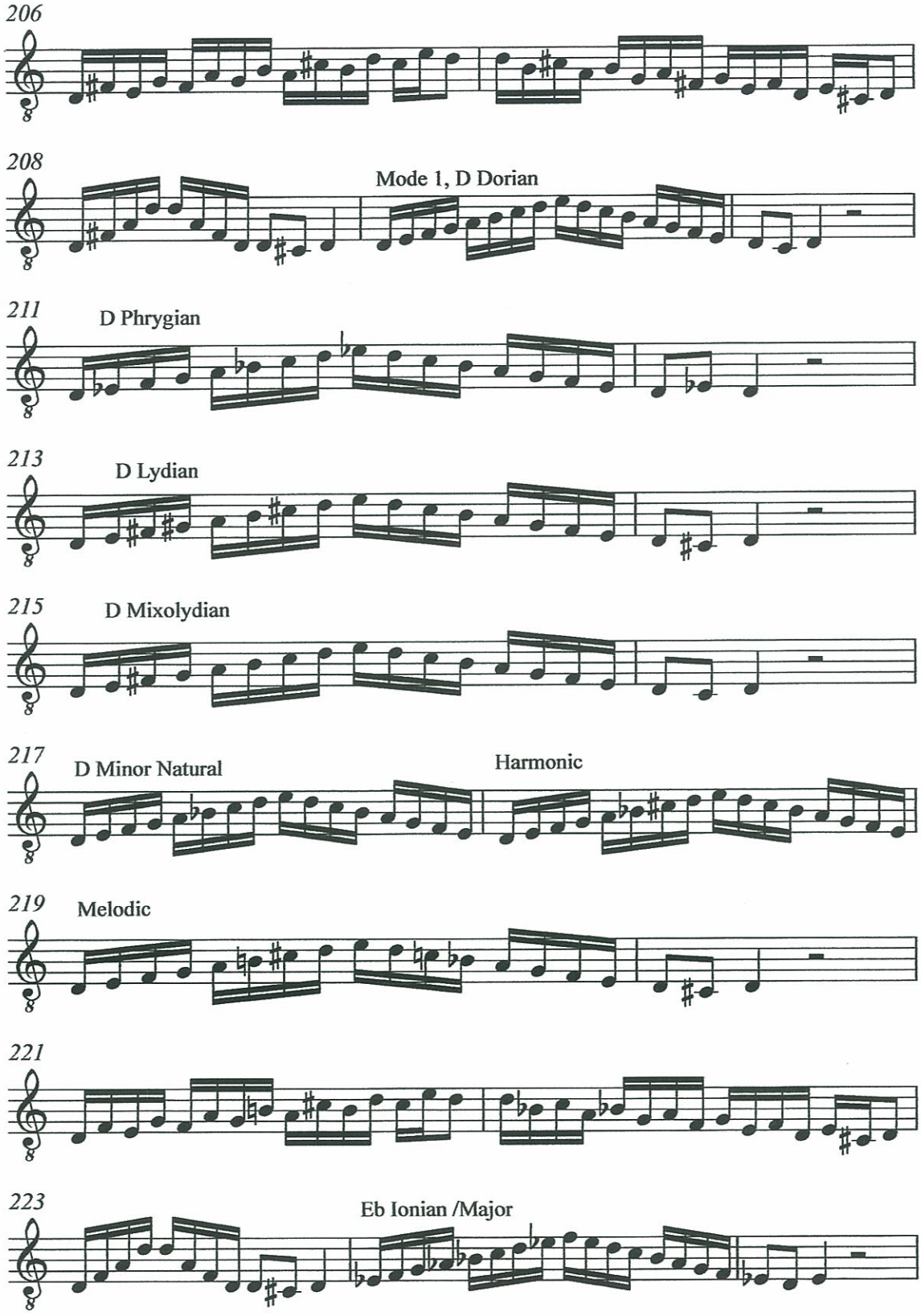
81
89
97
105
113
121
129
137

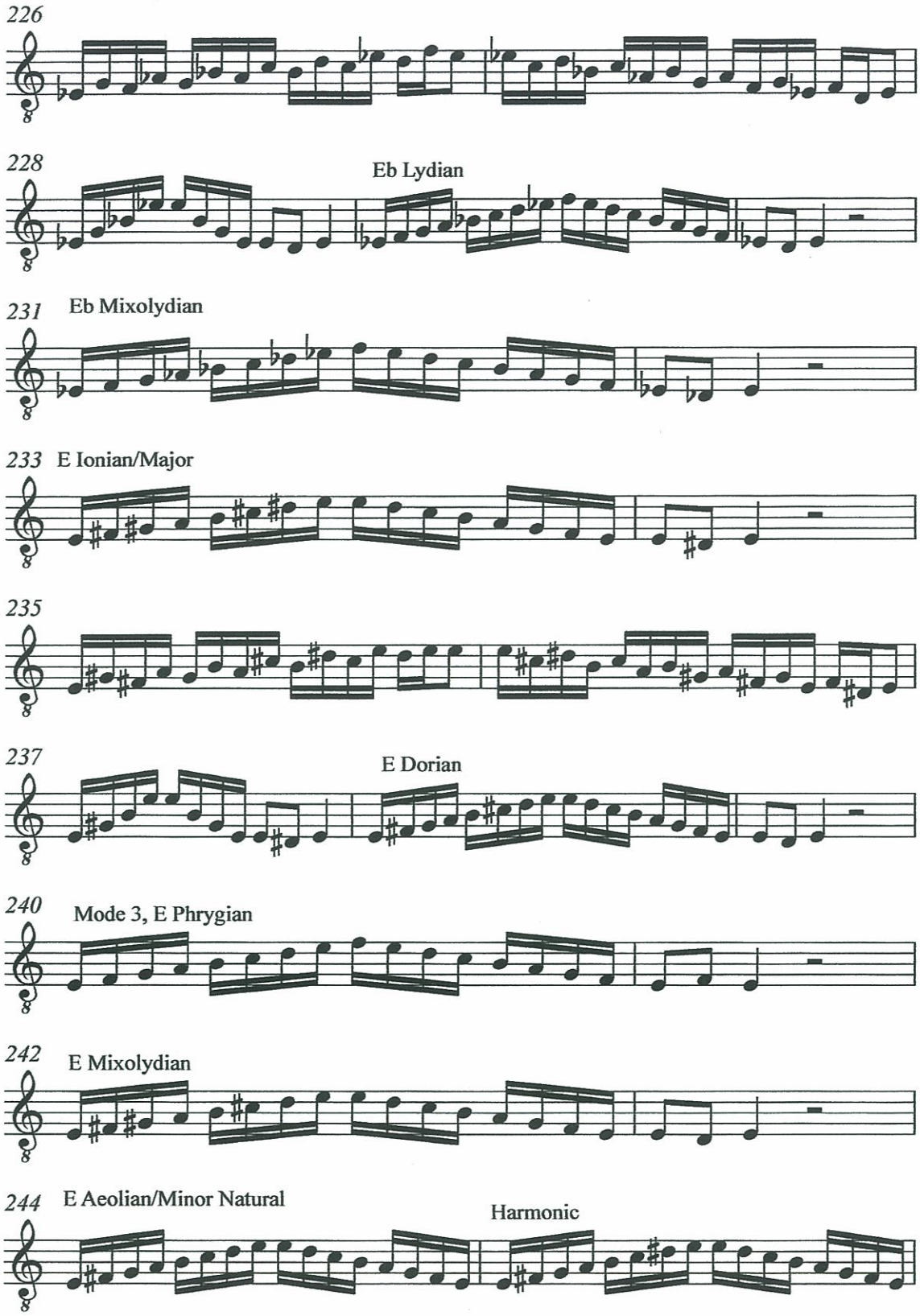

144
151
Chromatic
156
161
166
171
176
181
Authentic modes
C Ionian/Major

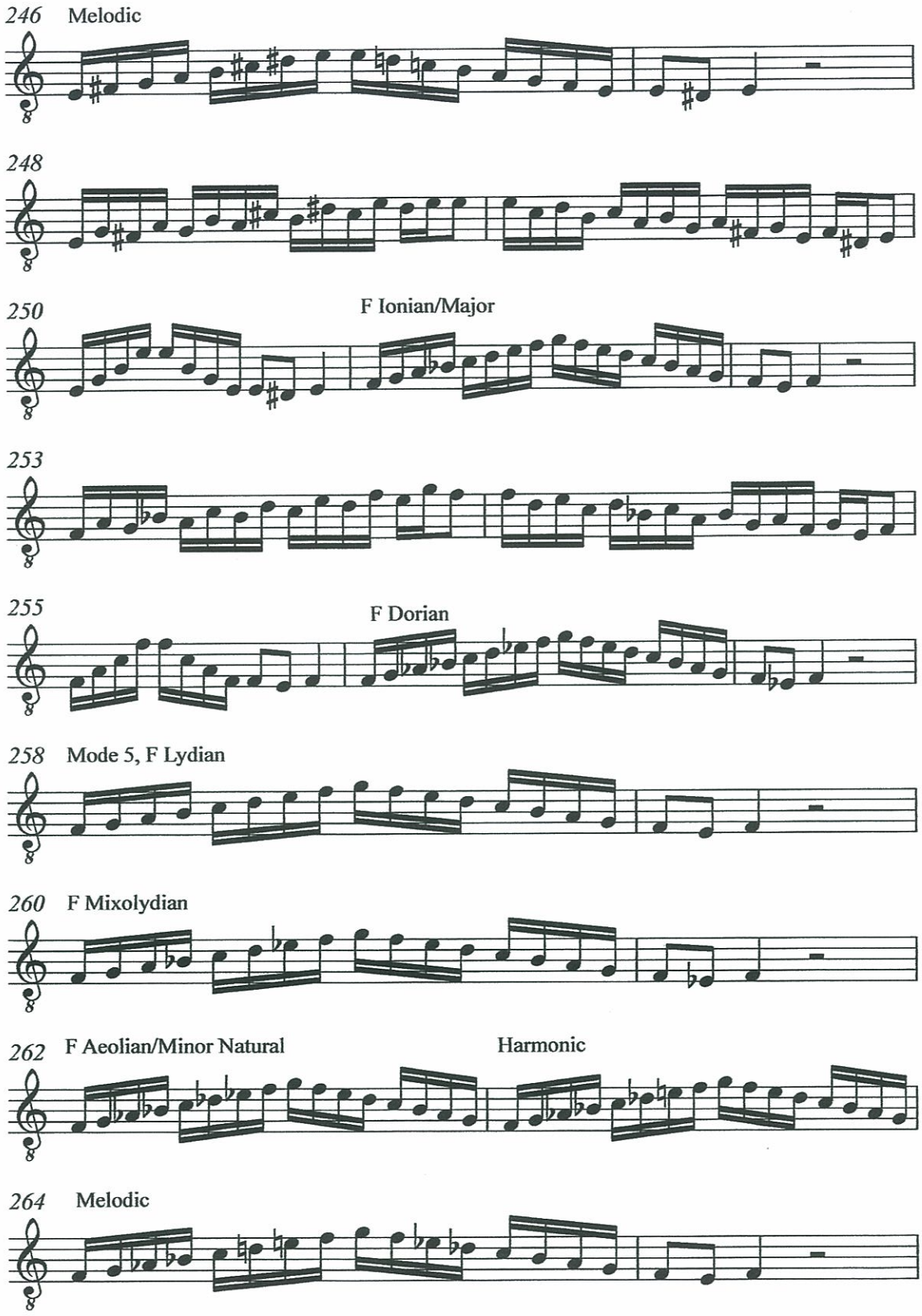
V.S.


185
188
C Dorian
191
C Phrygian
193
C Lydian
195
C Mixolydian
197
C Aeolian/Minor Natural
Harmonic
199
Melodic
201
203
D Ionian/Major

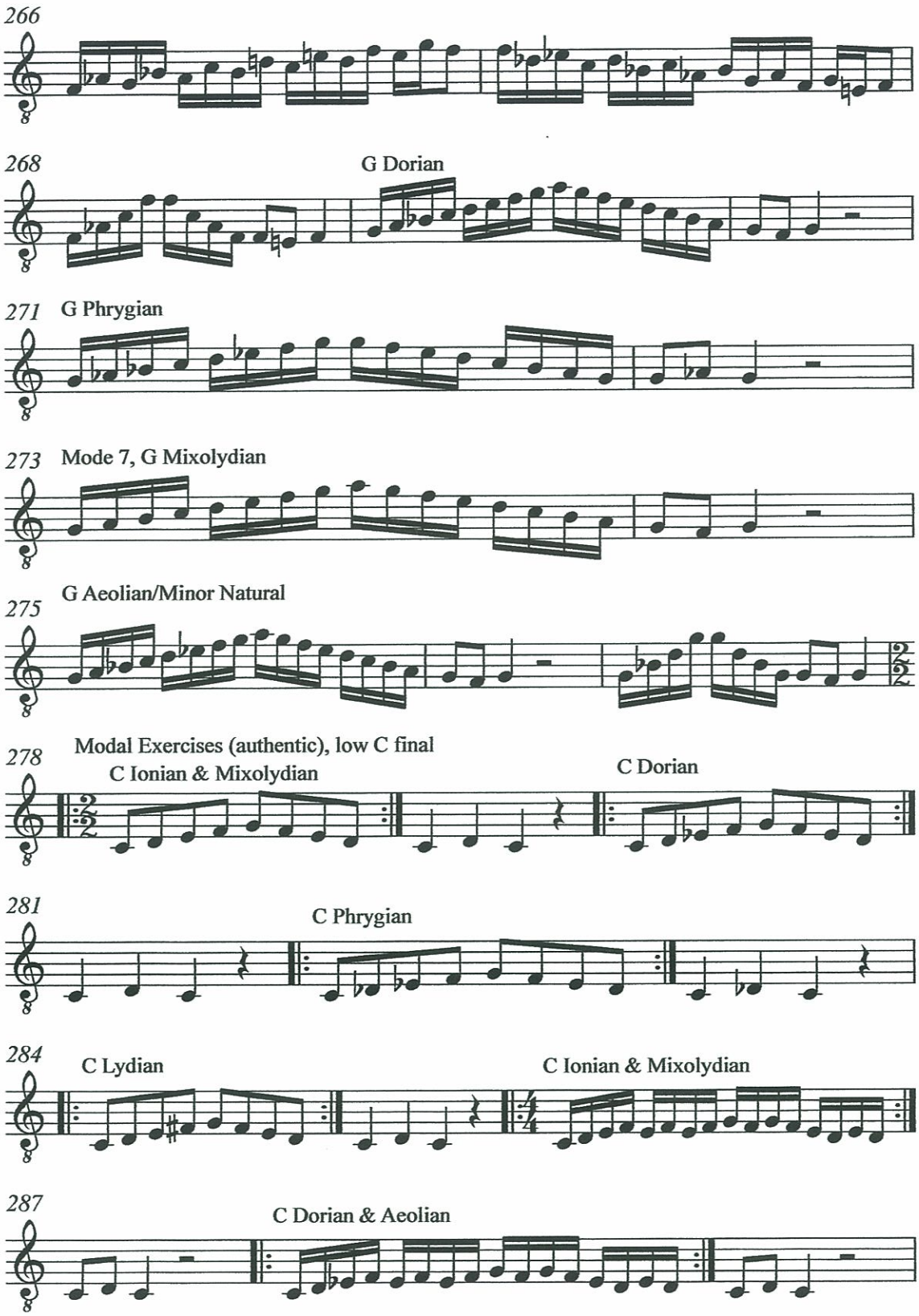

206
208
Mode 1, D Dorian
211
D Phrygian
213
D Lydian
215
D Mixolydian
217
D Minor Natural
Harmonic
219
Melodic
221
223
Eb Ionian /Major

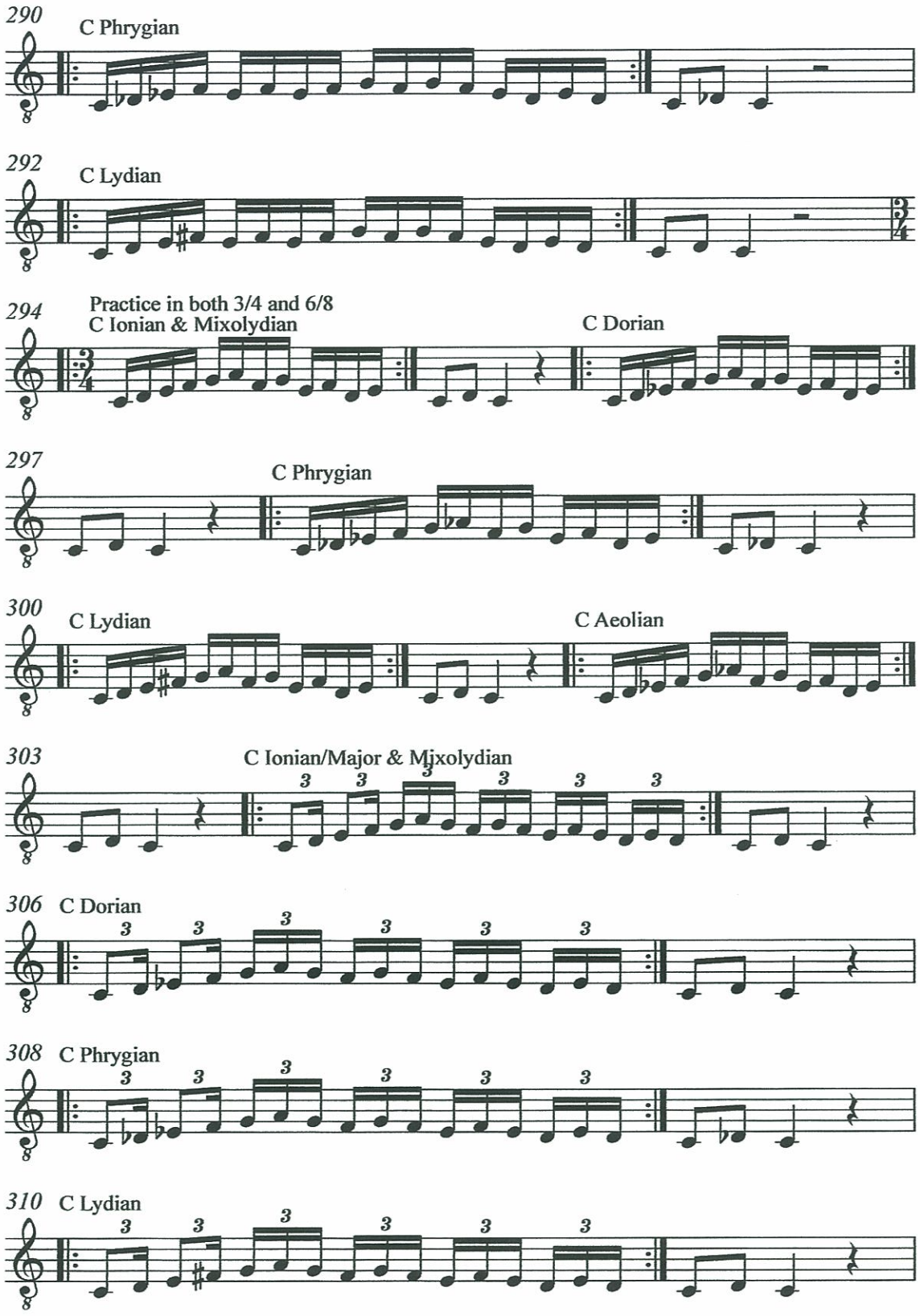
V.S.


226
228
Eb Lydian
231
Eb Mixolydian
233
E Ionian/Major
235
237
E Dorian
240
Mode 3, E Phrygian
242
E Mixolydian
244
E Aeolian/Minor Natural
Harmonic

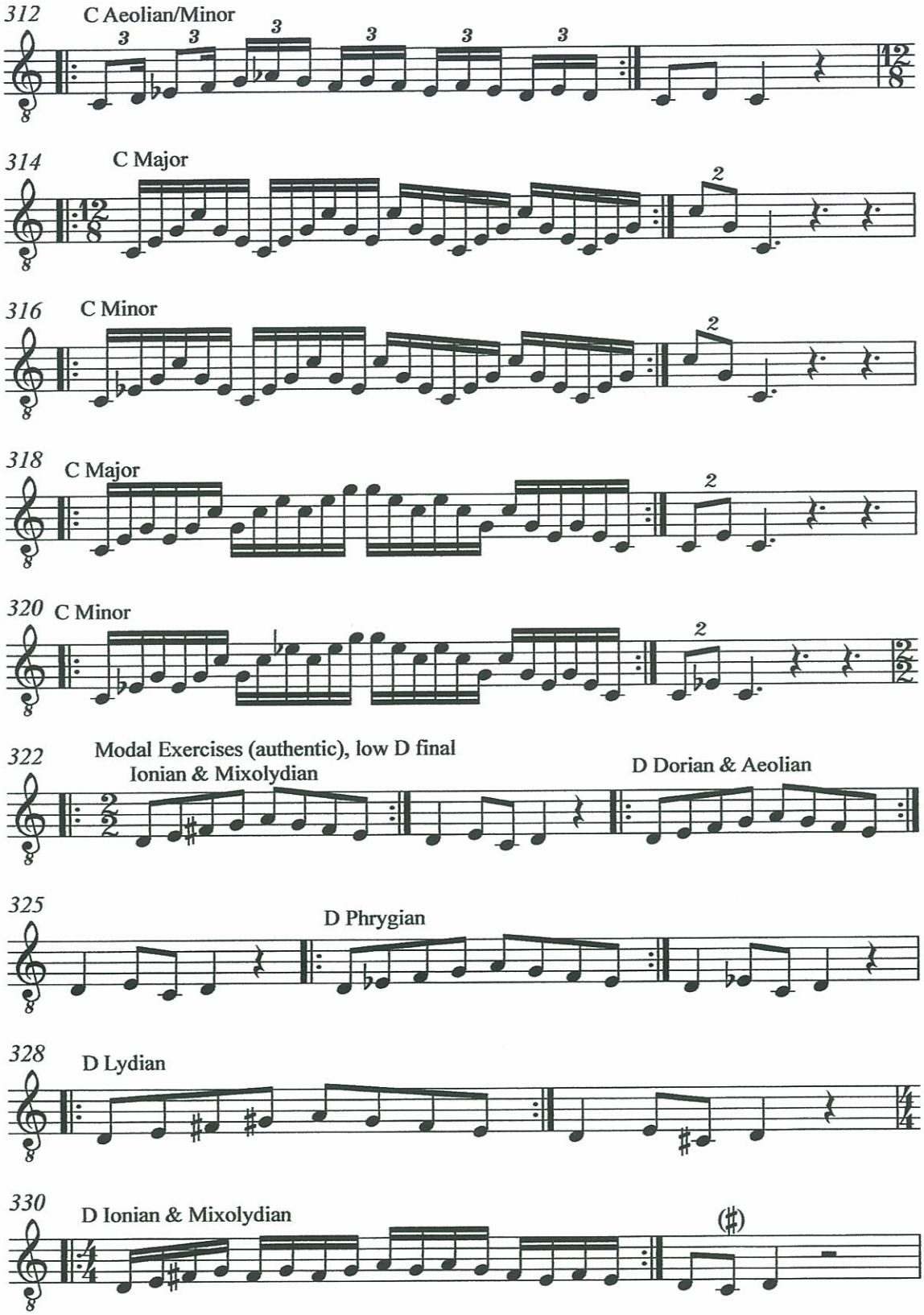

246 Melodic
248
250 F Ionian/Major
253
255 F Dorian
258 Mode 5, F Lydian
260 F Mixolydian
262 F Aeolian/Minor Natural
Harmonic
264 Melodic

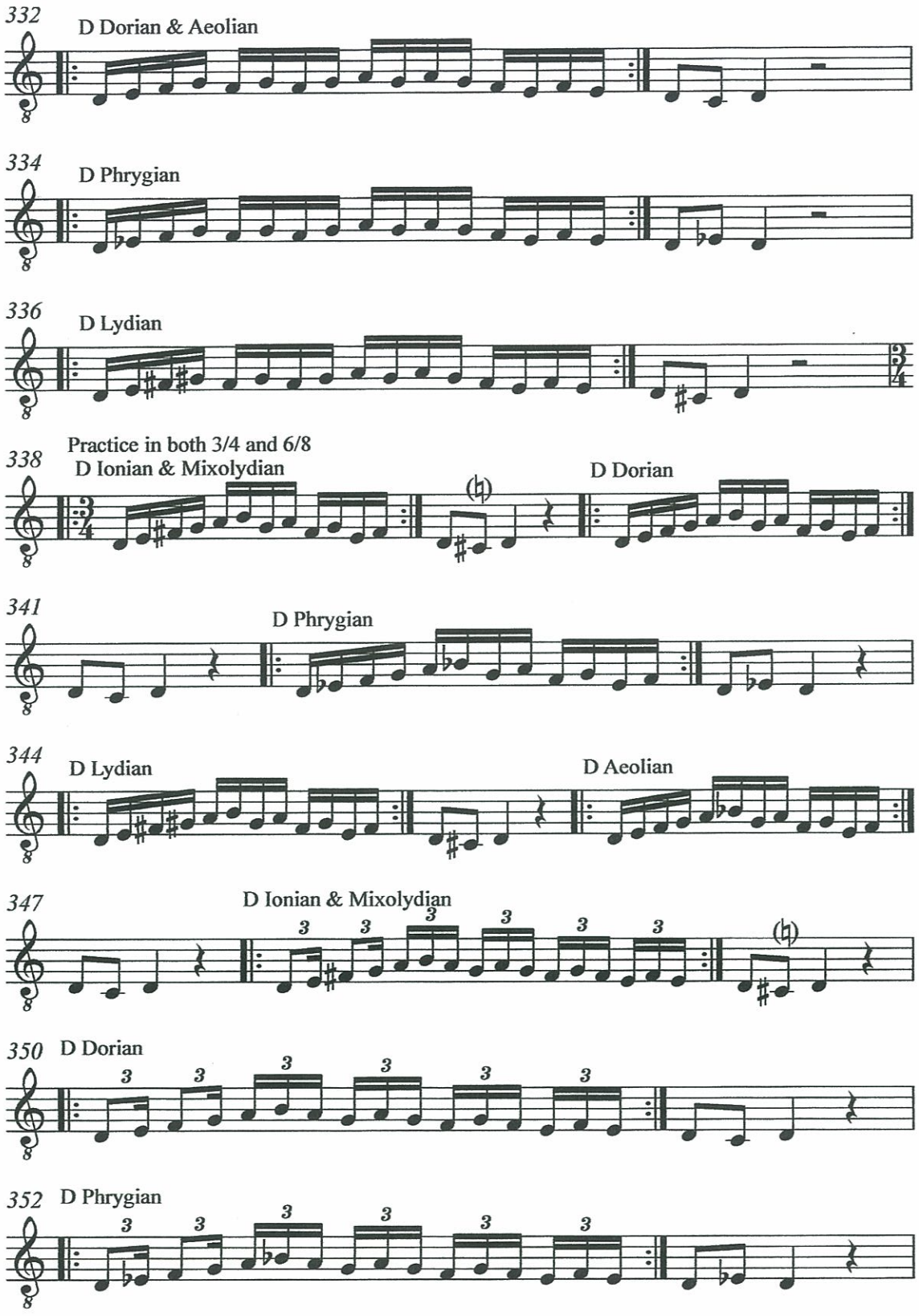
V.S.


266
268
G Dorian
271
G Phrygian
273
Mode 7, G Mixolydian
275
G Aeolian/Minor Natural
278
Modal Exercises (authentic), low C final
C Ionian & Mixolydian
C Dorian
281
C Phrygian
284
C Lydian
C Ionian & Mixolydian
287
C Dorian & Aeolian

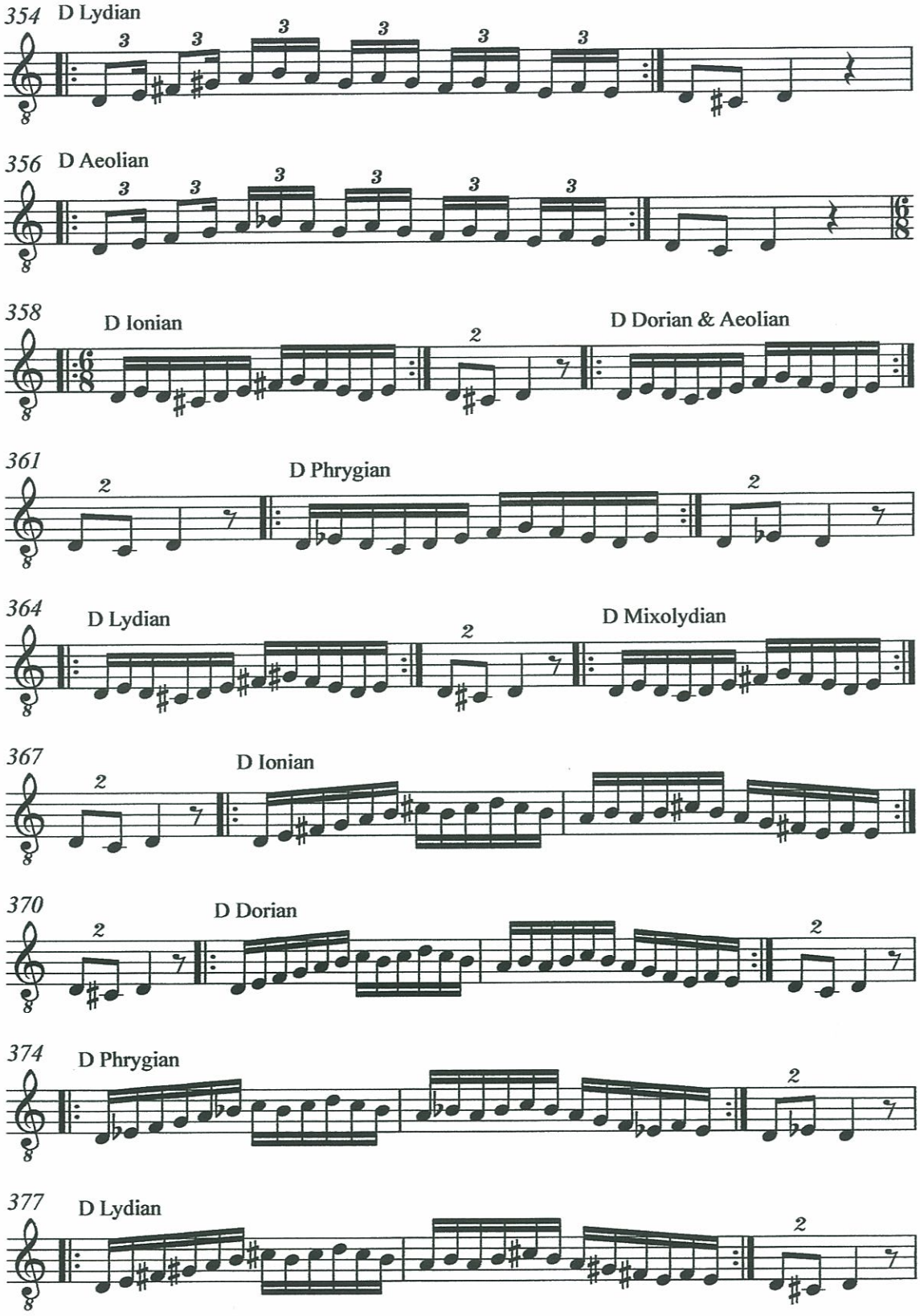

290
C Phrygian
292
C Lydian
294
Practice in both 3/4 and 6/8
C Ionian & Mixolydian
C Dorian
297
C Phrygian
300
C Lydian
C Aeolian
303
C Ionian/Major & Mixolydian
306
C Dorian
308
C Phrygian
310
C Lydian

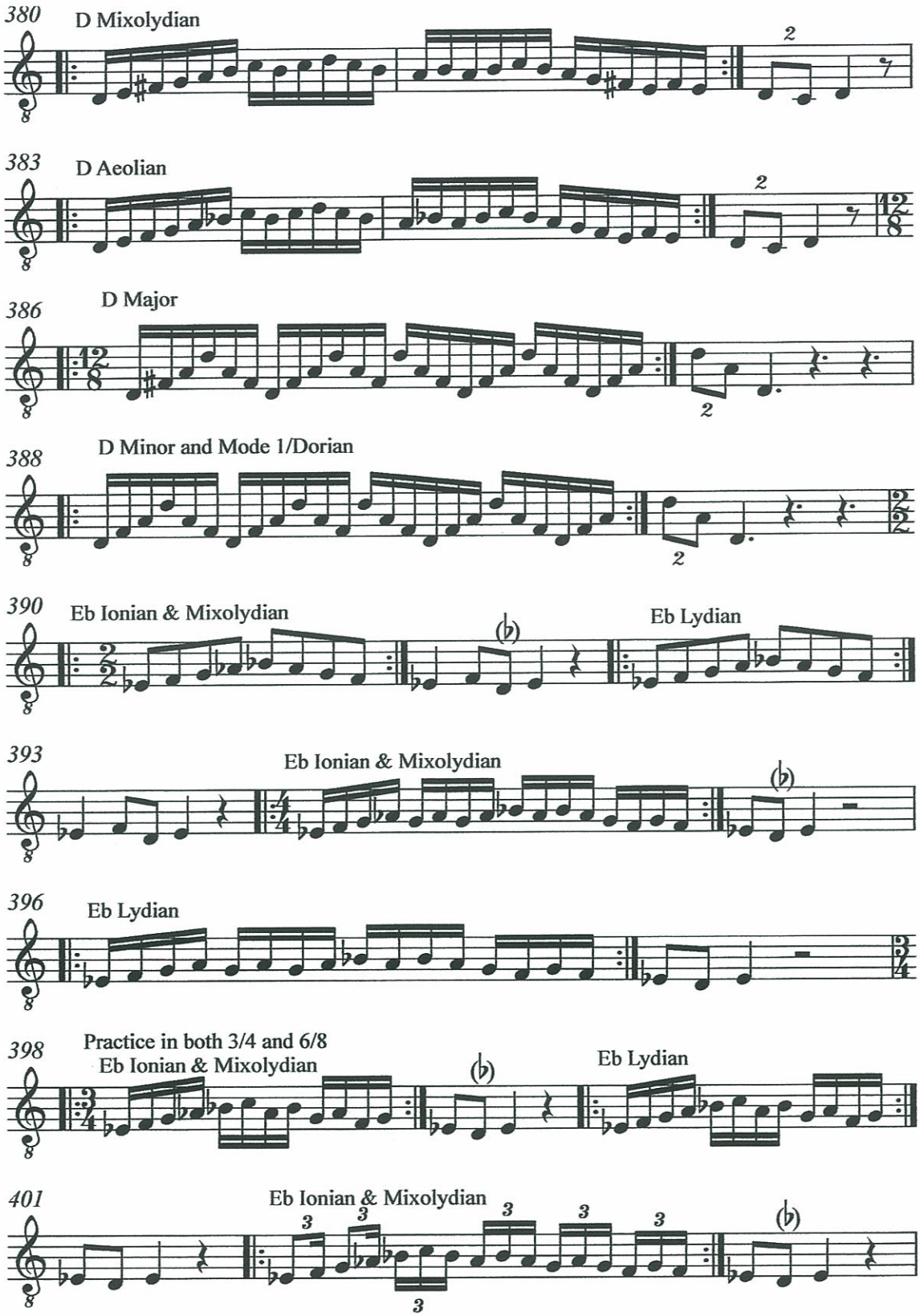
V.S.


312
C Aeolian/Minor
314
C Major
316
C Minor
318
C Major
320
C Minor
322
Modal Exercises (authentic), low D final
Ionian & Mixolydian
D Dorian & Aeolian
325
D Phrygian
328
D Lydian
330
D Ionian & Mixolydian

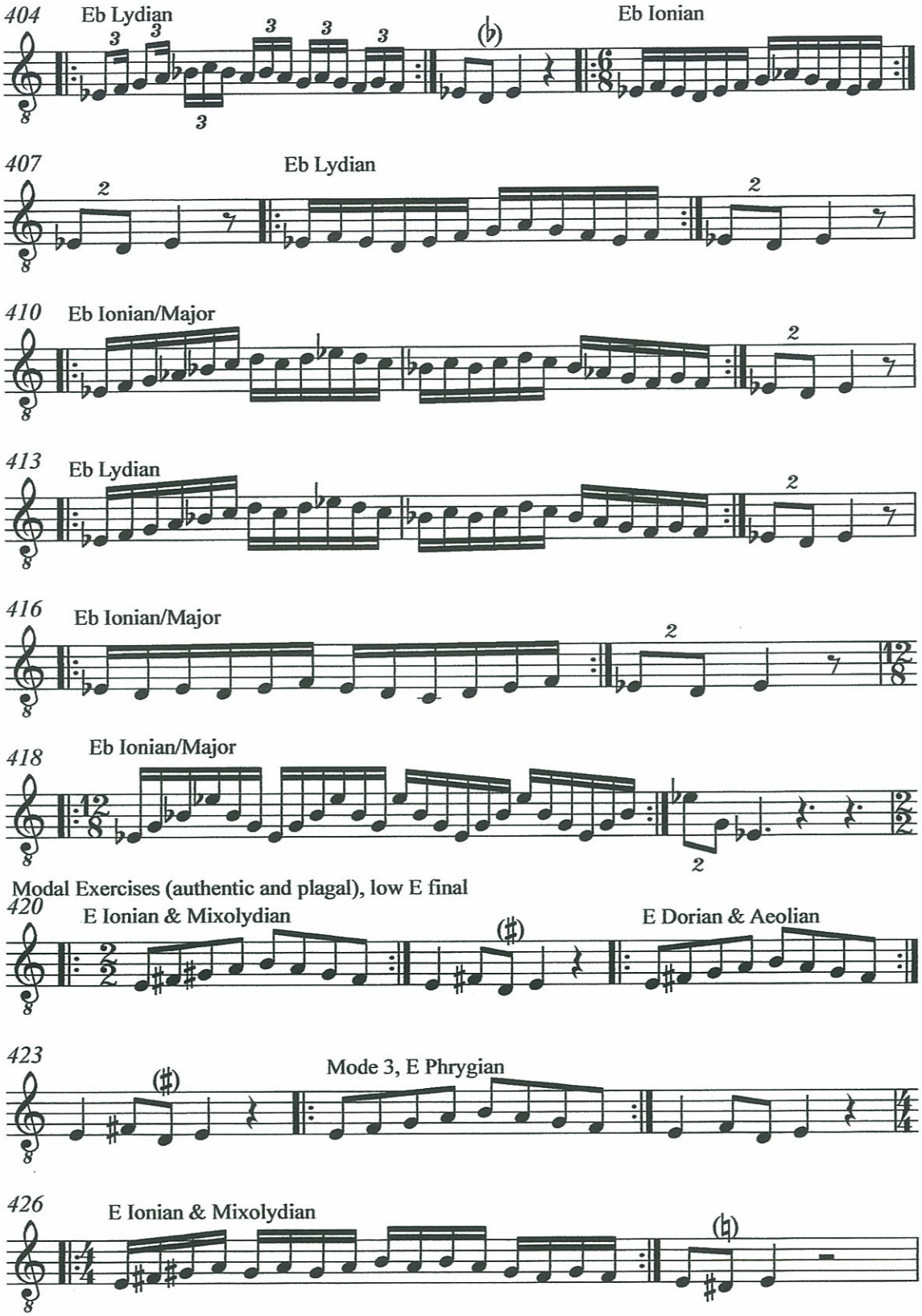

332
D Dorian & Aeolian
334
D Phrygian
336
D Lydian
Practice in both 3/4 and 6/8
338
D Ionian & Mixolydian
D Dorian
341
D Phrygian
344
D Lydian
D Aeolian
347
D Ionian & Mixolydian
350
D Dorian
352
D Phrygian

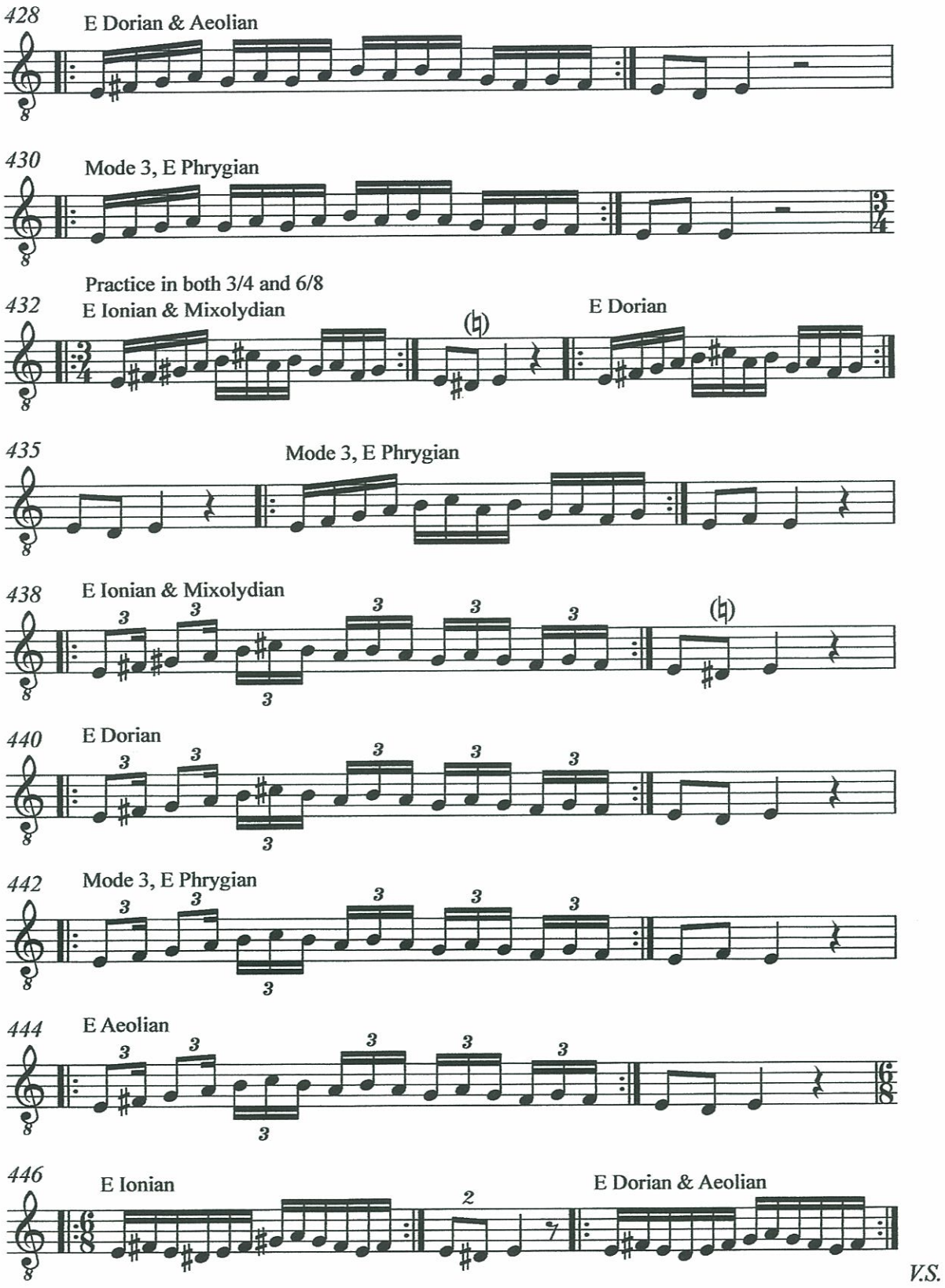
V.S.


354
D Lydian
356
D Aeolian
358
D Ionian
D Dorian & Aeolian
361
D Phrygian
364
D Lydian
D Mixolydian
367
D Ionian
370
D Dorian
374
D Phrygian
377
D Lydian


380
D Mixolydian
383
D Aeolian
386
D Major
388
D Minor and Mode 1/Dorian
390
Eb Ionian & Mixolydian
Eb Lydian
393
Eb Ionian & Mixolydian
396
Eb Lydian
398
Practice in both 3/4 and 6/8
Eb Ionian & Mixolydian
Eb Lydian
401
Eb Ionian & Mixolydian

V.S.


404
Eb Lydian
Eb Ionian
407
Eb Lydian
410
Eb Ionian/Major
413
Eb Lydian
416
Eb Ionian/Major
418
Eb Ionian/Major
Modal Exercises (authentic and plagal), low E final
420
E Ionian & Mixolydian
E Dorian & Aeolian
423
Mode 3, E Phrygian
426
E Ionian & Mixolydian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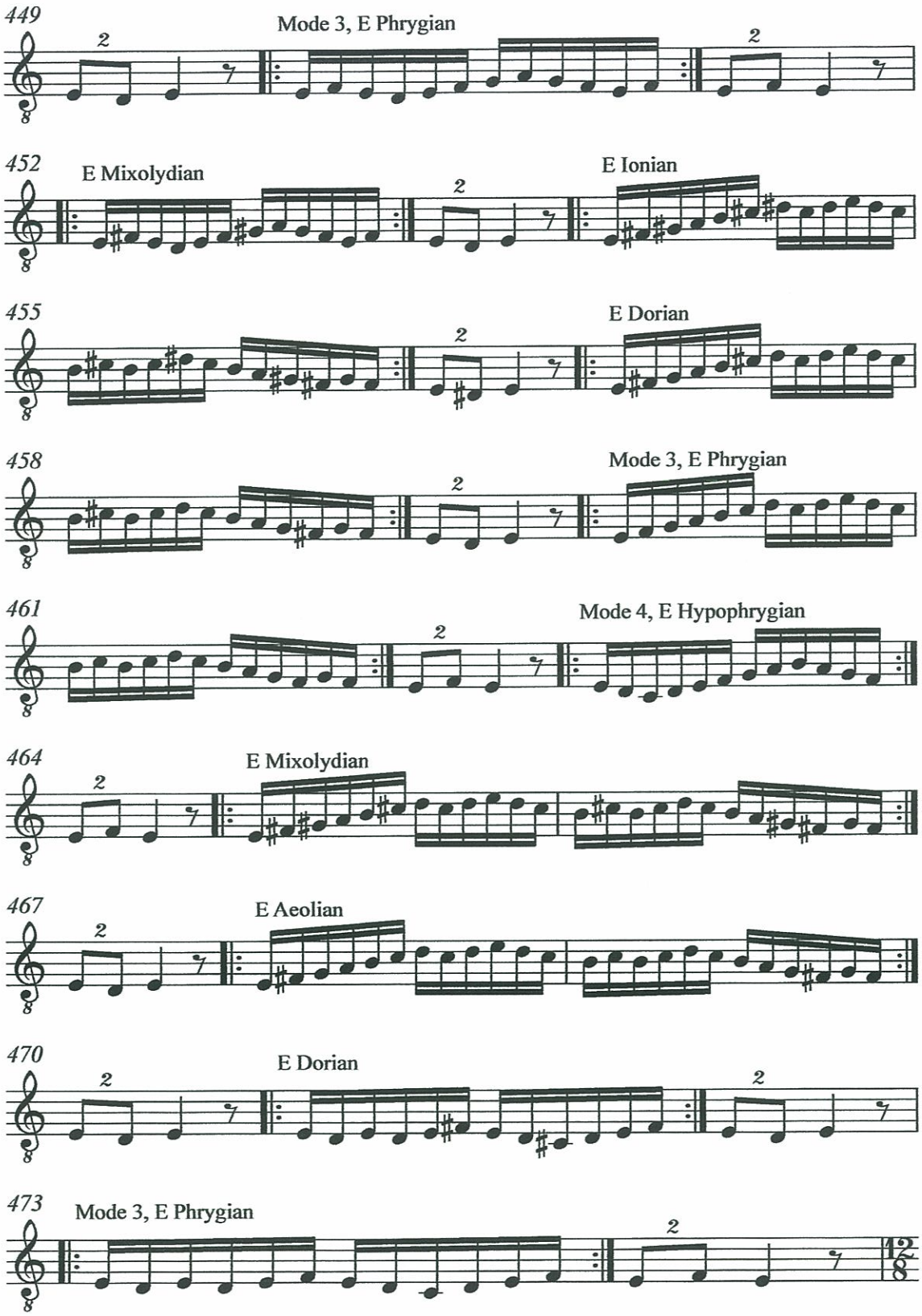
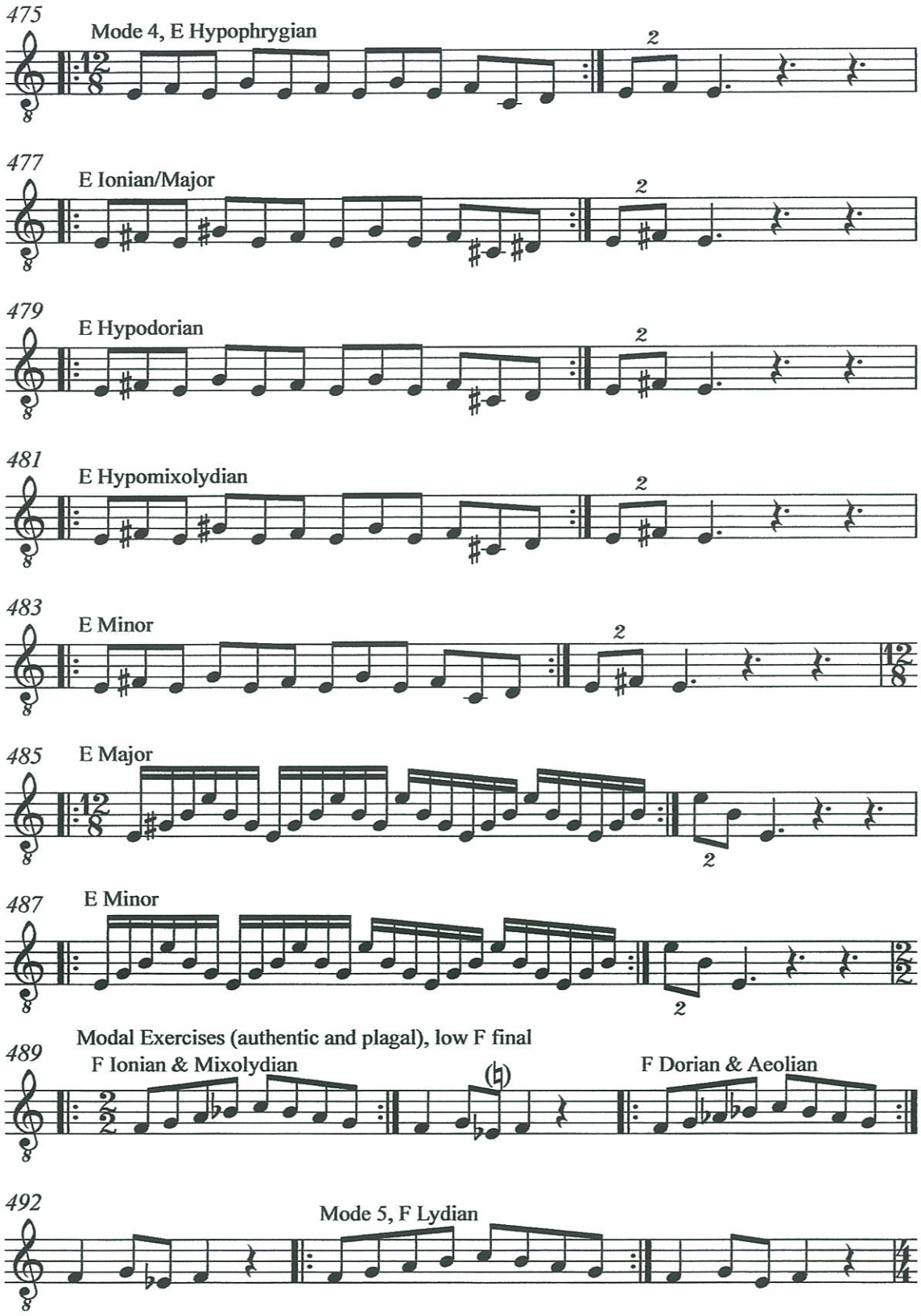
E Dorian & Aeolian
430
Mode 3, E Phrygian
Practice in both 3/4 and 6/8
432
E Ionian & Mixolydian
E Dorian
435
Mode 3, E Phrygian
438
E Ionian & Mixolydian
440
E Dorian
442
Mode 3, E Phrygian
444
E Aeolian
446
E Ionian
E Dorian & Aeolian

V.S.


449
Mode 3, E Phrygian
452
E Mixolydian
E Ionian
455
E Dorian
458
Mode 3, E Phrygian
461
Mode 4, E Hypophrygian
464
E Mixolydian
467
E Aeolian
470
E Dorian
473
Mode 3, E Phrygian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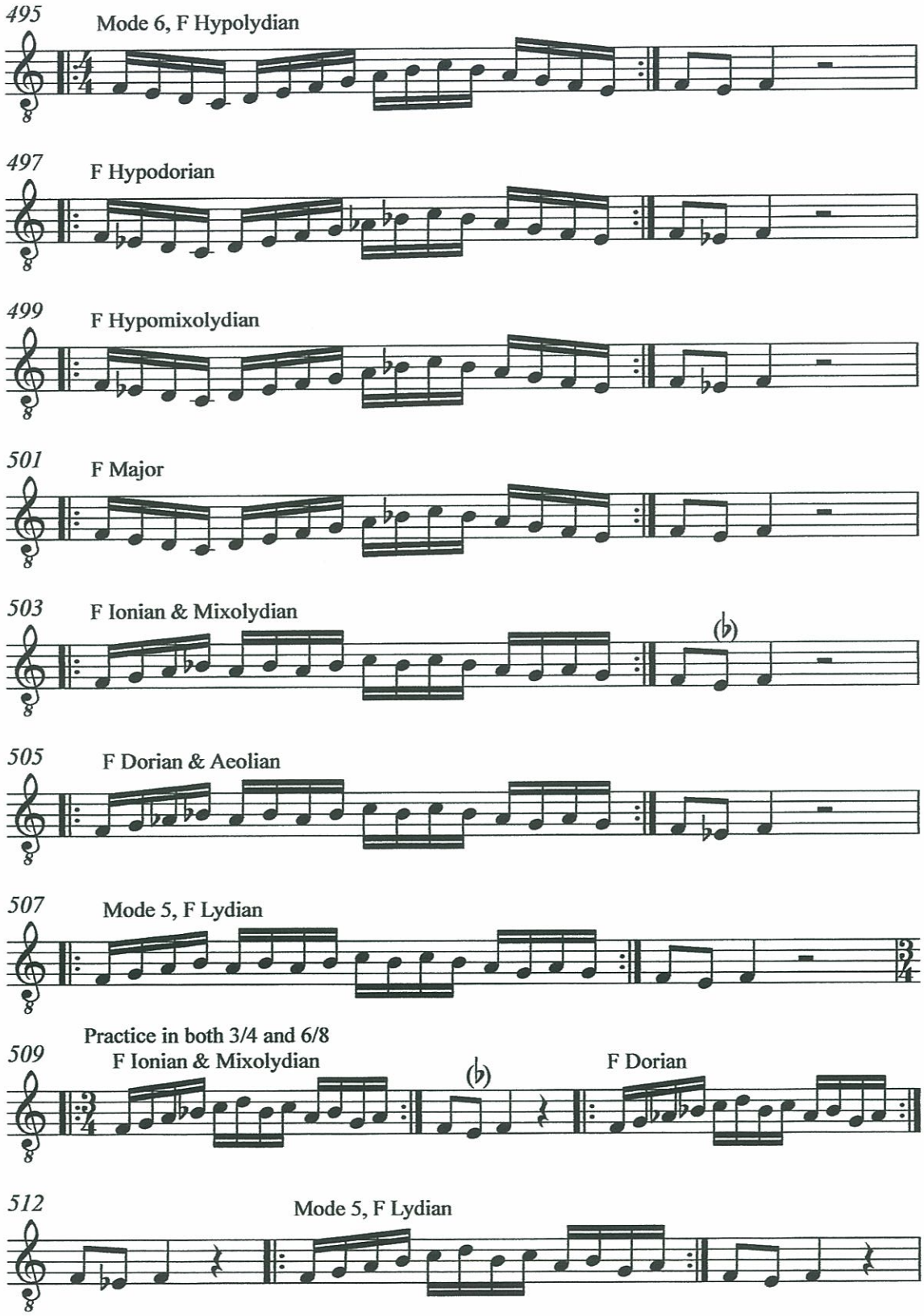
Mode 4, E Hypophrygian
477
E Ionian/Major
479
E Hypodorian
481
E Hypomixolydian
483
E Minor
485
E Major
487
E Minor
Modal Exercises (authentic and plagal), low F final
489
F Ionian & Mixolydian
F Dorian & Aeolian
492
Mode 5, F Lydian

V.S.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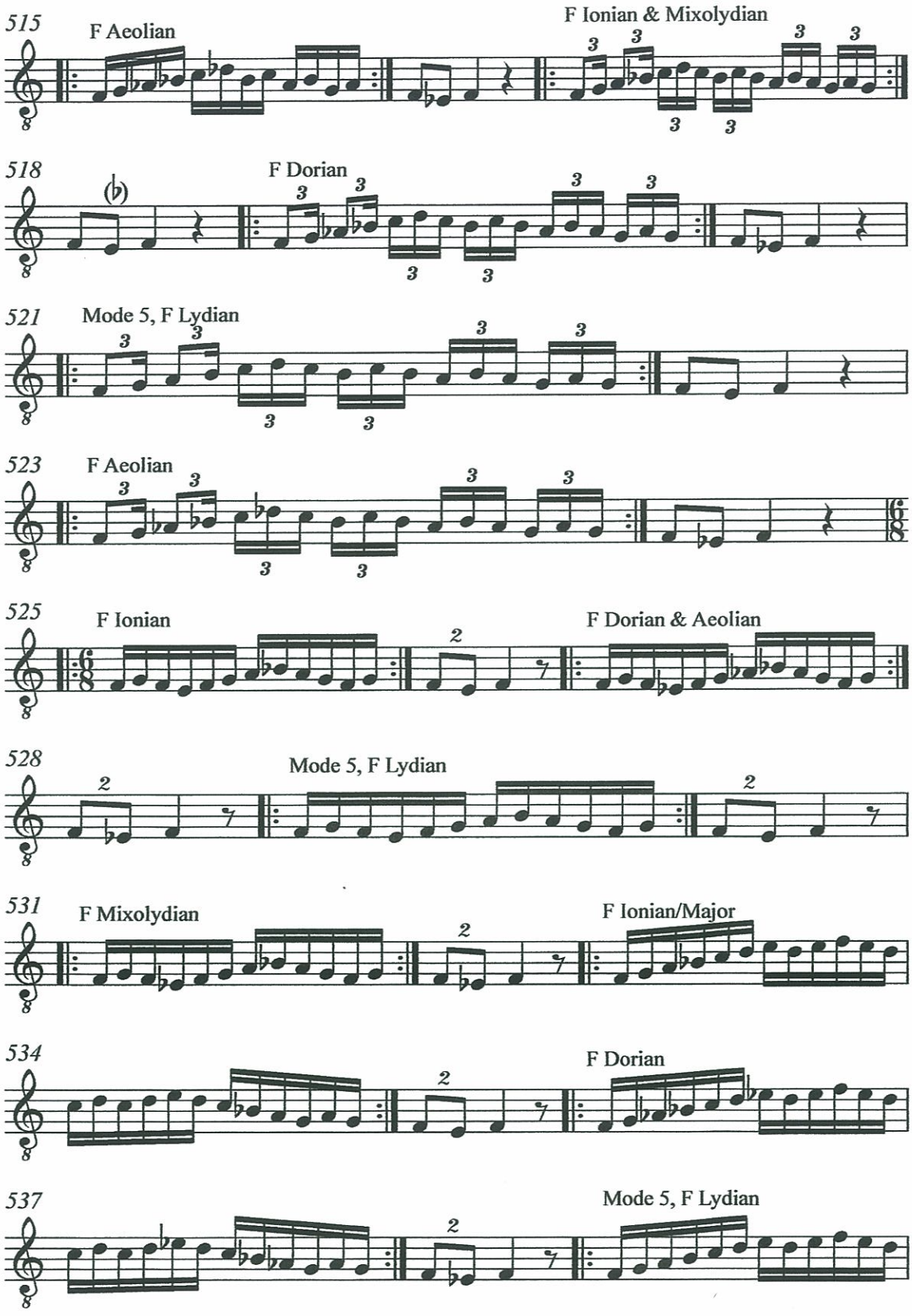
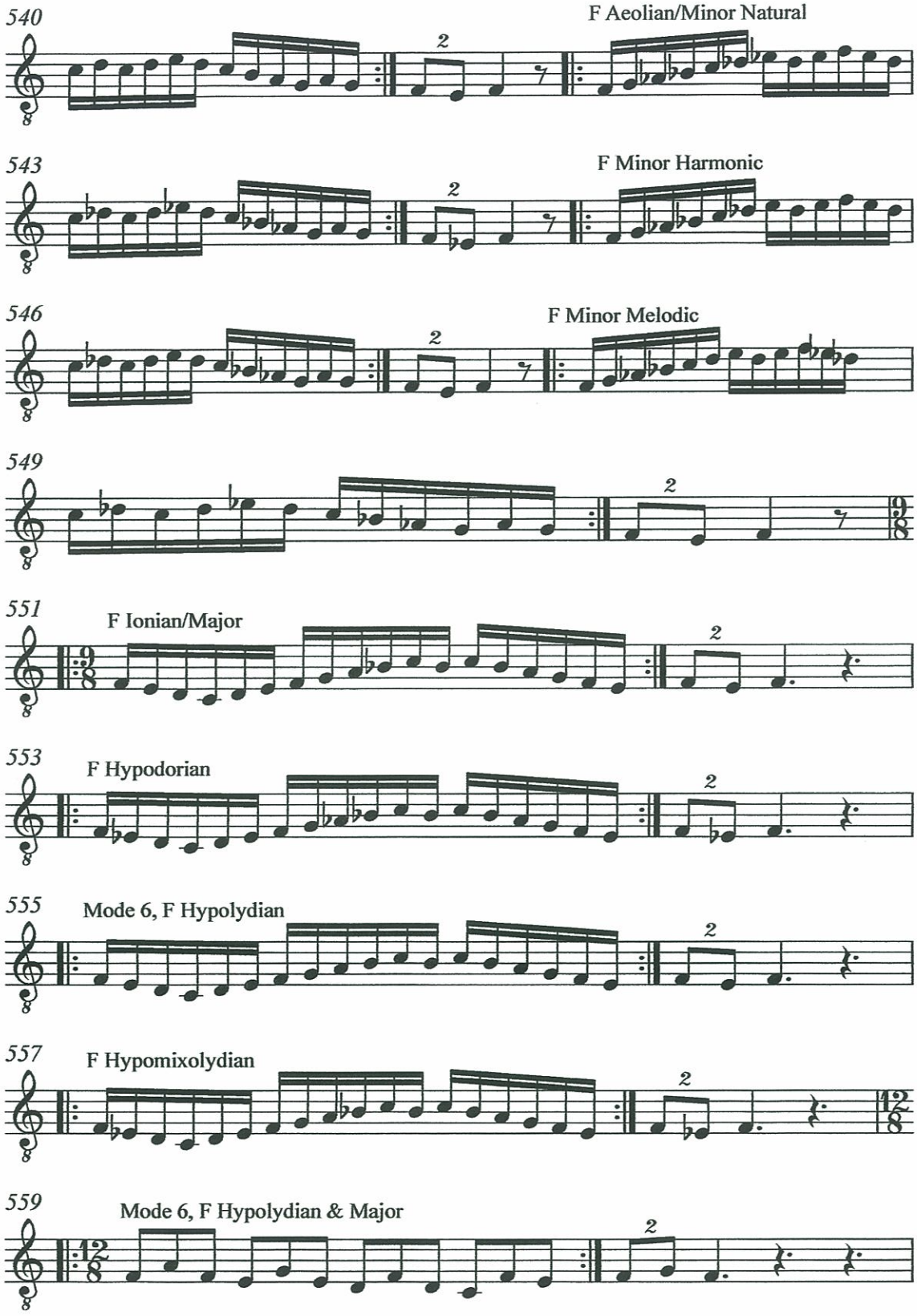
Mode 6, F Hypolydian
497
F Hypodorian
499
F Hypomixolydian
501
F Major
503
F Ionian & Mixolydian
505
F Dorian & Aeolian
507
Mode 5, F Lydian
Practice in both 3/4 and 6/8
509
F Ionian & Mixolydian
F Dorian
512
Mode 5, F Lydian


515
F Aeolian
F Ionian & Mixolydian
518
F Dorian
521
Mode 5, F Lydian
523
F Aeolian
525
F Ionian
F Dorian & Aeolian
528
Mode 5, F Lydian
531
F Mixolydian
F Ionian/Major
534
F Dorian
537
Mode 5, F Lydian

V.S.


540
F Aeolian/Minor Natural
543
F Minor Harmonic
546
F Minor Melodic
549
551
F Ionian/Major
553
F Hypodorian
555
Mode 6, F Hypolydian
557
F Hypomixolydian
559
Mode 6, F Hypolydian & Major

561 F Hypodorian

563 F Hypomixolydian

565 F Minor

567 Mode 6, F Hypolydian & Major

569 F Hypodorian

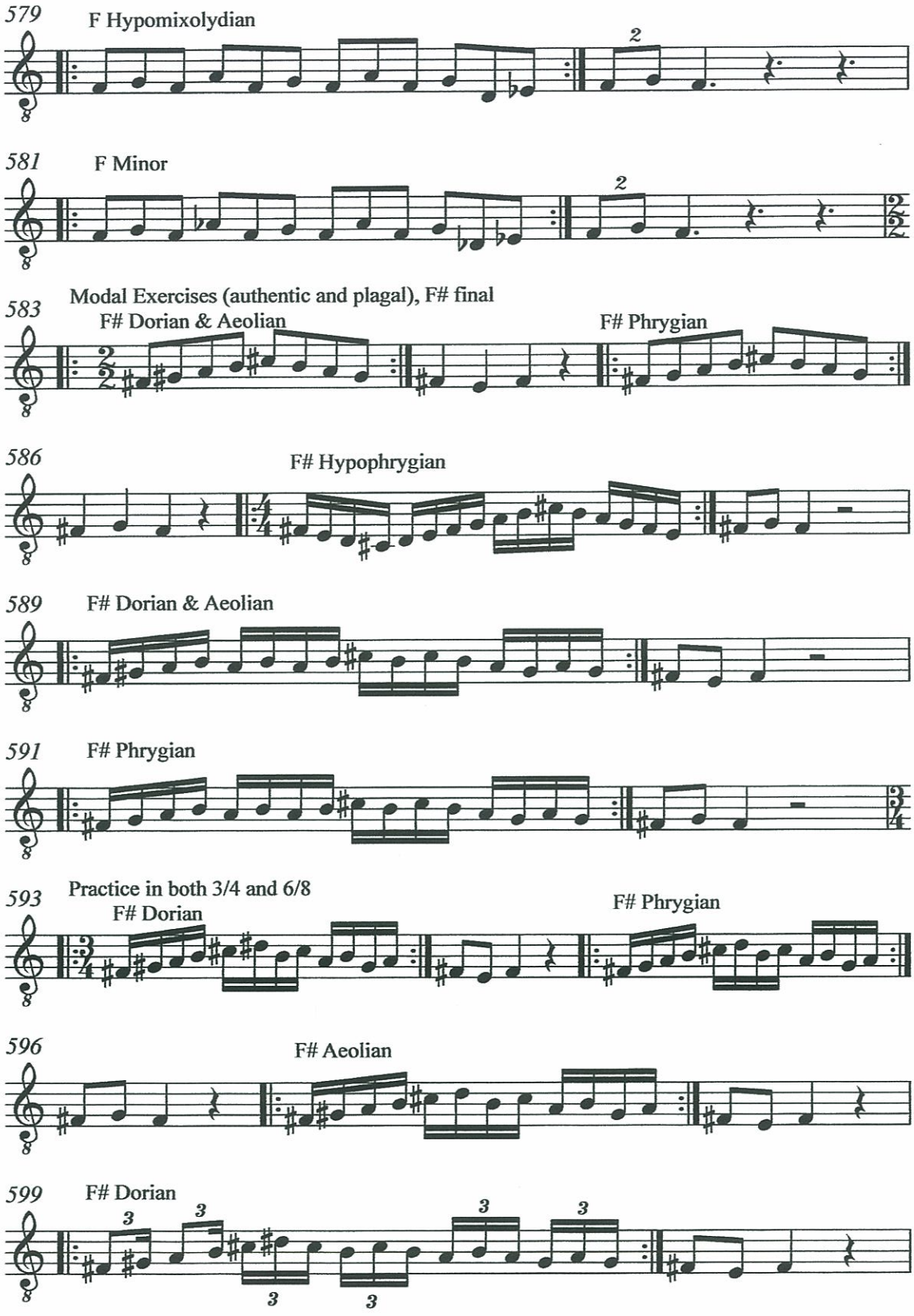
571 F Hypomixolydian

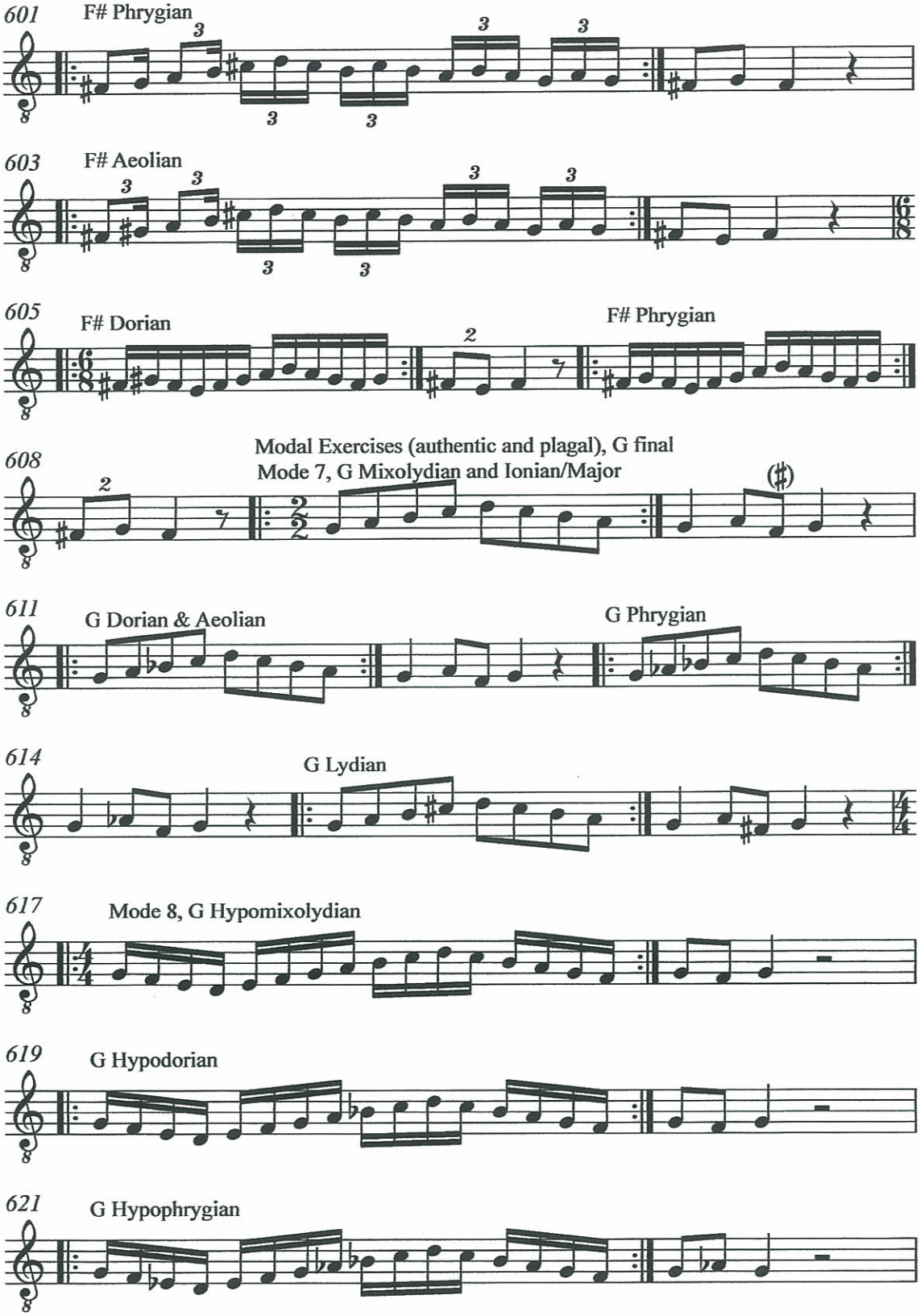
573 F Minor

575 Mode 6, F Hypolydian & Major

577 F Hypodorian

V.S.


579
F Hypomixolydian
581
F Minor
583
Modal Exercises (authentic and plagal), F# final
F# Dorian & Aeolian
F# Phrygian
586
F# Hypophrygian
589
F# Dorian & Aeolian
591
F# Phrygian
593
Practice in both 3/4 and 6/8
F# Dorian
F# Phrygian
596
F# Aeolian
599
F# Dorian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F# Phrygian
603
F# Aeolian
605
F# Dorian
F# Phrygian
608
Modal Exercises (authentic and plagal), G final
Mode 7, G Mixolydian and Ionian/Major
611
G Dorian & Aeolian
G Phrygian
614
G Lydian
617
Mode 8, G Hypomixolydian
619
G Hypodorian
621
G Hypophrygian

V.S.

623 G Hypolydian

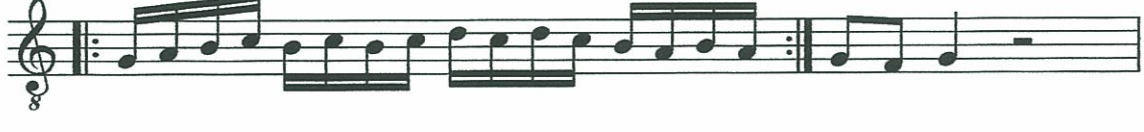
625 G Aeolian/Minor Natural

627 G Minor Harmonic

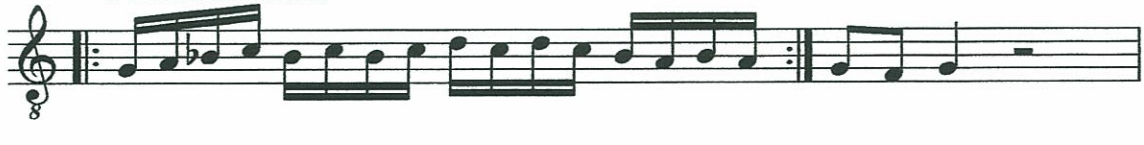
629 G Minor Melodic

631 G Ionian/Major

633 Mode 7, G Mixolydian

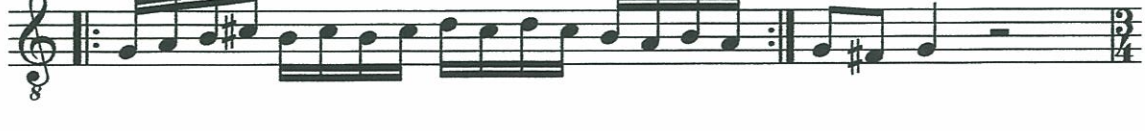


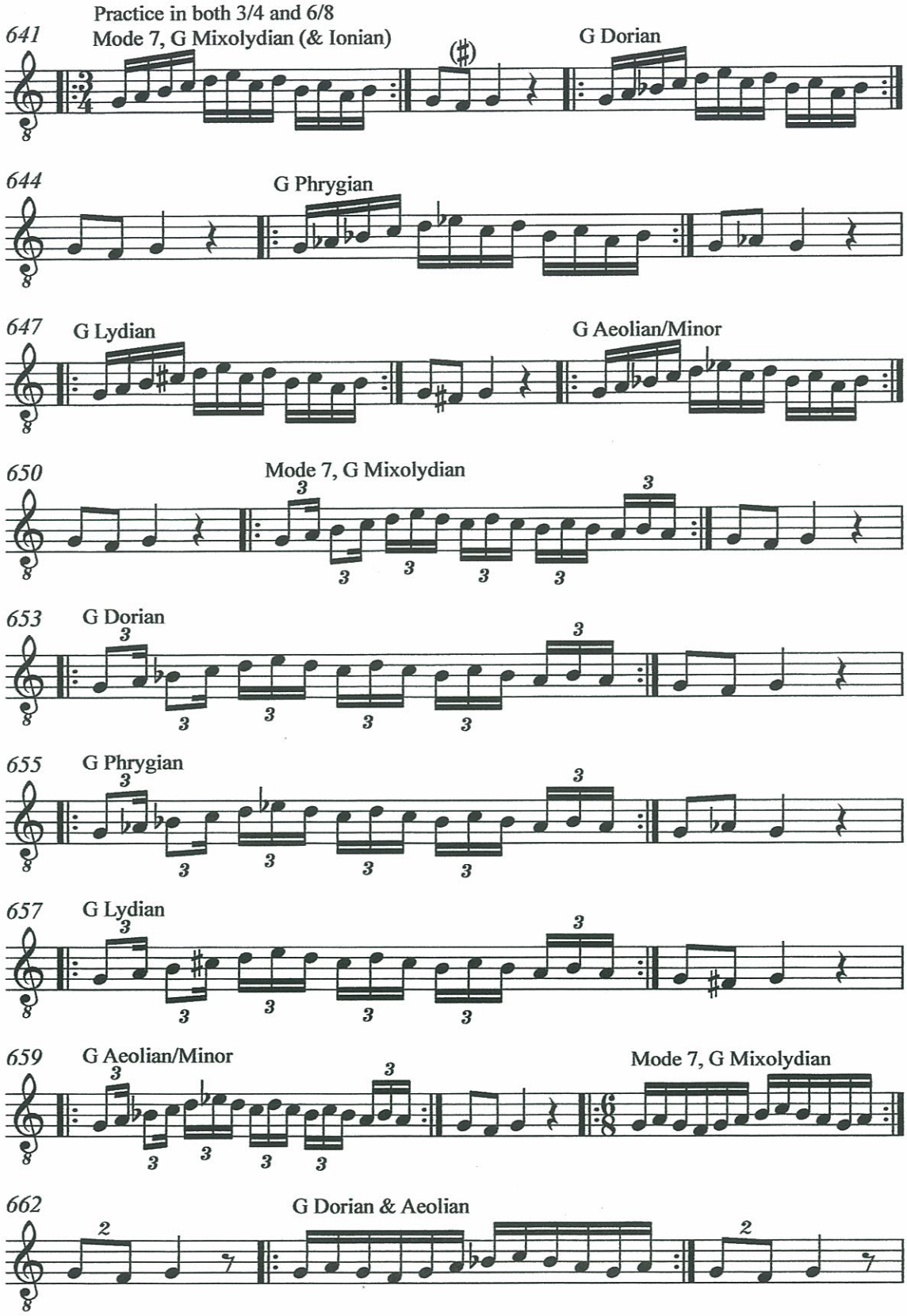
635 G Dorian & Aeolian



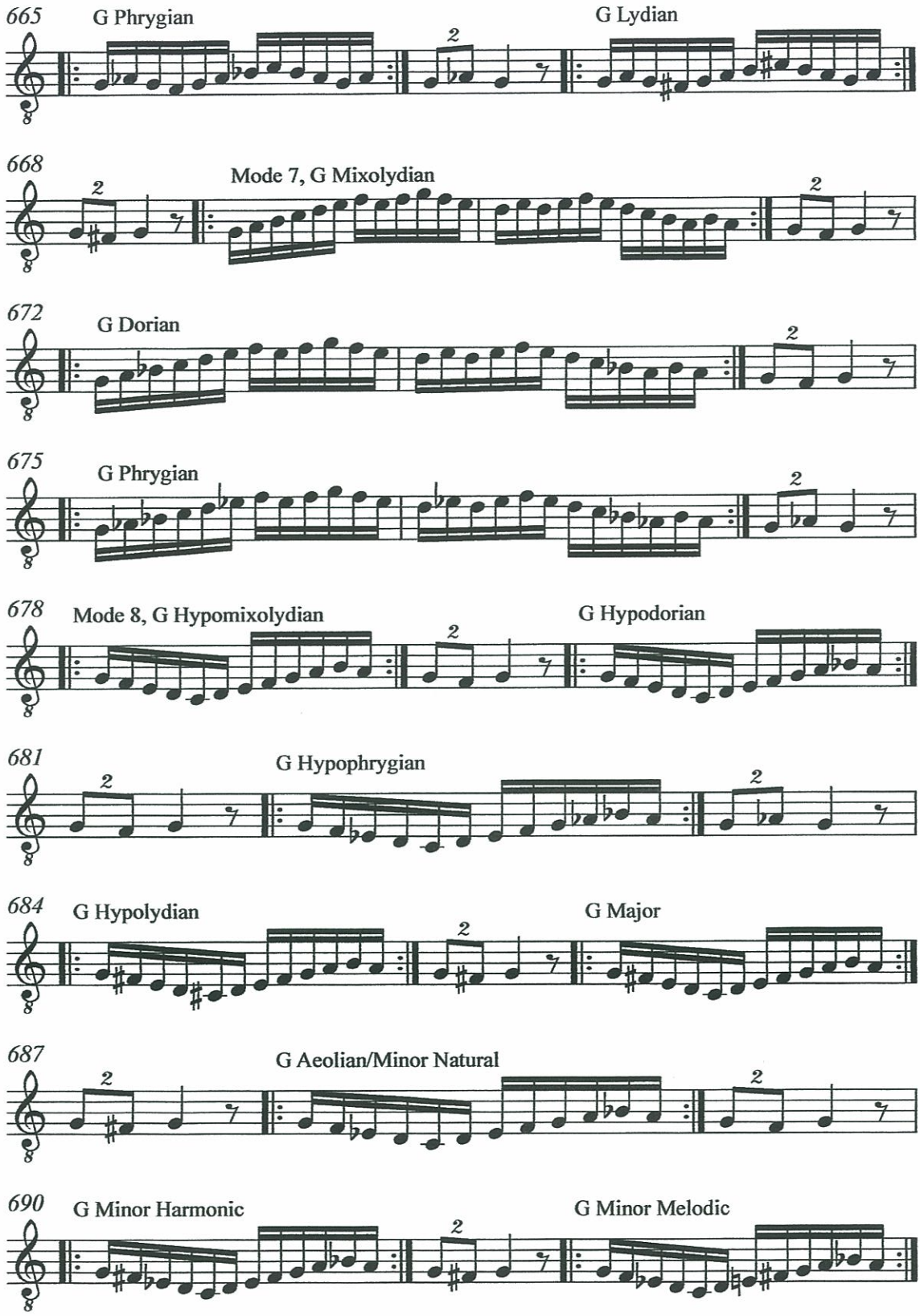
637 G Phrygian

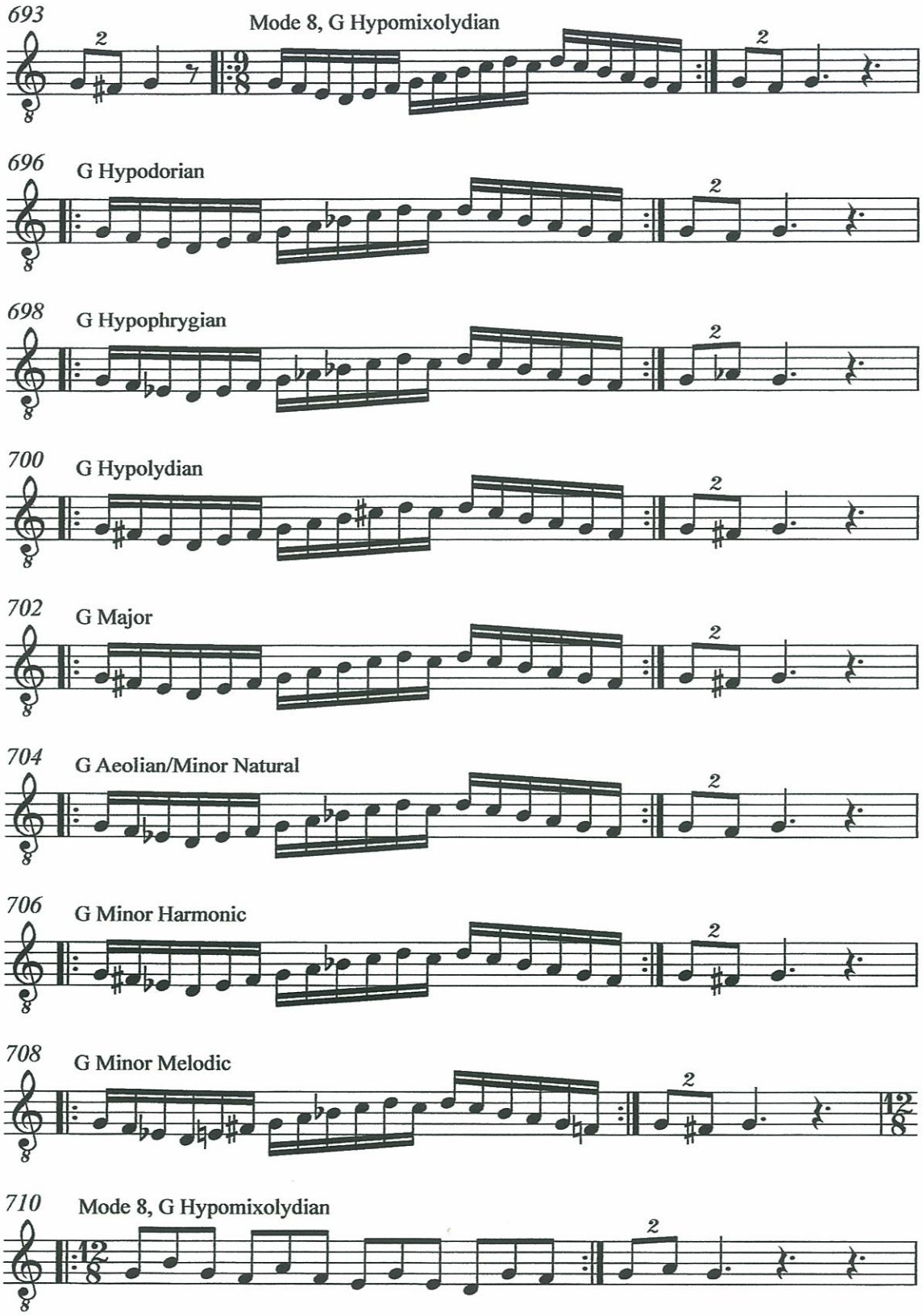
639 G Lydian




Practice in both 3/4 and 6/8
641
Mode 7, G Mixolydian (& Ionian)
G Dorian
644
G Phrygian
647
G Lydian
G Aeolian/Minor
650
Mode 7, G Mixolydian
653
G Dorian
655
G Phrygian
657
G Lydian
659
G Aeolian/Minor
Mode 7, G Mixolydian
662
G Dorian & Aeolian

V.S.


665
G Phrygian
G Lydian
668
Mode 7, G Mixolydian
672
G Dorian
675
G Phrygian
678
Mode 8, G Hypomixolydian
G Hypodorian
681
G Hypophrygian
684
G Hypolydian
G Major
687
G Aeolian/Minor Natural
690
G Minor Harmonic
G Minor Melodic


693
Mode 8, G Hypomixolydian
696
G Hypodorian
698
G Hypophrygian
700
G Hypolydian
702
G Major
704
G Aeolian/Minor Natural
706
G Minor Harmonic
708
G Minor Melodic
710
Mode 8, G Hypomixolydian

V.S.

712 G Hypolydian & Major

714 G Hypodorian

716 G Hypophrygian

718 G Minor

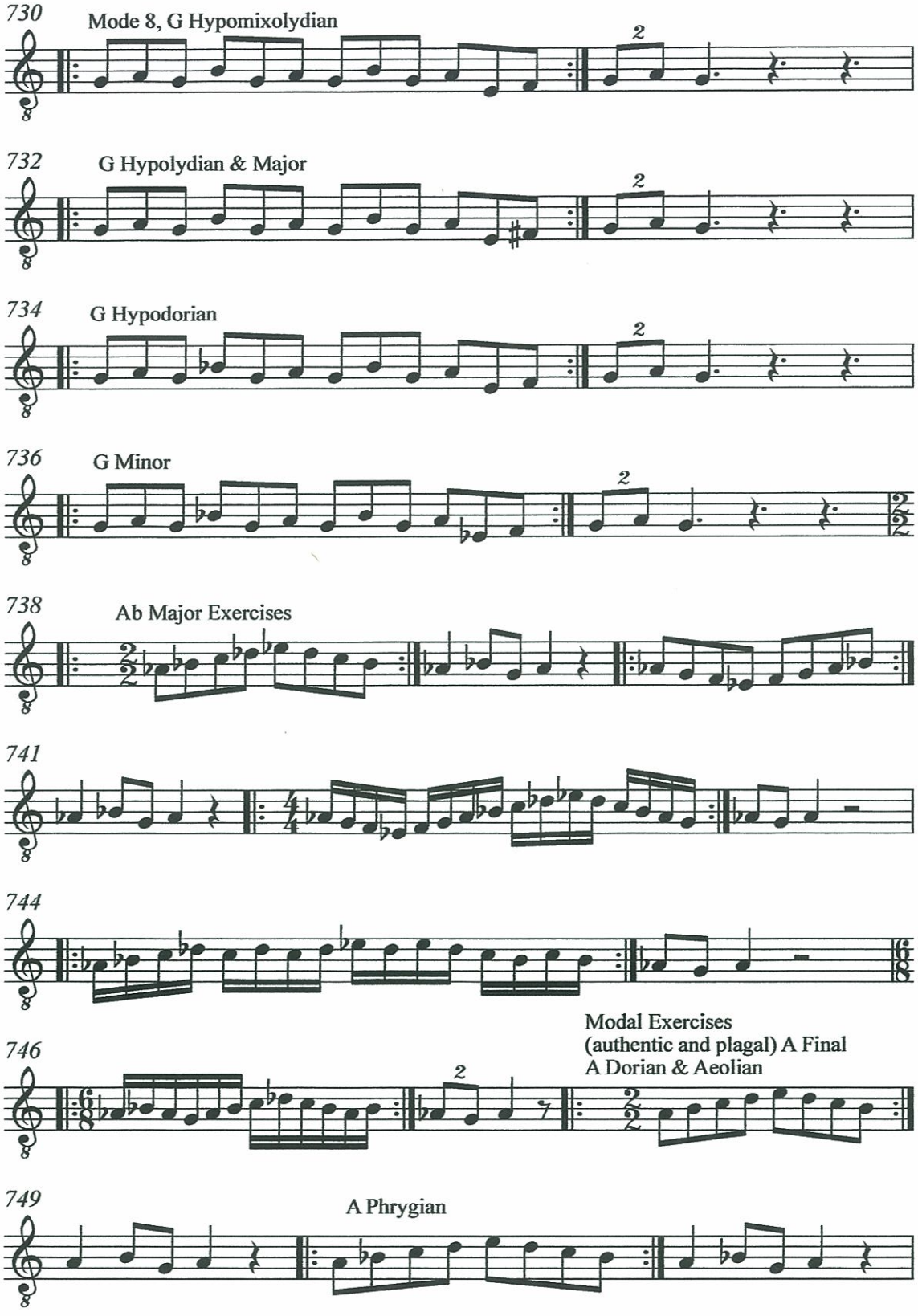
720 Mode 8, G Hypomixolydian

722 G Hypolydian & Major

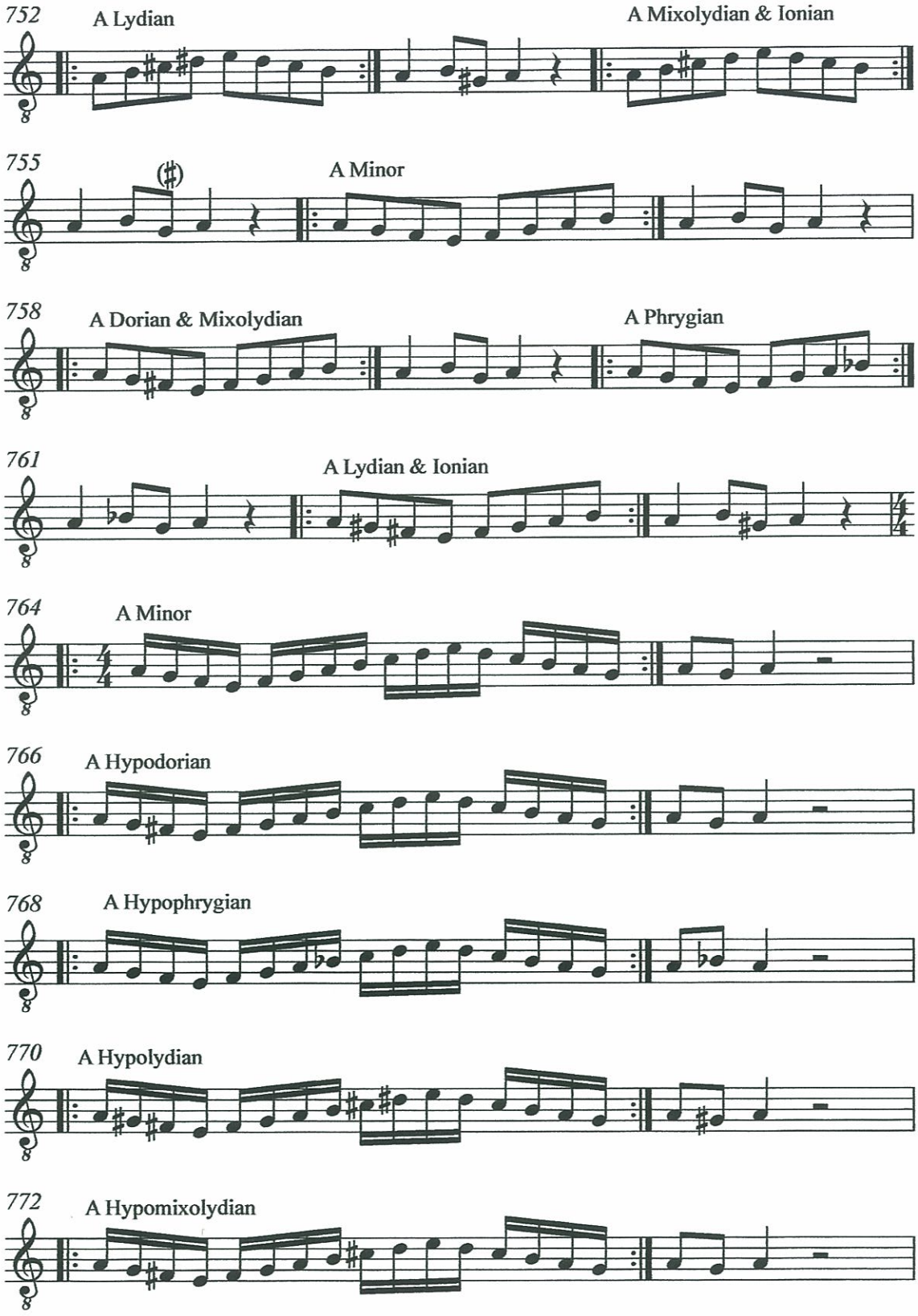
724 G Hypodorian

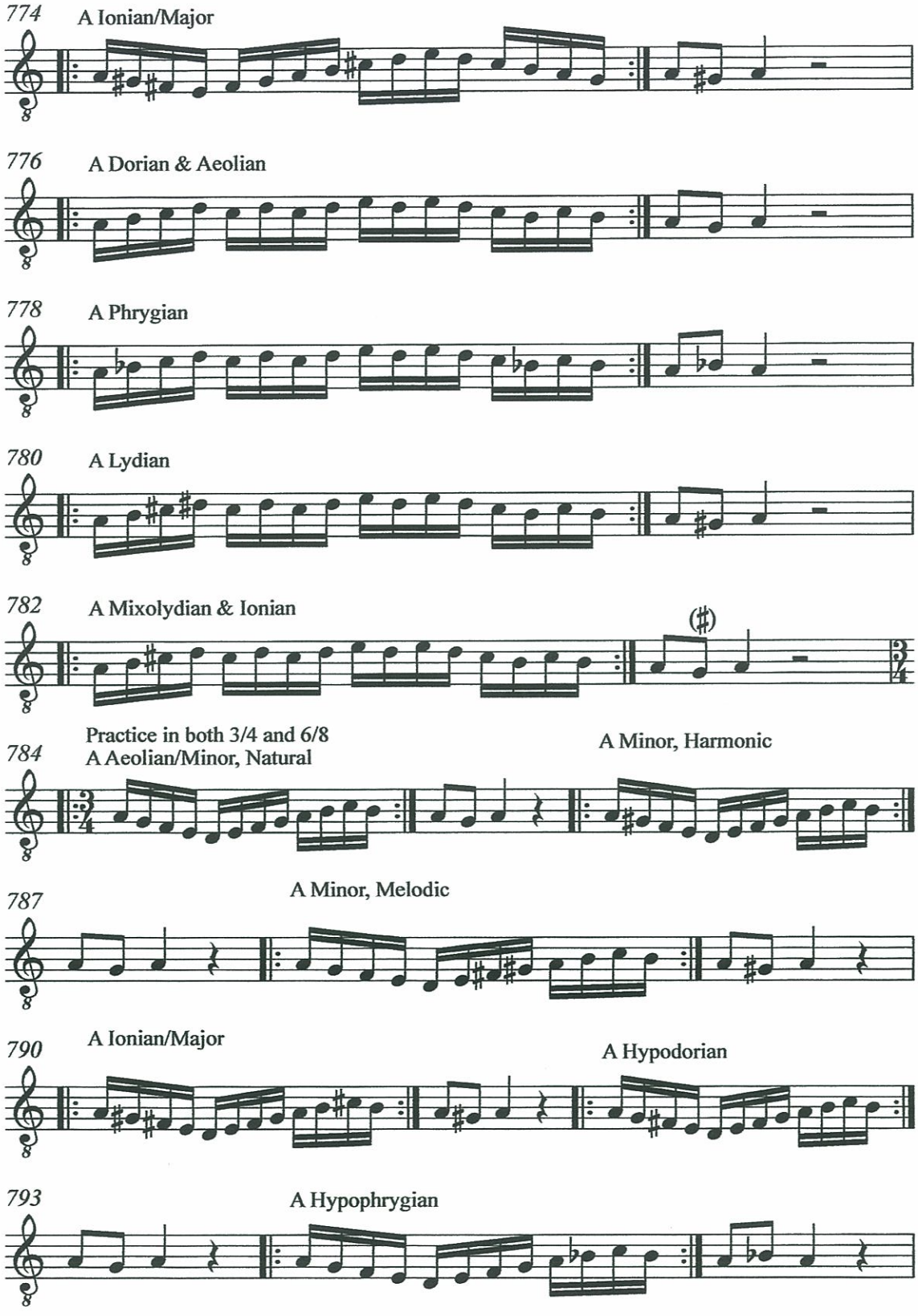
726 G Hypophrygian

728 G Minor

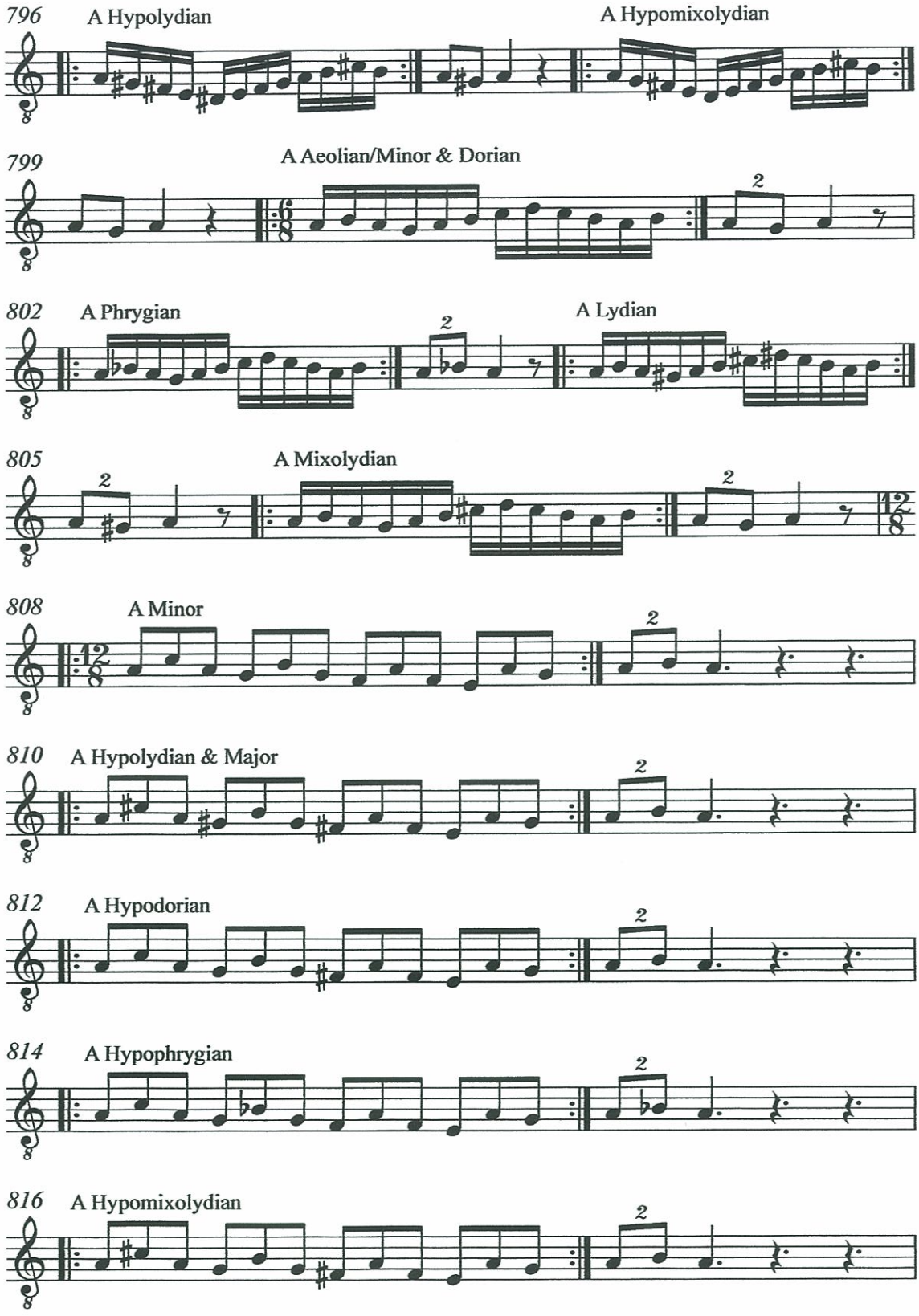

730
Mode 8, G Hypomixolydian
732
G Hypolydian & Major
734
G Hypodorian
736
G Minor
738
Ab Major Exercises
741
744
746
Modal Exercises
(authentic and plagal) A Final
A Dorian & Aeolian
749
A Phrygian

V.S.


752
A Lydian
A Mixolydian & Ionian
755
A Minor
758
A Dorian & Mixolydian
A Phrygian
761
A Lydian & Ionian
764
A Minor
766
A Hypodorian
768
A Hypophrygian
770
A Hypolydian
772
A Hypomixolydian


774
A Ionian/Major
776
A Dorian & Aeolian
778
A Phrygian
780
A Lydian
782
A Mixolydian & Ionian
Practice in both 3/4 and 6/8
A Aeolian/Minor, Natural
784
A Minor, Harmonic
A Minor, Melodic
787
A Ionian/Major
790
A Hypodorian
A Hypophrygian
793

V.S.


796
A Hypolydian
A Hypomixolydian
799
A Aeolian/Minor & Dorian
802
A Phrygian
A Lydian
805
A Mixolydian
808
A Minor
810
A Hypolydian & Major
812
A Hypodorian
814
A Hypophrygian
816
A Hypomixolydian

818 A Minor

820 A Hypolydian and Major

822 A Hypodorian

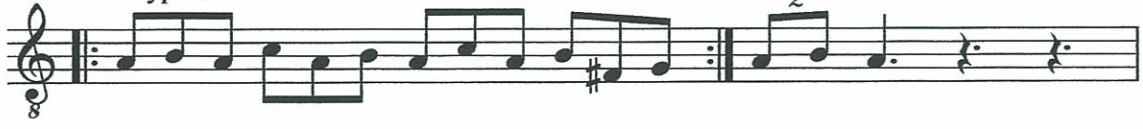
824 A Hypophrygian

826 A Hypomixolydian

828 A Minor

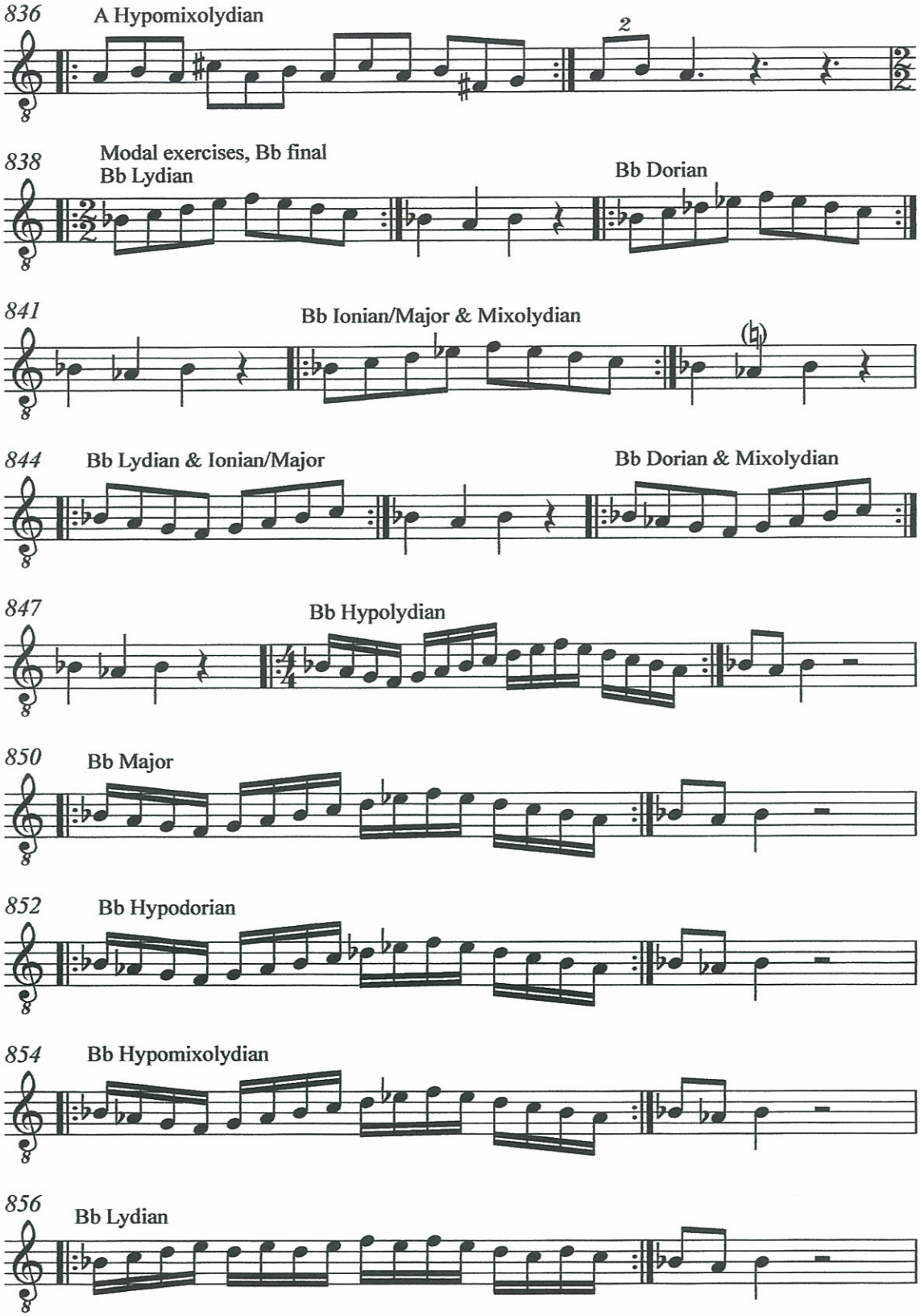
830 A Hypolydian and Major

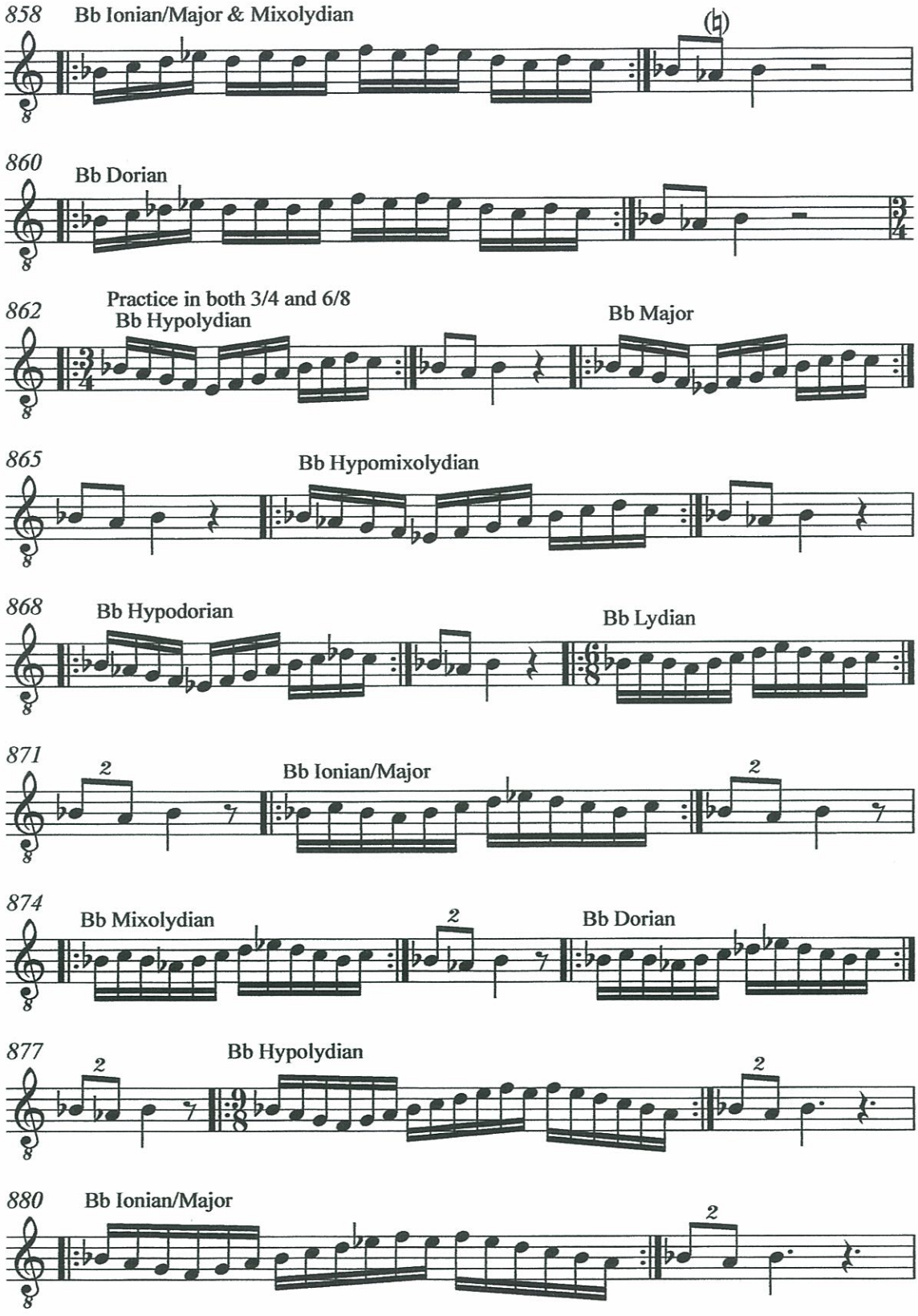
832 A Hypodorian



834 A Hypophrygian

V.S.


836
A Hypomixolydian
2
838
Modal exercises, Bb final
Bb Lydian
Bb Dorian
841
Bb Ionian/Major & Mixolydian
844
Bb Lydian & Ionian/Major
Bb Dorian & Mixolydian
847
Bb Hypolydian
850
Bb Major
852
Bb Hypodorian
854
Bb Hypomixolydian
856
Bb Lydian


858
Bb Ionian/Major & Mixolydian
860
Bb Dorian
862
Practice in both 3/4 and 6/8
Bb Hypolydian
Bb Major
865
Bb Hypomixolydian
868
Bb Hypodorian
Bb Lydian
871
Bb Ionian/Major
874
Bb Mixolydian
Bb Dorian
877
Bb Hypolydian
880
Bb Ionian/Major

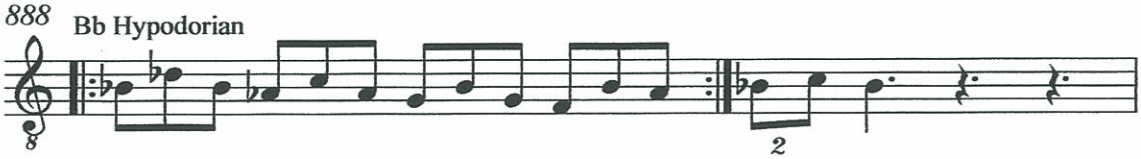
V.S.

882 Bb Hypomixolydian

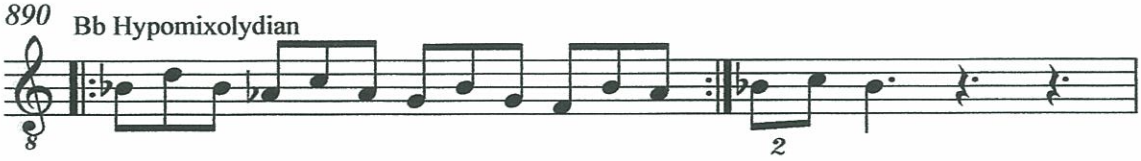
884 Bb Hypodorian

886 Bb Hypolydian and Major

888 Bb Hypodorian



890 Bb Hypomixolydian

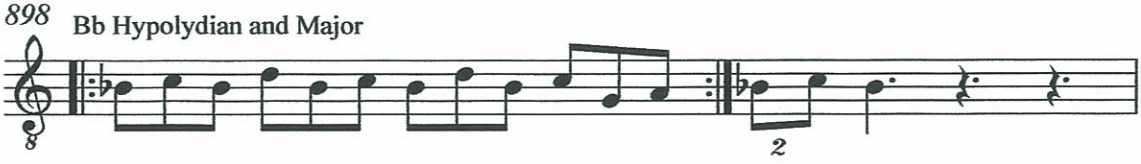


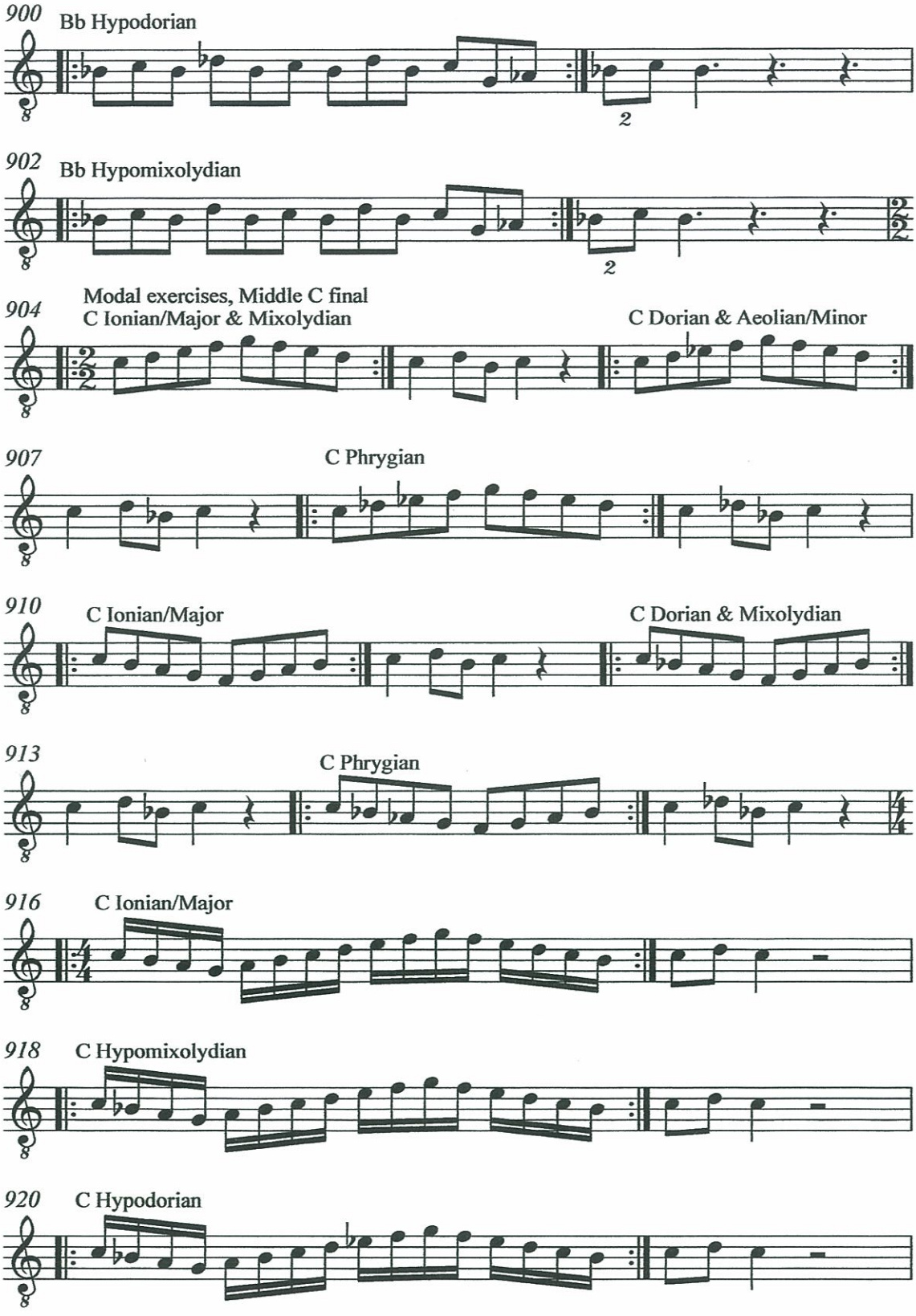
892 Bb Hypolydian and Major

894 Bb Hypodorian

896 Bb Hypomixolydian

898 Bb Hypolydian and Major




900
Bb Hypodorian
902
Bb Hypomixolydian
904
Modal exercises, Middle C final
C Ionian/Major & Mixolydian
C Dorian & Aeolian/Minor
907
C Phrygian
910
C Ionian/Major
C Dorian & Mixolydian
913
C Phrygian
916
C Ionian/Major
918
C Hypomixolydian
920
C Hypodorian

V.S.

922 C Aeolian/Minor Natural

924 C Aeolian/Minor Harmonic

926 C Aeolian/Minor Melodic

928 C Hypophrygian

930 C Ionian/Major & Mixolydian

932 C Dorian & Aeolian/Minor

934 C Phrygian

Practice in both 3/4 and 6/8

936 C Ionian/Major

C Hypodorian

939 C Hypophrygian

942 C Hypolydian C Hypomixolydian

945 C Minor Natural

948 C Minor Harmonic C Minor Melodic

951 Practice in both 3/4 and 6/8
C Ionian/Major

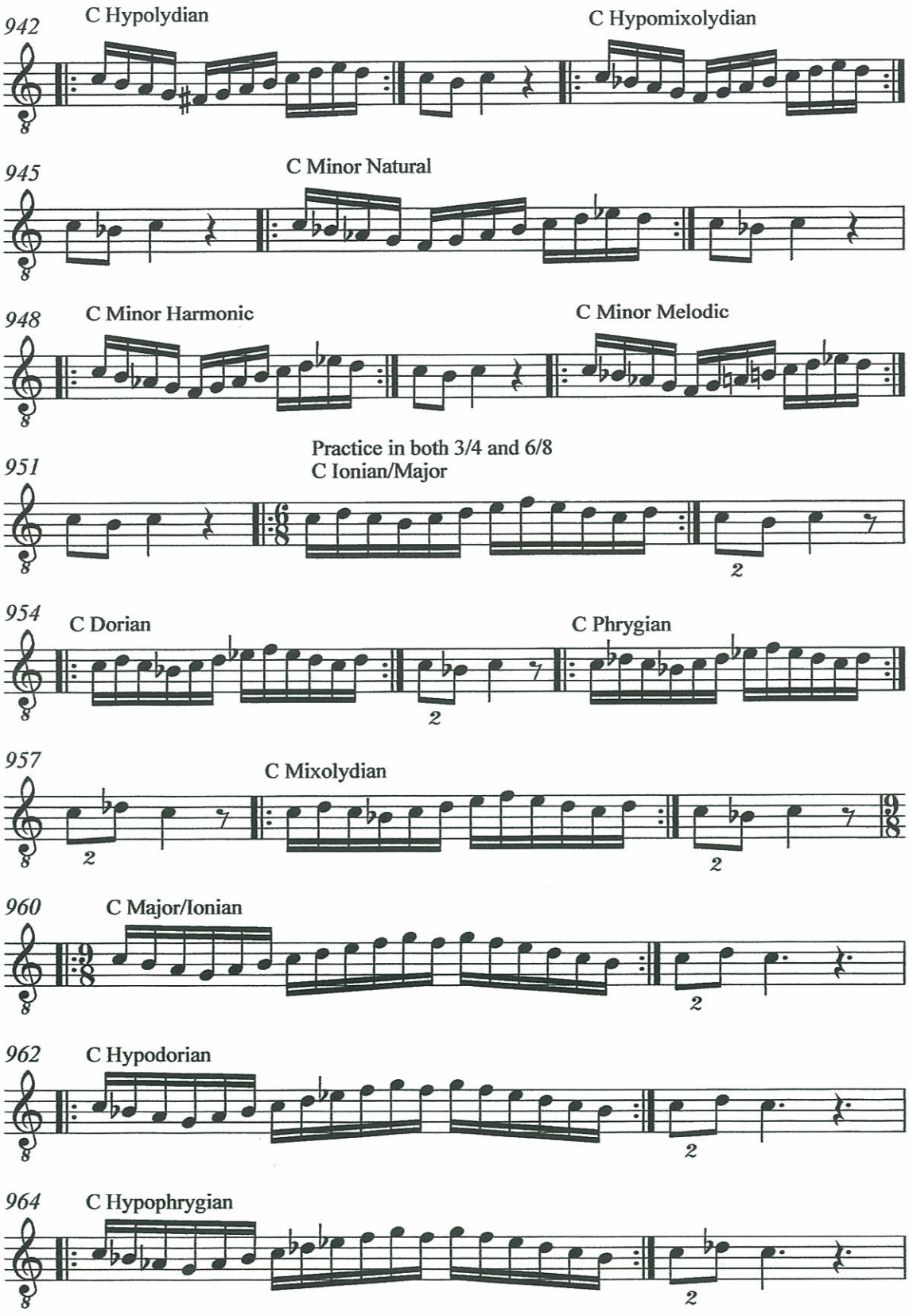
954 C Dorian C Phrygian

957 C Mixolydian

960 C Major/Ionian

962 C Hypodorian

964 C Hypophrygian



V.S.

966 C Hypomixolydian

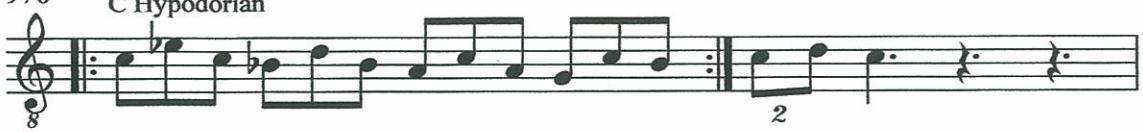
968 C Minor Natural

970 C Minor Harmonic

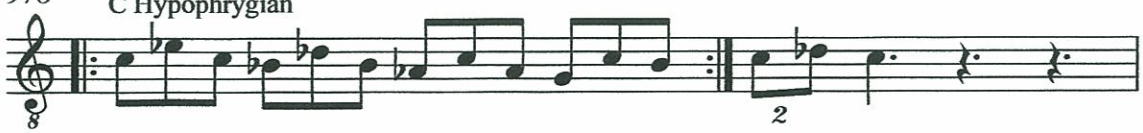
972 C Minor Melodic

974 C Ionian/Major & Hypolydian

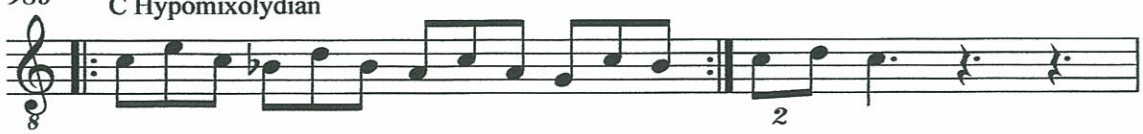
976 C Hypodorian



978 C Hypophrygian



980 C Hypomixolydian



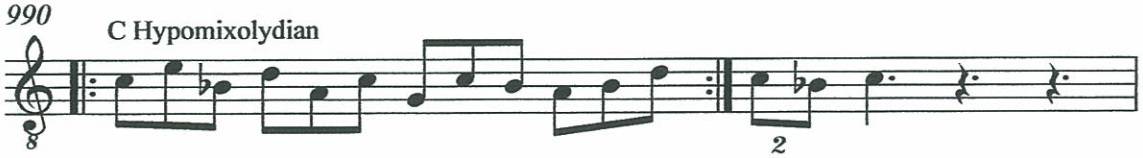
982 C Minor

984 C Ionian/Major & Hypolydian

986 C Hypodorian

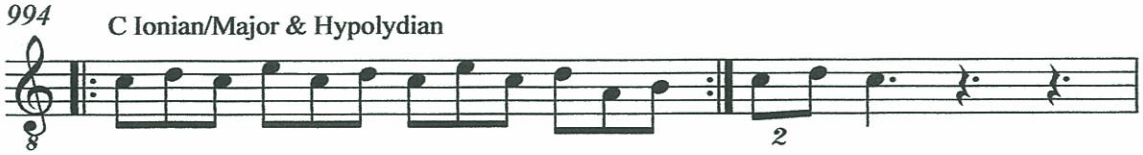
988 C Hypophrygian

990 C Hypomixolydian

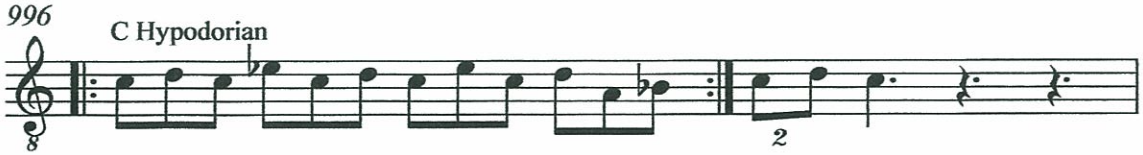


992 C Minor

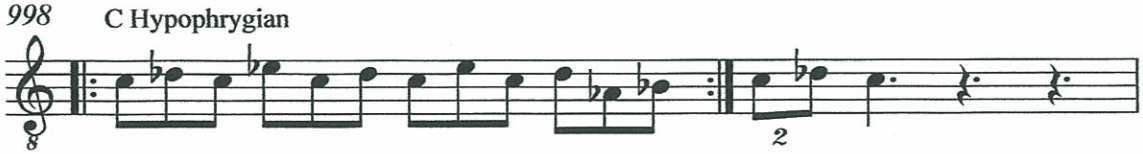
994 C Ionian/Major & Hypolydian



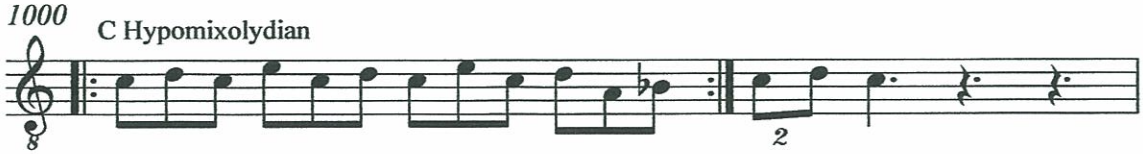
996 C Hypodorian



998 C Hypophrygian



1000 C Hypomixolydian



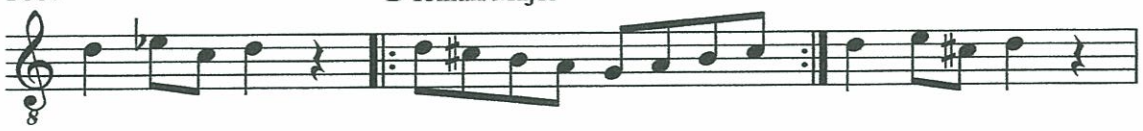
V.S.

1002 C Minor

1004 Modal exercises, D final
Mode 1, D Dorian

D Phrygian

1007 D Ionian/Major



1010 Mode 1, D Dorian & Mixolydian

D Phrygian

1013 D Lydian

1016 Mode 2, D Hypodorian

1018 D Hypophrygian

1020 Mode 1, D Dorian

1022 D Phrygian

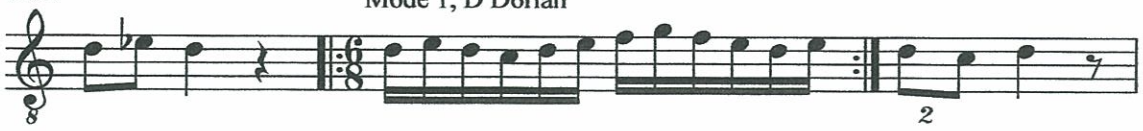
Practice in both 3/4 and 6/8
Mode 2, D Hypodorian

1024

D Hypophrygian

Practice in both 3/4 and 6/8
Mode 1, D Dorian

1027



1030 D Phrygian

1032 Mode 2, D Hypodorian

1034 D Hypophrygian

1036 Mode 2, D Hypodorian

1038 D Hypophrygian

1040 Mode 2, D Hypodorian

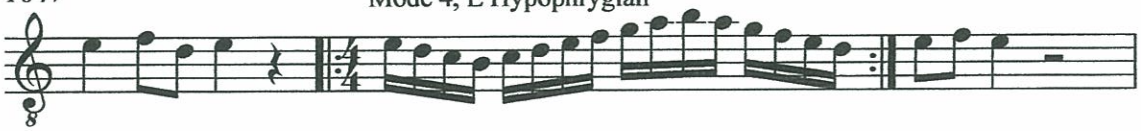
1042 D Hypophrygian

V.S.

1044 Mode 3, E Phrygian

Mode 3, E Phrygian

1047 Mode 4, E Hypophrygian

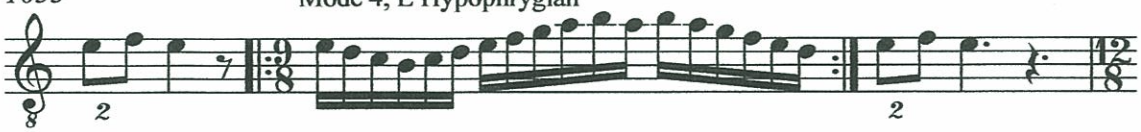


1050 Mode 3, E Phrygian

1052 Practice in both 3/4 and 6/8
Mode 4, E Hypophrygian

Practice in both 3/4 and 6/8
Mode 3, E Phrygian

1055 Mode 4, E Hypophrygian



1058 Mode 4, E Hypophrygian

1060 Mode 4, E Hypophrygian

EPILOGUE

The purpose of this work is to provide the historical context of the douçaine's use from the thirteenth to the seventeenth centuries, while giving modern musicians the tools to insure that the instrument is used and valued by contemporary musicians, thus avoiding a second extinction. Several of the douçaine's relatives with similarly narrow ranges, such as the recorder, Armenian duduk,[1] and Spanish *dolzaina,* rose tremendously in popularity during the twentieth century outside of the early music field. The incorporation of these other instruments within educational systems, and folk and popular musics has contributed to their sustained popularity. The Armenian duduk provides an excellent example, as it is soft and double reed like the douçaine. The duduk is closely associated with traditional music of the Armenian people and is so popular and such an integral part of Armenian culture, that there is little danger of the instrument becoming extinct. Furthermore, the duduk appears in blockbuster contemporary film scores such as *Gladiator* and *The Last Temptation of Christ,*[2] adding to its use and popularity. The Spanish *dolzaina,* meanwhile, is still very popular in Spain, appearing in both traditional

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[1] Andy Nercessian, *The Duduk and National Identity in Armenia.* (Lanham: Scarecrow Press, 2001), 117. The duduk is somewhat similar to the douçaine, sharing characteristics such as a cylindrical bore, large double reed, dark tone color and eight front holes. However, the fingering system is completely different. The finger holes are quite large in comparison to the douçaine, and there are no cross fingerings on the duduk.

[2] Ibid., 3.

and contemporary music.[3] The recorder is widely integrated into the American primary educational system and there are many fine professional players. The recorder, Armenian duduk, and Spanish *dolzaina* all have a sustained popularity that, coupled with this work, give hope for the renewed use of the douçaine, rather than a second extinction.

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[3] While it is a double reed instrument sharing the same Latin root as the douçaine, the Spanish dolzaina is conical bored, high-pitched, and loud.

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