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# PERFORMANCE PRACTICE BIBLIOGRAPHY (1989)

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## SURVEYS

### General Studies

#### Historical Overviews


* Containing as well a number of earlier citations.

177

The most comprehensive summary of performance practice to date, with valuable selective bibliographies accompanying each article. Many of the authors look to the future as well as the past, to questions still open, to research that remains to be done. The sheer concentration of data, however, allows little space for showing the application of performance information to musical repertory.

**MONODY: 9th-13th CENTURIES**

**General Studies**

**Surveys**


What is symbolical, what is everyday reality in medieval depictions? Devils and bestiaries, for example, may more nearly mirror daily life, and consequently come closer to depicting actual musical practice.


We know little about the nature of medieval sounds or the occasions for which music was performed. A particular kind of music could differ considerably, depending upon its locale and date. Clues are to be found in liturgical books, in literary writings, in iconographical sources (many of which, to be sure, are allegorical or non-realistic), as well as in certain forms of ethnic performances today.

The performer should attempt to reconstruct the social and cultural background of a work (instruments, for example, may have been associated with the "lower" styles). It is also advisable to become familiar with original sources, considering the writing habits (punctuation, slashes, etc.) of a given scribe. Musical relations to the text (the placement of certain melodic formulas or pitch levels) need to be looked into. Finally, it seems apparent that the originals were very likely only imperfectly set down by the scribes.

Forms and Genres

Chant


Research into neume notations (9th-10th centuries) indicates the stressing of certain notes by letters, episemas, or changes of neume shapes. In this one finds a remarkable degree of agreement among manuscripts, even of wide separation geographically. Still, while different note lengths seem likely, it remains problematical to reconcile the evidence with a proportional scheme. By the 13th century equal notes prevailed, yet a few chants (such as *Veni sancte* in a 14th-century missal) were mensural. Later, the Medicean Edition (1614-15) seems to have been conceived mensurally.

Mozarabic Chant


By studying specific neume shapes and the groupings of neumes composed to words, one can gain an idea of the rhythm as well as of the modes of chants.

Troubadour, Trouvère Chansons

Tackles the vexed problem of rhythm in monophonic non-liturgical song. Stevens proceeds from an isosyllabic interpretation and rejects entirely the modal rhythmic theory. He feels that medieval musician-poets were primarily attentive to number (which had a far-reaching symbolic significance in medieval thought). "Balancing your lines . . . was the all-important thing," words and music forming a symbiosis, for *Guido "a balanced relationship." Stevens goes over the paleographic, historical, theoretical, and notational evidence, and concludes that the scribes didn't lack a capacity to devise shorts and longs, but simply chose not to. The few pieces written modally in the 13th century seem to represent "a fashionable rewriting" of monosyllabic originals.

**Media**

**Instruments in General**


Consider the problem of classifying string instruments (by form of body, length of neck), and of their variable names. Some are difficult to identify, especially the gittern and citole. Young provides a table showing the dating and provenance of types from the 9th to 15th centuries.


Contains 50 color plates (miniatures of Alfonso) with a detailed description of individual instruments. Traces the Arabic origin of many instruments.


Attempts to schematize the instruments of the Escorial manuscript b.I.2 according to families.

The aerophone on 201-versus (codex b.I.2) has been variously interpreted (as a kind of double flute, a coramuse, etc.); Torres prefers to call it a kind of *gaita*.


Paintings at the Cathedral of Teruel offer the most extensive collection of secular instruments of the 13th century. The collection differs from the devotional portrayals of the *cantigas* manuscripts by presenting instruments more typical of everyday life.


Various geographical regions were represented by differing *instrumentaria*. Spain (e.g. the *cantigas*), Italy (e.g. Landini’s tombstone), and France (e.g. Machaut’s lists) each favored distinctive groups of instruments. Brown sums up the present knowledge concerning particular instruments, while emphasizing the need for more detailed studies. When did certain instruments appear, when did they undergo changes? How do we unravel literary references, such as to the cithara, lyra, or psalterium? When should pictorial evidence be taken at face value?

Keyboard Instruments


Wulfstan’s description (A.D. 994) of the Winchester organ — 26 bellows (12+14), 70 men, 400 pipes, 40 keys — seems to be made of number symbolisms and biblical allusions. James McKinnon has suggested that the account may represent an exaggeration of an existing West-end organ.
String Instruments
Book paintings and cathedral sculptures reveal oval, guitar-like instruments of varying sizes. The essential question is to what extent the representations correspond with real instruments of the time.

Rebecs and fiddles, as seen in miniatures, stained glass, frescoes, stone carvings, reveal some differences, the rebec closer to the lute (also in its playing technique), the fiddle to the guitar. Fiddles, unlike rebecs, were seldom placed on the knee or between the legs. Ravanel further observes the bow or lack of it, and the nature and position of bridges.

From medieval accounts the fiddle was the traditional instrument for estampies, the melody very likely accompanied by a drone. It was at times sung as well, as is indicated by Raimbaut’s adding of a text to Kalenda maya.

Woodwind Instruments
Traces the medieval German terms for Zink (cornett). The olifante (11th, 12th century) was apparently not related.

Medieval (transverse) flutes were wide-bored and thin-walled, and played with stretched fingers. Ehlich estimates from visual representations (a list is provided) a preferred length, a three-8ve range, and a basic pitch of b, c’, or d’.
Percussion Instruments


The writer studied in India with a nakers player, learning the performing technique and history, which he feels allows a fresh view of medieval playing, since crusaders brought back nakers from the Middle East.

Added Notes

Ornamentation


Taking present-day ragas as a model for modes, ornaments, and rhythm the Schola Cantorum Basiliensis is attempting to improvise in a manner that may have been typical of the Middle Ages.


The improvisatory filling out of a melodic framework (a technique that can be learned from present-day Mediterrane an folk art) was most likely quite common in the Middle Ages. Just how such passaggi were realized may be observed in the Robertsbridge or Faenza manuscripts, where predominantly stepwise successions flowing through several beats at a time appear mainly in the upper part. There is little information concerning specific graces (the first ornamental sign appears in the Buxheimer Orgelbuch), but the treatise of *Jerome verbally describes short and long trills, appoggiaturas, mordents, and the vibrato, these not to be placed on a note shorter than a semibreve or on an altered note of a mode.

Altered Notes

Rhythmic Alterations


The cantigas sometimes adhere to a single rhythmic mode, while at other times they mix modes (one cannot rigidly apply the modality of polyphony). Also, each verse needs to be treated autonomously. Fernandez illustrates his points in respect to Cantiga no. 100.

POLYPHONY: 9TH-13TH CENTURIES

General Studies

Surveys

Page, Christopher. "Polyphony before 1400." Cited below as item 25.

Many questions remain unresolved. Was the conductus modal? Here scansion offers an unreliable basis. In St. Martial organum was the upper part conceived as a decoration of the tenor, or was the tenor adapted to a rather evenly flowing upper part? For organum purum should one follow Waite's modal or Reckow's non-modal interpretation, the latter with elongated 5ths and 8ves according to the law of consonances, or Sanders's view that the law of consonances affected only the ends of phrases? Did instruments not participate in sacred polyphony as is seemingly implied by Grocheio's categories? What then of Anon. IV's remark that in organum purum performers rarely cadenced on a 4th unless a string instrument was involved (playing a lower 5th)?

Media

Voices

Notre Dame polyphony was a soloist's art (as is indicated by ordinances, cartularies, and manuscripts). Two to six solo voices were called upon in various distributions: with two, one did the tenor (based in chant), one the organal voice; with six it appears that five could have been on the tenor (which would have been useful for staggered breathing), against one on the organal voice. Elsewhere in Wright's book performance information is often interwoven, for example concerning the spacial context of Notre Dame polyphony (p. 13f); here it is pointed out that polyphony was not performed in an open cathedral, which would have resulted in a muddled sound, but in an enclosed chancel, very likely with curtains and draperies, these especially on high feast days when polyphonic settings were called for.

THE FOURTEENTH CENTURY

General Studies


Singers must have had an acute awareness of tuning, enabling *Marchetto to advocate very small (41 cent) minor 2nds in cadences (e.g. of M6 to 8). These Italian very sharp ("dissonant") major 6ths and 3rds were in distinct contrast to the English relaxed and more euphonious imperfect intervals, already advocated by *Odington. Concerning instrumental participation, the assumption held until recently of instruments on untexted parts is now seriously challenged. Seemingly "unvocal" lines, for one thing, appear in sacred (assumed not to have instruments) as well as in secular works.
Media

Instruments in General

< Brown Howard M. "Instruments [of the Middle Ages]." Cited above as item 13.

Keyboard Instruments


Considers the meaning of the bourdon or teneur pipes mentioned in English prose of the 14th and 15th centuries. In 240 miniatures of the time distinctly longer pipes which may be bourdons are present. *Arnault's treatise refers to fistulas tenoris. And bourdon and teneur pipes are often mentioned in 15th-century Dutch organ building contracts, trompes in those of contemporary France. Marshall interprets especially Arnault's descriptions in terms of what is known about early organs such as that of Halberstadt, and speculates on what the bourdon pipes might have played, e.g. low cantus firmus lines or drones.


An organ did not appear at Notre Dame cathedral until the 14th century (p.143f), and then as a large positive in the nave, quite remote from the choir. (Only in the late 15th century do we encounter a smaller organ in proximity to the choir, used most likely only in alternatim settings.)

String Instruments


Of about 350 trecento art works that involve music quite a number represent the fiddle, but only a small proportion depict the bridge clearly. In about 12 the bridge is flat, in about 12 it is arched, and in about 12 it is attached to the stringholder and could be arched. Some show two bridges, a second pressed against material that could produce a buzzing sound. According to the fiddle's size, its range would probably only descend to about g (below middle c). *Jerome's tunings, however, go to an 8ve lower. Does this imply thicker strings, or an upward transposition?
Woodwind Instruments

Cannon, R.D. "Bagpipes in English Works of Art." Cited below as item 43.

Hoffmann-Axthelm, Dagmar. "Zu Ikonographie und Bedeutungsgeschichte von Flöte und Trommel in Mittelalter und Renaissance." Cited below as item 69.

Percussion Instruments


Pictorial evidence from Italy, 14th-15th century, shows a greater participation of percussion than has previously been assumed. A considerable variety prevailed, e.g. cylindrical drums, tambourines, cymbals, triangles, glockenspiel.

Added Notes


Certain medieval sources seem to represent rare, written-out examples of what was essentially an unwritten improvisational practice: the Robertsbridge, Faenza, and Reina codices, as well as estampies in 14th-century sources.

Tuning


Relates Pythagorean tuning to aspects of late gothic style. The dissonant major 6th in a cadence was analogous to the later V7, and the resolution of major 6th (to 8ve) plus major 3rd (to 5th) was conditioned by small semitones. Full chromaticism on keyboards necessitated a wolf, probably g♯-e♭ (Robertsbridge Codex, 1340) and b-f♯ (Faenza Codex).
THE FIFTEENTH CENTURY

General Studies

Surveys


Signals the need for further archival research. Cautions against far-reaching conclusions based on one or two pieces of evidence. Should written descriptions be taken literally? Were pictures precisely drawn? What did instruments actually play? Can accidentals be taken as definitive? Was text underlay arbitrary?

Composers

Josquin


Proposes a rebarring of "Nymphes de bois," partly in *tempus imperfectum*, partly in *tempus perfectum*, depending on the declamation. For the phrase "plaine de deuil" the C present in earlier sources suggests a more deliberate, the C in later ones a quicker pace.


Attempts to correlate contemporary voice types (*sopranista, haute-contre, contra tenorista, bass-contre, contrabasso*) with Josquin's written ranges. Also contends that Josquin's Latin settings had either a French or an Italian orientation and should be realized with a different vocal timbre.

When the tenor is rhythmically similar to the other voices (Mass: *Une mousse de Biscaye*) vocal performance seems natural, when it is based on an ostinato with difficult text placement (Mass: *L'ami Baudichon*) an instrument — or perhaps untexted vocalizing — seems called for. As for which instrument, preference has fallen on the organ since Schering (1912), although the shawm (offering a full range) or slide trumpet (blending well with the voices) offer other alternatives.


Cited below as item 35.

Media

Voices and Instruments


Addresses a number of issues. That church music ca. 1500 lacked accompaniment needs qualifying: (1) church music could have been performed elsewhere outside the church; (2) for special festivities instruments actually did participate, as is revealed by eyewitness accounts — not by payment records (instruments were on a salary and thus not in the records). Analytic scoring, e.g. an instrument bringing out a tenor part, is perhaps misguided. (Loud) instruments most likely simply doubled all the voice parts to add richness. There is no evidence that boys took part in the polyphony of the main choir, although they sometimes sang part music by themselves. The wide ranges in Josquin's individual parts seems to exclude boys. He adhered to three registers (one high, two middle, one low), as distinct from the four registers of the Eton manuscript (which added a higher register, exploiting English boys' head tone).

The decade 1975-85 has brought into question a number of earlier assumptions. The majority of 14th and 15th-century bass instruments are now recognized as having been small in size, leaving performance of tones below middle C mainly to the lute, harp, or doucaine. Moreover, minstrels appear not to have read music, rendering them incapable of realizing the (lower) untexted parts (such parts could have been vocalized, sung with reconstructed texts, or perhaps played by harpists, for example, who are known in certain instances to have been endowed with extraordinary memories). Around 1475 a decisive change came about, as large winds (capable of playing in lower register) were constructed and large numbers of strings had curved bridges (making them fully competent melodically). Also, a considerable number of entirely untexted works now appeared.

Voices


Concerns mainly the nature of choirs. Already in the early 15th century at least 2 singers participated on each part, and by the 1480s in Italy about 4 to 8 adults plus a few boys. Thereafter a dramatic increase in numbers took place, although personnel lists should not be taken as reflecting the actual number that took part in a particular performance. The comparative abundance of sopranos has often been remarked on, yet in the "loud" singing in cathedrals and chapels these numbers may have been necessary in order to achieve a balance with the lower parts.

Instruments in General


Pictorial evidence shows the combinations of instruments and their geographical representation, e.g. in France 3 basses were the most common, in the Netherlands 2 or 3 shawms plus trumpet. By the late 15th century soft
instruments — recorders, harp, pipes — began to replace the loud. These pictorial representations need to be coordinated with contemporary written evidence.

Brown, Howard M. "Instruments [in the Renaissance]." Cited below as item 61.

The 15th century saw a number of remarkable changes: the building of separate organ stops; the development of string keyboard instruments; the appearance of the slide trumpet and changeover to the trombone; the emergence (late in the century) of the viola da gamba. Also a number of writers described the nature of instruments: *Gerson, *Paulirinus, *Arnault, *Tinctoris, and *Ramos.

Keyboard Instruments


String Instruments


No lute tablatures remain from the 15th century, but hints concerning performance appear in iconography (showing the lute often with the harp or psaltery) and in contemporary descriptions (e.g. the Germans play in both upper and lower registers — does this imply more than one part simultaneously?).


Lists iconographical sources (1430-1510) that show duos, especially of two lutes or of a lute plus a harp. Contemporary tablatures also contain a number of two-part pieces, often of the lower parts of a vocal model.


Examines representations of harps from the 15th century and enquires whether they were capable of playing chromatic half steps. Was the two-rowed harp (Madrid 1390) for
chromaticism or resonance? How were certain harp pieces (containing c#, f#, b) mentioned in the 14th century by Prudenziani executed?


Suggests that the geige (which Polk calls a "German viol") may have had a role in the development of the viol in north Italy 1480-1500. Woodfield's Spanish connection is not dismissed, nevertheless Polk assembles an array of archival evidence supporting a German influence. German ensembles (four a norm) became more prominent in the late 15th century — the geige had replaced the vedel (fiddle) ca. 1450 — and German musicians were often hired in Italy. Polk also distinguishes the hauts instruments from the bas, players of the latter being more sophisticated and capable of ensemble polyphony. Manuscripts such as Faenza and Buxheimer could have been realized on organ, lute, or bowed strings under varying circumstances.

Woodwind Instruments
< Hoffmann-Axthelm, Dagmar. "Zu Ikonographie und Bedeutungsgeschichte von Flöte und Trommel in Mittelalter und Renaissance." Cited below as item 69.


Challenges the stereotype of judging historical bagpipes on the basis of contemporary paintings and drawings, since these are for the most part ill drawn, erroneous in details, or copies of earlier similarly unreliable sources.

Brass Instruments

In Memling's triptych (ca. 1480) of two folded trumpets one held slightly differently appears to be a slide trumpet. The slide trumpet, designated trompette des menestrels, can be documentarily pushed back as far as 1386, and in the alta capella it rather surprisingly assumed the melodically more difficult contratenor rather than tenor part.

In the 15th century a polyphonic loud band, replacing earlier heterophonic forms, only makes sense if the trumpet was melodically equivalent to the shawm and bombard, i.e. through some form of slide mechanism. Myers maintains that the slide trumpet (with middle branch shorter than mouthpiece) preceded the trombone (with shorter mouthpiece and bell branch).


Evidence for slide brass extends back to ca. 1350 with a straight, followed ca. 1375 with an S-shaped, and ca. 1400 with a folded instrument, each with a single slide. A double-slide mechanism was known by ca. 1450, but not preferred until the late century. We encounter the word trombonus in 1439 (Ferrara) and trombone grosso in 1446 (Florence), and a combined ensemble of 4 trumetters and 2 posaunen appeared in 1458 (Nördlingen). The trombone seems to have been invented in Germany and brought to northern Italy.

Percussion Instruments


Instrumental Groups


Examines pictures of alta capella performances and considers what their music may have been like. Models may be present in arrangements of vocal works, as in the Buxheimer Orgelbuch. Did all the parts of a chanson serve as a basis? The Schola Cantorum Basiliensis has carried out improvisatory experiments on particular chansons.

Tempo

Sums up and reflects on what is known about tempo and tempo relations (proportions) in the Middle Ages and early Renaissance. Planchart suggests that *Vetulus’s stipulated tempos may have been overly slow and rigid, that chant in alternatim settings may have approximated the pace of the polyphonic settings, that slight variations may have existed within late 15th-century tactus; and that 0 (15th century) meant a diminution by half in simultaneous, by a third in successive proportions. Planchart includes a valuable table of proportional signs and their implications.


Considerable confusion exists in 15th-century English sources, especially in those from the continent, due to the problem of strokes or lack of strokes in the various sources. Wegman considers the relation between signatures and types of note values (which need to be averaged to arrive at a "note density") in 35 English masses or fragments, and concludes that their tempo was not constant but variable. In respect to O and C the masses fall into four categories: 1:1; 4:3; 3:2; and indeterminate.

Added Notes

Ornamentation


Attempts to reconstruct a lost unwritten tradition through theoretical writings and examples.


Frottola settings offer clues to an unwritten 15th-century tradition, showing how certain melodies were originally ornamented. Petrucci’s (early 16th-century) lute-playing polyphony reflects as well a tradition going back to the 15th century, for example to Paumann and *Tinctoris (after 1480).
Altered Notes

Accidentals


Dufay's song motet "O beate Sebastiane" comes down to us in two sources, each differing considerably in its accidentals. BolL (probably ca. 1434, and close to the date of composition) offers a "flat" reading, ModB (probably ca. 1448, and most likely altered by Dufay himself) presents a "sharp" reading. Why was ModB a revision? An explanation may lie in an intensifying of internal and cadential progressions in respect to important modal degrees.


Theory can resolve a number of issues. In potential chains (b\textsuperscript{b} then e\textsuperscript{b} etc.) it supports not correcting the original. In mi-fa combinations (e.g. f-b) beginning in the 1470s it favored changing mi to fa (f-b\textsuperscript{b} rather than f\textsuperscript{#}-b), or from the late 15th century allowing mi-fa to stand if resolved by a half step on both sides (f-b to e-c). In M6-8 cadences it favored a raised 6 before d, but was less certain before an a. Theory also clarified what constituted a cadence: proceeding to an 8ve, incorporating an 878 melodic pattern, and proceeding to the start of a mensuration.

Pitch and Tuning

Tuning

< Lindley, Mark. "Tuning and Intonation." Cited below as item 167.
THE SIXTEENTH CENTURY

General Studies

Surveys

Brown, Howard M. "Introduction [to the Renaissance]." Cited above as item 31.


Casts an eye on the various unwritten traditions, for which evidence is only fragmentary at best. Epics, poems, etc. were sung to accompanying chords, played, for example, on the lyra da braccio. Polyphony was improvised super librum, perhaps in the manner of a work like Josquin’s Kyrie 1, Hercules Mass. And chant was apparently quite different from that of the Middle Ages, leading to the Medicean Edition (1614-15), where versions may be more appropriate for much Renaissance music than are those of Solesmes.


Italian canzonas often lack repeat signs, although repetitions may be implied by the incipit of a section (A. Gabrieli’s "Canzon ariosa") or by signs of congruence (Merulo’s "Petit Jacquet"). The French chanson, wherein the repeat of a final section is obligatory (AABA’), should serve as a model.


How did music fit into social events, into banquets, processions, court entertainments? How were sounds accommodated to the performing space, to small chambers, to summer gardens? What was the nature of the scoring, when did melodic instruments replace vocal parts, when did chordal instruments double, and which chordal instruments (harp, lyra da braccio, etc.) were called upon? These
questions point to some of the areas in which a great deal remains to be discovered.

Composers

Josquin

< Stewart, Rebecca. "Voice Types in Josquin’s Music." Cited above as item 33.

Luis Milán


Since Milán avoided an E chord, which would have been easy in equal, but which sounds ugly in meantone, Lindley concludes that Milán is a good candidate for having used meantone. One method of achieving a pure major 3rd on the two open strings was to temper each open-string 4th by 25%.

Media

Voices and Instruments


Instruments in the theater were either apparent or hidden. In the *intermede* occasional simulations of playing occurred on stage or in elevated machines (the sound in either case coming from elsewhere). With the stile rappresentativo accompanying instruments needed to be positioned in closer proximity to the singers than hitherto. Often they were positioned on the two sides of the stage, but gradually the preferred placement was in front of the stage.


Looks at 16th-century Italian literature in general for what it yields concerning musical practices, for instance the reciting of texts against musical background, an ongoing tradition. Giovan Francesco Straparola’s *Le piacevoli notti* (1550, 1553) describes the music-making, *a cappella* or with instruments, for 13 nights of carnival celebrations in Venice.


In reviving ancient tragedy singers, accompanied by harps, lutes, or harpsichords, etc., followed the accent of the poetry without unduly prolonging syllables with florid passages.

Instruments in General


Notable developments in the 16th century include the building of instruments in standard sizes enabling groups to play in consorts, a plethora of tutors explaining techniques on various instruments, and the detailed descriptions of *Virdung, M. Agricola, Bermudo, Zacconi, and Praetorius* (whose writings have particular relevance to the 16th century).

Keyboard Instruments


Compares 16th-century French and German organ dispositions principally in terms of two models: the organ of Trèves (1537) and of Würzburg (1568).


Precise summary of Lindley’s previous writings on fingerings, richly illustrated with excerpts from known fingerings, 16th — 19th centuries. Whether fingering had an effect on articulation remains uncertain.
String Instruments

Dombois, Eugen M. "Varieties of Meantone Temperament Realized on the Lute." Cited below as item 78.


Renaissance viols show a changeover in the 1560s from cross bars to a lack of them. The earliest evidence for soundposts is in the late 16th century (Shakespeare speaks of them in Romeo and Juliet).


Madrigals were often rearranged (by Willaert, Bossinensis, and others) for solo singer and lute. The common omission of the alto indicates that it was not deemed an essential part. In these arrangements the pitch of the lute (tuned in d, e, g, or a) frequently differed from that of the vocal model, the two standard transpositions lying either a whole step or a perfect 4th away (as was also true of melodic instruments such as recorders and flutes, or of violas da gamba).

Woodwind Instruments


Flutes with flaring bores appear on the frontispiece to the Fontegara (1535). A reconstruction produces a pure, hard (unreedy) sound in the lower register.


Examines pictorial and theoretical sources (*Virdung to *Mersenne) for sizes and ranges of (transverse) flutes. Considers the flute’s participation in ensembles from Attignant’s chansons to English consorts.

Advice concerning fingering, articulation, tonguing, or breath on the cornett was offered in the 16th century by *Agricola (1529/45), *Cardanus (ca. 1546), *Dalla Casa (1584), *Zacconi (1592), *Bottrigari (1599), and *Artusi (1600), in the 17th by *Praetorius (1618), *Mersenne (1636/37), *Bismantova (1677), and *Speer (1697).


Examines a number of pictures of flute with drum from 1260 (Cantigas) to the 15th century (when the flute became longer) and the 16th. *Arbeau indicated that the flute had a certain improvisational freedom in respect to the drum rhythm (a procedure that may be illustrated in compositions such as Byrd’s "Battle").

Brass Instruments


Instrumental Groups


Shows how consort music (ordinarily for 3 melody plus 3 plucked instruments) often depended upon arrangements, such as of earlier lute duets.

Tempo


Should an original (theme) and its ornamental versions be taken at the same tempo, or should the original be played two or three times more quickly than the subsequent variations? Erig provides a table of tempo relations in
*Ortiz: C is a \textit{tempo ordinario} (semibreve 40-48 according to Erig), \ø and C3 (semibreve 1/3 faster than in C).

\textbf{Added Notes}

\textbf{Improvisation}


How was improvisation carried out in the 16th century? Players undoubtedly stored in their minds a great many formulae that could be called up and joined together in various ways; aside from this, typical cadences (as described, for instance, by *Zarlino) clearly separated these components.

\textbf{Ornamentation}


Primarily a style study, showing the differences in approach to keyboard ornamentation in Spain, France, Italy, and England as well as distinctions between vocal and instrumental embellishment.


*Santa Maria distinguished between the \textit{quiebro} and \textit{redoble} (unprepared and prepared shake respectively), but made no mention of a repeated lower mordent, what *Mace later called "the beate." Santa Maria, unlike later theorists, also spoke of intervening auxiliaries between repeated notes.

Pitch and Tuning

Pitch


Viol and flute performers seem to have transposed downwards (often by 4th) in order to bring their music within the compass of their relatively fixed consorts. Brown explores this idea of transposition in *Ganassi* (1542, 1543) and *Gerle*; also in the *Oeglin Liederbuch* some pieces work well in a lower register.


Relates the use of chiavette clefs to the modes and the vocal ranges. Since the hypodorian, for instance, was inconvenient for singers it was often transposed a 4th higher. Smith provides an extensive table with the theorists who prescribed particular ranges and modes.


415 "will minimize the sum of adjustments between any regular meantone temperament and equal temperament."

Tuning


Lutenists may have adjusted their frets by ear, sometimes setting them somewhere between meantone and equal, thereby achieving a variety of meantone temperaments.

On keyboard instruments just intonation (pure, non-beating intervals) could be achieved by tuning certain intervals with beats. *Fogliano tuned diatonic strings in just with two D's a comma apart, while *Zarlino's (1571) just keyboard lacked D♭, A♭, and D♯.

   Surveys 16th-century theorists regarding meantone. *Lanfranco simply advocated "wide" major 3rds and 4ths and "narrow" 5ths; *Fogliano more specifically realized a number of perfect 3rds at the expense of six almost unbearable 5ths and three wolf intervals; and *Zarlino (1571) adopted 1/4 as a corrective to his (1558) 2/7 meantone.

   Some non-Pythagorean tuning appeared in Spain during the 15th and 16th centuries.

   Temperaments may have been selected to better other intervals than the major 3rd. Segerman provides a table for 5ths, 4ths, 3rds, and 6ths, showing the number of commas out of tune each would be in various meantone tunings: 1/6, 1/5, 1/4, 1/3, etc.

THE SEVENTEENTH CENTURY

General Studies

Surveys

What are the sources of information as yet untapped? Journals and personal diaries, personnel lists, surviving instruments (strings, for example, which show surprisingly low dynamic levels), and venues of performance, these and other resources still await our study.

< Fuller, David. "The Performer as Composer." Cited below as item 132.

Composers

Monteverdi

A reconstruction of the scenographic aspects of Orfeo, Arianna, Ritorno, and Poppea, which halls were likely, and the nature of the stage and sets. Orfeo originally had a quite narrow stage forcing the accompanying instruments to move from the sides to the back and front of the stage, those in front behind a partition — the later standard. Instrumental interludes allowed time between scenes, a procedure Monteverdi got away from in Ritorno and Poppea.

Praetorius

Schütz
Schütz came from a period of ¼-comma meantone. His French contemporaries held to "regular temperament," wherein a 5th of the same largeness was maintained throughout the scale.

**Forms and Genres**

**Opera**


The print of Gagliano's *Daphne* (1608) provides details concerning the first staging. Since the stage movements are carefully coordinated with the music, the details show the important place such staging had in early operatic productions. Savage raises the issue whether modern productions should be (at least in part) a *simulacrum* of the original — in other words, whether staging (like other aspects of performance practice) should be authentically replicated.


*Il corago* (The Stage Manager), 1628-37, throws light on various matters of staging in a sung drama. Aside from sets and costumes, we learn about the positioning of singers on stage, the (coordinated) gestures and movements of the chorus, and the problems of singing from a raised and moving machine.

**Media**

**Voices**


One finds a diversity of singing styles from Monteverdi to Handel, and in Handel himself a considerable variety. Sopranos, basses, castratos, each had their idiosyncracies, and there were national differences as well, for example between *haute-contre* (a high tenor), countertenor (head voice), and Spanish falsettist (falsetto). The distinction
between a darker chest and lighter head tone was maintained during the 17th century (as *Bacilly indicated, singers may perform in either); but the extension of range in the 18th century made necessary a concern about the break (between e'- f and in female voices an additional break an octave higher).

**Keyboard Instruments**


A comprehensive list (pp. 1-156), containing some previously unknown items of registration in French sources from Titelouze (1623) to Corette (1787). Diederich subsequently traces the connections between organ construction and registration in French organ composition, especially from 1660-1715.


More a book on style analysis, but points up the importance of registration as a component in the structure of French organ works (see especially pp. 48-101, where each formal type is discussed in respect to registration).


Bottazzi (1614) enhances our understanding of *alternatim* practice in the early 17th century. For example, organ verses alternate with parts of the Sanctus prior to the Elevation; the Benedictus then follows.

< Lindley, Mark. "Keyboard Fingerings and Articulation." Cited above as item 63.


After organ stops were invented regional differences began to emerge, resulting in the Italian "vocal," the French
piquant, the Spanish dynamically-variegated, the German and Dutch versatile organs. Keyboard scores often afforded a mere skeleton, in terms of which performers realized improvised transcriptions. The various keyboard instruments acquired distinctive idioms, but the characteristics that came to be associated with one instrument were sometimes transferred to another. Ornaments were probably more liberally applied than is suggested by the ornament manuals.

String Instruments


Summarizes the guitar treatise of *Ribayaz, one of the few to explain rasgado (strumming with "all the fingers at once"). Ribayaz favored lower bordones, unlike *Sanz, who omitted them for greater ease in ornamenting and to make possible campanelas (bell-like sounds).


Citterns in the late 16th century (as represented in the UnTon painting) were perhaps 60% the lengths of lutes, but they appear to have increased in size by the late 17th century (as in *Talbot's measurements). String instruments probably had to adjust to two pitch standards (Cammer and Chor).


All gut bass strings were used on cellos in Italy and France and on viols in France until ca. 1660. The same was true of violins in France until ca. 1700 and in Germany into the 18th century.

In *Robinson's lute (1603) and cittern (1609) instructions left-hand fingerings often require small breaks between the notes of a phrase, implying articulation. In *Mace's fingered teaching pieces slip-strokes (the same finger on consecutive frets) also give evidence of articulative breaks.


Italian guitar books up to *Millioni's make no mention of hitting all the strings at once with one finger (strumming or battuto), although in rapid movements it seems necessary.


"We shall define a baroque lute as one with more than seven courses." Strings were entirely of gut before the 1660s, and thereafter metal winding came in only gradually. Pitch standards, based on *Talbot and the strength of the higher gut strings, were about a 2nd or 3rd below modern.


*Talbot's measurements are compared with *Simpson's, the instruments larger than earlier ideas of English viol sizes.


Hair tension, set by the maker (16th and 17th century), was not constant and could not be exploited in bowing. Screw tighteners appeared only in the later 18th century. Bows had 80-100 hairs (*Mersenne), as compared with the modern 150-200 hairs.


Sees no reason to suppose the existence of a bass archlute; the lower range could have been covered by a theorbo. Banchieri's *liuto grosso* was simply an ordinary large lute. Hodgson provides a list of known double
archlutes (ca. 1600-1666), which fall into two sizes a tone apart.


Schütz specifically requested steel (stålne) strings from a Nuremberg maker since no equivalent product could be found elsewhere.


Piccinini's three sizes of lutes (1623) were probably in A, D, and G. Banchieri's ordinary lute (in G) and liuto grosso (in D) were most likely not archlutes. Segerman tabulates the open string ranges of a number of Italian theorboes and archlutes.


Did a connection exist between Italian improvisatory arpeggiation and the French style of séparées? Did Marais's luthée signify a (bowed) imitation of lute plucking?


Most scorings of the first half of the 17th century call for chitarrone or theorbo. Despite a distinction (which is unclear) in *Praetorius and a sizable modern literature that follows Praetorius, one must conclude that chitarrone and theorbo were not two but one and the same instrument.


There are two distinct types of mandoline: an earlier gut-strung, 4-6 course instrument played with the fingers, often misnamed *mandora* by modern writers, and a metal-strung,
4-course Neapolitan instrument developed in the mid-18th century. Tyler considers the remaining specimens, tunings, theoretical descriptions, and music written for the former, Sparks the repertories, techniques, and performers of the latter.


Assembles a range of details concerning the performance of each string instrument. The frequent citing of contrary evidence points up the need to associate a given manner of playing with a particular composer. Were chords (on the violin) played broken as on a lute or by striking all strings at once (as advocated by *Le Blanc*)? Who played chin on and chin off? How extensive was vibrato (difficult at any rate without chin support)? Which of the many kinds of bow was utilized?

Woodwind Instruments

< Leonards, Petra. "Historische Quellen zur Spielweise des Zinken." Cited above as item 68.


Mostly concerns when or by whom each wind instrument was introduced into musical literature. In flute tonguing shorter notes (*tere lere*) were distinguished from lengthier (*tede*) by a more forward positioning of tongue.

Brass Instruments

In the commentary the authors describe *Bismantova's five tonguings, which differed from those of *Bendinelli (1588?) and of *Fantini (1638).


Consideration of Neuschel's trombone (1557) leads to a general discussion concerning differences between Renaissance and baroque trombones. Measurements are provided of a number of surviving instruments.


Believes that "flat trumpets were used routinely in the English orchestra of the Purcell period" for ordinary and minor-key trumpet parts. According to *Talbot a trumpet in Eb can be taken down and locked in D with a "turne screw" and from D can be crooked down to C, which can explain the sudden shifts from D to C (and vice-versa) in Purcell's dramatic operas.

Instrumental Groups (chamber music)


Rosseter's Lessons (although incomplete) shows the same manner of writing for the instruments as did Morley's ten years before.


Considers the (broken consort) accompaniment for Alison's (1599), Leighton's (1614), and Tailer's (1615) sacred vocal works. Counters Reese's notion that instruments accompanied only when the melody alone was sung, showing that a number of scorings were possible. Since Allison's and Leighton's parts accomodated seating around a table, the
ideal seems to have been a performance by both voices and instruments.

**Tempo**


A criticism of Hiekel's interpretation, wherein Praetorius's tactus relationships are strictly maintained at 2 to 1 and no distinction is made between triple and sesquialtera. Brainard, on the contrary, feels that Praetorius stands at the beginning of the baroque variability of tempos and is attempting to convey a subtle (and irrational) speeding up and slowing down rather than an exact halving or doubling.


For Praetorius the usual tempus or tempus ordinario, was represented by a C alla semibreve (S), in which the primary time unit was the S. Č alla S was somewhat faster, Č alla breve (B) somewhat slower. But Č alla S can "zur noth" be beaten as Č alla B (a "gar langsamer Tact"), a statement Dahlhaus feels is contrary to sense.


Compares Praetorius's writings concerning mensuration signs with his own music and discovers an internal consistency. For Praetorius C (used in madrigals and concertos) represented a slow, Č (used in motets) a fast tactus, from which Paine concludes that a semibreve tactus prevailed in both. In *Polyhymnia* (1619) one can determine which note value constitutes the tactus, since Praetorius inserted numbers for rests (these equalling the number of tactus).
Ornamentation


Ornamentation in *Sanz, *Ribayaz, and *Guerau show similarities to, yet distinct differences from, those in contemporary French and Italian sources. For one thing, main-note starts are fairly frequent, apparently perpetuating a 16th-century Italian tradition.


Several words appear to have referred to vibrato: *flattement, tremolo, trillo, tremblement flexible,* and (in some English sources) vibration. Dickey explores how each was treated in theoretical writings as well as how finger or breath vibrato was applied to various wind instruments.


*Santa Maria and *Diruta (1593) describe the inverted mordent in connection with rapid descending scales, *Praetorius with both rapid descending and ascending scales. This appears to exclude it from the virginalists, whose slashes do not consistently meet the scalewise criterion. The inverted mordent passed out of favor in the 17th century (neither Robinson’s relish nor Mace’s shake corresponding with it). Its appearance in Spanish guitar music of the late century apparently reflects a latent 16th-century usage.


Bartolomeo’s manner of breaking up rhythms is distinctive when compared with other reworkings of "Susanne un jour."

*Rognoni, like Caccini earlier, focusses on bringing out the affective words of the text, eschewing Renaissance passaggi in favor of small-scale ornaments such as accenti and esclamazioni. Certain of Rognoni's ornaments seem to anticipate those of 17th-century France, e.g. the portar la voce resembles the port de voix.

Altered Notes

Articulation


Considers the effect of oratory on French dance songs through exclamations, pauses, exaggerations, etc. The sarabande, as an example, became more subtle, abandoning by the 1680s or 90s the balanced phrases and overtly demonstrative features of its Spanish prototype.


Exposes "some errors and dubious readings [of fingerings] by various editors." Appendix 1 corrects LeHuray's transcription of Bull's Miserere, appendix 2 Faulkner and Soderlund's of Bach's Prelude and Fughetta in C.

Inequality


Dotted rhythms in Purcell, Corelli, and Bach may at times have been understood as written-out inequality. Support is provided by dotted notes in Gigault (1685), which can only be realized as notes inégales. Fuller finds less unanimity among theorists than does Neumann; they did not, for example, always limit inequality to stepwise movement, nor was it confined solely to French music.

Whether playing a Gerschwin pop tune, a Viennese waltz, or a Chopin mazurka, each has a particular "style," inviting changes that go beyond the written notes. The same undoubtedly held in concerts ca. 1700, when performers altered individual notes depending on the type of composition being played (e.g. a French overture).

**Pitch and Tuning**

**Pitch**


Bunjes constructed organ pipes based on *Praetorius's diagrams and arrived at A = 445 (Thomas and Rhodes came out slightly lower, 435). Considering paper shrinkage, 430 seems a reasonable estimate.

< Smith, Anne. "Über Modus und Tranposition um 1600." Cited above as item 76.


Meeüs suggests that *Mersenne's statement that the English ordinarily played a tone lower than the French may have meant in a lower key rather than a lower pitch. Similarly *Praetorius's remark that the English sometimes played viols alone a 4th (or 5th) lower may simply have referred to a renaming of strings, DAE instead of GDA. Segerman disagrees, holding to the idea that both references have to do with actual pitch.


Reexamines the various statements (German, Italian, French, English) concerning pitch in the baroque period and arrives at some (admittedly speculative) conclusions about their relationships — unlike Mendel who felt the problem was unsolvable. Segerman attempts to show that a basic
chamber pitch (about 1/3 semitone below 440) persisted throughout the period, although under different names). Related to this Cammerthon standard, Comett-thon (or trumpet pitch) was a tone higher, low Cammerthon (French pitch) a semitone lower. A number of other pitches (representing Italy, France, England, and Germany) are brought into the discussion.


< Karp, Cary. "Pitch." Cited below as item 166.

Tuning


Mersenne provided descriptions of equal, just, and meantone temperaments without vigorously advocating any of them. His directions for meantone inadvertently led to certain of the irregular schemes of the later 17th century. He seems to have favored equal for keyboard works (e.g. *Mersenne 1636-37*), but was perhaps reluctant to encourage its use because of G. B. Doni's strong opposition. Frescobaldi as well (during the 1630s) supported equal (which would be needed in a work like the *Cento partite*), and this presumably had an influence on certain of Froberger's works.


A basic reference, bringing together the ideas (those of each theorist concisely summarized) and the mutual consequences of particular tunings 15th-19th centuries. Individual approaches are often clarified by means of diagrams. Lindley pinpoints the inconsistencies and inaccuracies in many of the writers.

< Lindley, Mark. "Heinrich Schütz: intonazione della scala e struttura tonale." Cited above as item 85.
Segerman, Ephraim. "A Note on Meantone Temperaments." Cited above as item 82.


Lindley proposed that in the well temperament (applicable especially to the late-baroque German repertory) all meantone 5ths be tempered less than 1/5 to produce fewer harsh keys. Bates and Marshall, however, fear that this would be deleterious to the Renaissance major 3rds, making them less pure. Instead they suggest that BD♯ be improved at the expense of E♭G (by lowering D♯/E♭). This would also be advantageous to the French 17th-century repertory, wherein D♯ became increasingly important between 1660 and 1710.

Lindley, Mark. "Tuning and Intonation." Cited below as item 167.

THE EARLY EIGHTEENTH CENTURY

General Studies

Surveys


Various aspects of Baroque performance (freely inserted appoggiaturas, cut-offs, pitch adjustments, etc.) can be associated with jazz, and the codification of such features in manuals of the time is understandably quite inadequate. As a 1630 treatise put it, one has to grasp the andamento (the way it goes). The many recent controversies concerning rhythm (inequality, exaggerated dotting, assimilation) seldom take into account the importance of rhythmic shaping, through agogics, dynamic nuance, etc. The
thorough bass player, as well, needs to go beyond the rules in order to imaginatively fill out a given framework.

Composers

Vivaldi


Points out the discovery of concertos for clarinets by Vivaldi.


The designation "claren" in the oratorio *Juditha* refers to high trumpets (rather than to clarinets) as is indicated by the further indication "clarini" in a margin. The title "Concerto con due clarinetti" attached to a Vivaldi work appears to derive from the late 18th century.


Confirms the identity of *salmo* (salmoe) in five Vivaldi works, wherein a chalumeau was extended to an 11th. Representations of two types of of *scialumo* (chalumeau) appear in Bonanni.


Vivaldi's *passaggi* were sometimes only skeletally indicated, sometimes written out, e.g. in a slow movement 8th and 16th notes indicated the former, 32nd notes the latter. Specific graces need to be added, since Italy was slow in adopting symbols. Neumann goes through the Vivaldi bassoon concerto, suggesting a possible ornamentation.

Rameau

137. Milliot, Sylvette. "Rameau et l'orchestre de l'Académie royale de musique d'après les exemplaires des répétitions de ses opéras." *Jean-Philippe Rameau: Colloque*
Information gathered from rehearsal exemplaires reveals Rameau’s scrupulous attention to tempo, accentuation, dynamic nuance, and general mood (in markings such as brutalement or tendrement).

Saint-Saëns’s edition misrepresents the original scoring of Hippolite et Aricie (1733). The orchestra was normally organized in four parts, the first and second dessus (violins) playing the upper part in unison. Only in trios did the second dessus assume a second part.

The recently recovered parts of Rameau's La naissance d'Osiris reflect performances shortly after the premiere of 1754. Ornaments differed and the scoring was sometimes lighter (aspects not indicated in the Durand edition).

Handel
Maintains that the music be rendered as written, and not (as in various editions) with the opening note contracted. That Handel regarded "be" (in behold) a long syllable is corroborated by 17 other instances in which he set the word.

Neither the thorough bass nor tuning methods were likely by Handel himself, the contents being lifted from well-known 18th-century treatises.
Handel's Ornaments


Shows Handel's artful and unique manner of ornamenting. Questions (in part 3) two later sources: the barrell organ ornaments of two organ concertos (ca. 1790), and Babell's ornamented slow movements. Both appear dull and mechanical when compared with Handel's own embellishments such as in "Siete rose rugiadose."

Handel's Thorough Bass

Christensen, Jesper Bøje. "Zur Generalbass-Praxis bei Händel und Bach." Cited below as item 149.

Handel most likely followed the vogue of three-part realization with 8ve bass, which was in vogue 1690-1750. Christensen quotes kinds of accompanimental patterns utilized by various theorists (*Gasparini, *Mattheson, 1731, *Heinichen) that are applicable to Handel.

Mann, Alfred. "Zur Generalbasslehre Bachs und Händels." Cited below as item 163.


Expands upon the author's Ph.D. dissertation of the same title, especially by considering the Aylesford keyboard parts and the Hamburg *Cembalopartituren*.

J.S. Bach

Bach's Voices


Before 1750 the word "choir" was often applied to a group of solo singers. In Schütz's *Musikalische exequien*, for example, the six parts were taken by 6 singers (with another 6 ad lib.). In Bach's 1725 presentation of the St. John Passion only 10 singers were available for the two choirs,
Jesus, Evangelist, etc., i.e. one to a part. For the B-Minor Mass (SSATB) no evidence exists that more than one singer was used on a part.


Maintains that each singer had his own partbook. For the Magnificat eight books implied 8 singers, for the B-Minor Mass (Credo) five books 5 singers.

Bach’s Keyboard Instruments


A number of Bach’s cantatas contain a part for obbligato organ (i.e. with written-out upper parts), whereby the organ played a role as a concertante instrument — Bach may have had in mind a particular organ in the Nikolaikirche for these works. This raises the question of how the organ was used in Bach’s cantatas in general.

Bach’s Continuo Instruments


Whether foundation instruments played in addition to or (as seems equally plausible) as substitutes for the organ remains uncertain.

Bach’s Ornaments


Comprehensive survey of approaches to Bach ornamentation from the mid-19th to mid-20th century. During the later 19th century scholars (Kroll, D. Wagner, Kuhn, Chrysander) hadn’t accepted the notion of a literal historical interpretation, whereas those of the early 20th advocated setting aside modern prejudices and accepting
past points of view. A great step towards historical exactitude was fulfilled by Dolmetsch (1915), who may however have placed an undue trust in *C.P.E. Bach and *Quantz. Since his time controversies have centered on parallelism, on-the-beat starts, and strict applications as opposed to greater flexibility.

Bach’s Orchestra

Bach’s Thorough Bass

Bach preferred strict four-part writing with numerous ties, along the lines of *Telemann and *Heinichen. Often a single note rather than a full chord was placed on the initial beat of a measure. Valuable guides are afforded by Bach’s obbligato sonatas.

Bach’s Orchestra

< Mann, Alfred. "Zur Generalbasslehre Bachs und Händels." Cited below as item 163.

Bach’s Rhythmic Alterations

Did Bach at times adopt inequality, overdotting, assimilation? Fuller looks at a number of organ works and weighs the pros and cons. For example, Art of Fugue no. 6 ("In French Style") with its persistent dotted rhythm may very well have been conceived of as approximating the French style of inequality.

Bach’s Articulations
Bach’s Tunings


Bach’s more straightforward arpeggiation in certain keys (e.g. C,G) and less solid verticality in others (e.g. A,E) in WTC I points to an unequal scheme of tuning, not "nuanced" like the French (i.e. with extreme harshness in certain keys), but more evenly balanced, as in *Neidhardt and *Sorge, where we find a varied distribution of the Pythagorean comma over the 5ths, i.e. 1/6 of the comma over C- G- D- A, and 1/3 over A- E- B- F#. G#. E.

D. Scarlatti


The testament (1756) of Queen Maria Barbara describes a number of harpsichords and pianos at the Spanish court that Scarlatti very likely came into contact with. Only the three Spanish harpsichords, however, were of a sufficient range (five 8ves, 61 notes) to accommodate Scarlatti’s later sonatas. The pianos (four-and-a-half 8ves) were most likely enlisted as accompanimental instruments, and no evidence exists that Scarlatti intended any of his sonatas for them. Very likely all the sonatas could be realized on a single manual harpsichord ("gradations" being written in by texture, etc.). Few fingerings are preserved, a curiosity being a scale con dedo solo, i.e. a glissando.

Forms and Genres

Opera


The partbooks used by singers at the Académie royale de musique contain valuable performance indications: (1) vocal ornaments, conveyed by signs standard at the Opéra but not present in contemporary treatises; (2) verbal designations (e.g. tendrement); (3) guides to declamation (e.g. the "s" in Vénus was pronounced); and (4) stage directions.
American Music


In Boston in the early 18th century the "old" or "usual" way of singing (with lining out, dragging tempos, improvisatory additions, etc.) was challenged by a number of reformers, among them *Symmes, who advocated "regular singing". It has been assumed that "regular singing" meant singing from notation, but Osterhout reveals (from various church records) that in outlying areas of Massachusetts and Connecticut it had more general meanings, such as "singing in time" or "singing in tune".

Media

Voices

< Harris, Ellen T. "Voices [in the Baroque Era]." Cited above as item 88.

Voices and Instruments


Defends independence of accompaniment in vocal works of fewer than four voices.

Keyboard Instruments


Mention was made by Francesco Mannucci of Cristofori's cembali con piano e forte as being two years prior to the giubileo (of 1700), i.e. as of 1698. Scipione Maffei's Rime e prose (1719) is considered the first description of the new instrument, containing also a diagram of the mechanism.


Lindley, Mark. "Keyboard Fingerings and Articulation." Cited above as item 63.

**String Instruments**


Early 18th-century string players would not have cared for a screw mechanism, since playing did not require an adjustment of hair tension. Even in the 1760s fixed-frog bows were still standard (slipping a frog in and out was easy), and screws were only an alternative.

Tyler, James, and Paul Sparks. *The Early Mandolin.* Cited above as item 106.


**Woodwind Instruments**


Summary of early references to the clarinet during the first half of the 18th century and after. Attempts to clarify the differences between chalumeau, clarinet, and clarino trumpet (the three instruments were indicated on a Vivaldi title page of 1716). Although reed against upper lip was characteristic of the 18th c., the 19th c. increasingly saw it against the lower teeth and lip, which allowed for a finer modification of tone.


Advice concerning cornett performance from two 18th-century Norwegian tutors by *Berin* and *Berg*. One should avoid, for instance, puffed cheeks, and play from the side of the mouth, either right or left.
Cannon, R.D. "Bagpipes in English Works of Art." Cited above as item 43.


Terry (1932) provided the local background of Bach's orchestra; Schulze expands this to all the cities Bach had contact with (Eisenach, Celle, Lübeck, Weissenfels, and many others), assembling much data concerning the numbers and types of musicians available. The resources were usually quite minimal, and may reflect a pietist restraint, as for example in Johann Beer's (1719) suggestion of a chapel consisting of 4 vocalists, 2 violinists, organist, and director.


Documents in Dresden offer insight into the nature of performing groups, especially 1697-1763, a very rich time in the city's history. A chart offers the constitution of the orchestra by years: 33 instruments when Bach visited in 1717, and 10 violins, 4 violas, 6 cellos, 2 contrabasses, 3 flutes, 5 oboes, 4 bassoons, 2 horns, and 4 in the continuo in 1732.


The total time taken to perform works was noted by a number of early 18th-century writers. If applied to the number of measures these timings can provide an equivalent of later metronome markings (with the caution that some works may have contained cuts). Sawkins extends the information acquired from timed works to others that were untimed.
Added Notes

Ornamentation

< Dickey, Bruce. "Untersuchungen zur historischen Auffassung des Vibratos auf Blasinstrumenten." Cited above as item 118.

Thorough Bass


Bach’s approach to thorough bass shows a particular care for the inner voices, as is reflected in his own *Regeln* and in his dependency on *Niedt*. Handel’s figures, on the other hand, give evidence not so much of harmonic as of linear procedures, even of miniature fugues in certain instances.

Altered Notes

Articulation


An examination of 17th- and 18th-century chorale books reveals that fermatas simply signified the ends of phrases rather than a lengthening. Bach follows this practice in the *Orgelbüchlein*, where the fermatas in the chorales against simultaneous 8ths and 16ths in the other voice parts could in no wise mean an extension of the note.


Rhythmic Alterations


Inequality is documented in 85 French sources, most of them from 1690 to 1780. In duple time it usually referred to a quarter of the denominator, in triple to a half.
228 EARLY EIGHTEENTH CENTURY

Pitch and Tuning

Pitch

< Segerman, Ephraim. "On German, Italian, and French Pitch Standards in the 17th and 18th Centuries." Cited above as item 128.


A study of 18th-century double reeds in conjunction with Bach's choir pitch, chamber pitch, and low chamber pitch suggests three levels of A460, 410, and 390. Mid- and late-18th century pitch pipes at ca. A422 may show a slight rise from the standard 410 (chamber) pitch. Approximations may be found as well in Sauveur's A405 and Brook Taylor's 1712 harpsichord string equation at about A390. The three levels may not be far from Praetorius's Chor-Ton, Cammer-Ton, and low Cammer-Ton in the early 17th century, if Mendel's stipulation of organ pitch (Chor-Ton) at ca. a minor 3rd above 440 (based on the vocal ranges in Praetorius's music) is correct.

Tuning


< Lindley, Mark. "Just Intonation." Cited above as item 79.

Geminiani and Tartini in violin performance aimed at a kind of just intonation with certain adjustments.


Clear résumé of ideas developed in Lindley's earlier writings. Certain tunings are shown to be most appropriate for particular composers or works, e.g. Paumann (mean-tone); Frescobaldi's Cento partite (equal); French harpsichordists writing in minor (heavily tempered); Bach's WTC I (slightly nuanced); WTC II (probably equal).
THE LATE EIGHTEENTH CENTURY

General Studies

Surveys


Goes over the items that may yield information concerning performance practice: treatises (e.g. *Galeazzi*), literary anecdotes (e.g. concerning Grétry), payroll accounts, musical journals (e.g. *Journal de musique*, 1770-77), iconography, and histories. Zaslaw advocates consulting original facsimiles of works being performed.

Dictionaries


*Rousseau's* (1768) definitions (*pathétique*, *gout*, *ensemble*, *expression*) and their implications for late 18th-century performance. Among the definitions of *ensemble* is that performers "seem animated with the same spirit."

Composers

Haydn


What kind of *lira organizzata* did Haydn utilize? The issue remains unresolved since the surviving specimens are each problematical in realizing his works. Czakler concludes that Haydn's instruments were very likely of French provenance, for most late 18th-century instruments of this kind were made there.
    Did Haydn prefer tempered or equal tuning? Although several writings in Haydn's possession favored equal, the issue remains unsettled.

    It is difficult to assign many of Haydn's keyboard sonatas to a specific instrument. Until about 1770 the choice, between clavichord and harpsichord may be determined at times by kinds of figures: suspiratio patterns, slurs over dots, or syncopations for clavichord; arpeggations, Trommelbässe, or "crescendos" by adding voice parts for harpsichord. After 1770 one can decide between harpsichord or fortepiano largely by the frequency of dynamic indications in works intended for the latter.

173. Mertin, Josef. "Zu den Orgelinstrumenten Joseph Haydns," pp. 72-75. (See note above 170.)
    Considers the disposition and tuning of organs in Eisenstadt and Vienna that Haydn had contact with. Some were by Johann Mallek, who adhered to late 18th-century ideals of building.

174. Stradner, Gerhard. "Zur Stimmtönhöhe der Blasinstrumente zur Zeit Joseph Haydns," pp. 81-86. (See note above 170.)
    The pitches of wind instruments in Haydn's time were not normalized as they are today. Oboes, for example, could sound anywhere from 420 to 435. A preserved English horn, a basset horn, and a number of clarinets tend toward 435.

Haydn's Ornaments

Anticipatory ornaments seem justified when Haydn places a sf, fz, f, or staccato dashes beneath a principal note. Arpeggios as well should precede the beat if a melody's rhythmic integrity would otherwise be compromised. Haydn composed several pieces ca. 1790 for musical clocks constructed (probably following his counsel) by Joseph Niemecz; these show anticipatory mordents and consistently main-note trills.

Mozart

Mozart’s Voices


Postulates on the basis of contemporary theorists (such as *Hiller and *Mancini) a different singing style than is usual today: light-voiced, ornamented with messa di voce, and employing throat articulation. Mozart described Aloysia Weber, for whom he composed K.294, as possessing "a superb cantabile."

Mozart’s Orchestra


Reconsiders the many questions surrounding the orchestra in Mozart’s time: the lack of standard sizes; the differences of balance (e.g. between violins and violas, or between strings and winds); the range of tempos; the varying standards of performance, etc. Zaslaw offers plausible answers in respect to Mozart’s symphonies, for example that he probably preferred a moderate-sized orchestra for the sake of clarity (despite the enthusiasm for a larger ensemble conveyed in the oft-cited letter of 1781), or that Hummel’s tempo markings for certain of the symphonies, modified by Czerny, offer guidelines, although we need to consider that they reflect a somewhat later time and were conceived for a chamber rather than orchestral medium.

Mozart’s Ornaments

Mozart’s leanings were toward Italian rather than north German (i.e. C.P.E. Bach’s) ornamentation. Above all, the added notes must not seem calculated. Neumann suggests ornaments for the bassoon concerto.


When two notes of the same pitch are written at phrase endings (and sometimes internally) should the first always be the appoggiatura? Late eighteenth-century theorists (*Corri, Lasser, Lanza, and others*) support an affirmative answer, in arias no less than recitatives. A telling source is *Hiller’s realization of two arias*, which show appoggiaturas throughout.


Countering a number of Levin’s ideas, Neumann holds that lead-ins might precede non-structural points in a work, that wide fermatas can sometimes be embellished, that caesuras are not tied to the strict pulse of Mozart’s rubato. He also questions Levin’s suggestion that new cadenzas be composed for the sake of spontaneity.

**Forms and Genres**

**Opera**


Stage gestures as described in late 18th-century treatises (e.g. *Mancini*): the placement of characters on stage and their manner of conveying grief, anxiety, etc. by hand and other bodily gestures.

**English Church Music**


During the 18th century the tenor part was sometimes provided in the G clef (rather than the C as earlier) with the expectancy it would be transposed down an 8ve. This
tendency invited the doubling of the tenor an 8ve higher by women, children, or a keyboard instrument; and when this took place the tenor melody overshadowed the regular treble and alto parts (Tans'ur even permitted in such cases the omission of these parts).

American Music


Twentieth-century folk hymnody in southern Appalachia is characterized by overlapping, leader-chorus exchanges, drones, and a hard core of quartal harmony. These aspects very likely throw light on early American (as well as early medieval) practices.


In the *Sacred Harp* edition of 1911 Joe James speaks of "snaking the voice," an "old-style" manner of singing involving leaps, shakes, scoops, etc. This kind of improvisation went back to the 18th, and probably 17th centuries as an offence to high culture. Wicks shows it to be currently more widespread throughout the south, and not, as has been supposed, confined to Baptist dissenters in isolated Appalachian congregations. She also shows that it has made a cross-over into American popular singing.

Media

Voices and instruments


Rehearsals, staging, orchestral disposition, etc. as revealed in a newly discovered source by Reicha.

Voices

Points to the need for more research on vocal quality in the Classic period. Little can be learned from contemporary requisites such as "clear and pure" (*Quantz), "not harsh" (*Türk), or "the higher the voice, the lighter the sound" (*Mattheson, 1739).


Voice types were ordinarily called simply SATB, an intermediate male sometimes a "baritone" or "mezzo tenor." The Italian manner of singing (e.g. as described by *Mancini) was based on a unification of the chest and head, a smooth portamento, and a capability of *messa di voce* throughout the entire range. Examples of fully written-out embellishments by Mozart show passing tones in the first statement, appoggiaturas on all feminine line endings (and often elsewhere), short (one-breath) cadenzas, and *passaggi* not limited to a single rhythmic value.

Keyboard Instruments


The Viennese and the English represent two distinct conceptions of piano and two quite different musical aesthetics. The Viennese piano was clearer, cleaner, and thinner, with lightning-quick damping, well-suited to the minute slurs and subtle nuances of Mozart. The English piano was fuller and more sonorous, with only modest damping, congenial to the sustained, legato style of Clementi.

Lindley, Mark. "Keyboard Fingerings and Articulation." Cited above as item 63.


For *Türk non-legato was the normal touch, but the degree of detachment varied, depending on the character of the piece. Stately or serious works had the least, light (scherzando) works the most separation. Slurs indicated connectedness and were associated with sorrowful affects or with particular patterns such as short-to-long or appoggiatura-to-main-note."
String Instruments


Concentrated summary of changes in string instruments, in bowing techniques, etc. The ideal was moving away from clearly articulated strokes, subtle nuances, and delayed attacks toward a more cantabile style.

Tyler, James, and Paul Sparks. *The Early Mandolin.* Cited above as item 106.

Woodwind Instruments

Summarizes changes in the structure and playing technique of the flute, oboe, clarinet, bassoon, horn, trumpet, and trombone between about 1750 and 1825 with little comment on the implications of these changes for the music.

Brass Instruments

Charlton, David. "Woodwind and Brass." Cited above as item 191.

Instrumental Groups (chamber music)

Proposes that idioms characteristic of orchestral or soloistic writing should determine the scoring of mid-18th century chamber works. Prior to the late 1760s the orchestrally-conceived divertimento a quattro was typical, after this the soloistically-conceived string quartet.

Tempo

Tempos of individual works by Handel, Haydn, Clementi, and others (as well as a number of English gleeis), as these
were performed in the late 18th century, were transmitted by Crotch in an essay of 1800. His basis was the pendulum, whose lengths are transferred into modern MM markings by Rubin. That this offers a more specific guide than do Italian words is shown for example by the indication grave, for which the pendulum markings range from MM69 to 116.

Added Notes

Improvisation


Manners of embellishing may be seen in written-out, ornamented restatements. Embellishment needs to be added, for example in Mozart's piano concertos when the notation appears to provide only a skeleton of the original. Written cadenzas, such as the one for K453, can provide a model in respect to themes and modulations for concertos lacking cadenzas.

Pitch and Tuning

Tuning


*Vallotti was unorthodox in viewing the 4th (and the 6/4 chord) as consonant. He also held to the concept of chiaroscuro (i.e. the distinctiveness of keys), and to achieve it advocated an unequal temperament whereby the six 5ths from B-F were just, while the six from F-B had a Pythagorean comma distributed evenly.

<

Examines 22 sources that show "how keyboard instruments such as the Viennese fortepiano were tuned during the period from 1770 to 1840." Equal temperament was already advocated by *Fritz (1756), and later by *Vogler (1776), *Löhlein (3/1779), and *Petri (2/1782). Unequal temperaments were primarily represented by *Kirnberger (1771-74), who felt a need to maintain "keys" that were distinctive, and his followers *Laag (1774) and *Schultz (2/1792-94). *Türk (1789), however, favored equal, as did a number of authors of early 19th-century keyboard maintenance manuals.

**THE NINETEENTH CENTURY**

**General Studies**

**Surveys**


*Draws attention to numerous areas that hold promise for future research: manuscript materials from original performances; orchestration treatises (placement, quality of instruments, etc.); original scorings (prior to modern tamperings); singers' notebooks (with cadenzas, etc.); opera production books (diagrams, staging, gestures, etc.); iconographical material (halls, audiences, sets, costumes, etc.); autobiographies and memoirs (e.g. Spohr, Berlioz, Wagner); and accounts in contemporary journals.*

**Composers**

**Rossini**

< Bernardini, Alfredo. "Due chiavi per Rossini?"

Cited below as item 206.

**Chopin**

Singing was the ideal model, the wrist being raised for a breath (according to student Emilie Gretsch). Possible clues to Chopin’s articulation may be found in *Adam (1802) and *Kalkbrenner (1831). Recordings by Raoul von Koczalski, a pupil of Mikuli, may be suggestive of Chopin’s lost melodic art.

Brahms


In his later years Brahms often played the Bösendorfer in public recitals, but had a special predilection for the Streicher (crisp tone, soft-sounding leather-covered hammers, distinct bass, middle, and treble registers) and had one in his home in Vienna from 1873 until his death. A particular importance in later keyboard works (e.g. opp. 116-119) was accorded middle register melodies brought out especially by the thumbs, and he shows in his 51 Exercises how to execute and finger such melodies.

Media

Voices


During the first half of the 19th century a technique was developed enabling the singer to produce a loud tone over the entire range. The male voice in particular was shifted upwards into higher notes without falsetto (the ability to sing high C was something new). Different registers were dependent on mouth position and sub- and supra-glottal spaces within the larynx; according to *Garcia "a register is a series of tones with the same color (timbre) and the same production mechanism."


Quotes a number of examples showing an original with the embellished versions of the various singers. The extent of ornamenting was gradually declining; for example, during
the first quarter century two cadenzas were the norm, one on I 6/4, one on V, but by the 1830s the first fell from use. Early recordings (some from the end of the 19th century) very likely reflect a style of singing prevalent ca. 1860, and certain recordings had the collaboration of Brahms, Verdi, Wagner, Gounod, and other composers. These recordings often show extended acciaccaturas, but not interpolated high notes. Many conventions, such as the coloraturas of "Una voce poco fa," derive from as late as the 1920s and 30s.


What does "covering" mean in the several languages? Copertura, for example, may mean vowel modification (offering a means of scale equalization in upper-middle and upper ranges), and should not be confused with Deckung (which involves laryngeal, postural changes), while "cover" brings a number of connotations. Couverture is modelled on copertura, but avoids recognizing a need for vowel modification.

Keyboard Instruments

Bilson, Malcolm. "Keyboards." Cited above as item 188.

The modern piano does a disservice especially to Beethoven, who suffers from its lack of strong metric pulse and genuine sforzando.

Lindley, Mark. "Keyboard Fingerings and Articulation." Cited above as item 63.


From the five-octave fortepiano of ca. 1800 with two knee-levers (damper, cloth muffler), for which Beethoven conceived his earlier sonatas, to the overstrung Steinway with added sostenuto pedal, which triumphed at the 1869 exposition, a remarkable diversity of pianos came into vogue — "the Romantic piano was many pianos." Winter shows the appropriateness of various kinds of pianos to particular composers and even to specific compositions. He relates Viennese makes, for example, to works of Beethoven, Schubert, Schumann, and Brahms, the Pleyel to those of Chopin, the Erard to those of Liszt, Debussy, and Ravel.

A detached touch was continued into the 19th century (although legato slurs and phrase markings were gradually becoming lengthier). In France in the 1850s Lemmens represented a decisive change with his advocacy of finger substitutions and note ties (although his pupil Widor at times played detached, as in the toccatas). In registration new color combinations were explored: brighter and louder trebles, strings, tremolos, the crescendo mechanism (Rollschweller). Leupold summarizes the developments in organs in each country, 1840s to 1880s, 1890s-1940s.

String Instruments


Shifting became more secure, due in part to chin rest (ca. 1820) and end pin (ca. 1860), and higher positions were exploited, e.g. by Paganini on the G string. New color possibilities were opened in the form of glissandos, harmonics, double-stop harmonics, left-hand pizzicato, etc., and *Baillot spoke of three kinds of (selective) vibrato. The Tourte bow elicited a variety of new strokes (although the signs for these were often inconsistent).

Woodwind Instruments


Baldassare Centroni, oboist and friend of Rossini, is pictured with his two-keyed oboe, which would have lacked the pitches b and c#. It seems significant that Rossini’s oboe parts consistently omit these notes. He appears to have agreed with the *Allgemeine musikalische Zeitung* (29 January 1812) that attempts to improve the flute and oboe by adding many keys represented no betterment whatsoever.

Brass Instruments

Surprisingly little uniformity existed among wind and brass instruments during the 19th century. And much remains to be found out concerning composers’ preferences in specific works: Berlioz mixed natural trumpets and valved cornets in the *Fantastic Symphony*; Schumann exceptionally went over to valved brass in his Fourth Symphony; Brahms called for a natural horn in his Trio, op. 40 (1865). Charlton also indicates that much remains unresearched in instrumental tutors (tonguing, vibrato, etc.).

**Orchestra**


The *Archivo storico civico* of Milan conserves materials concerning productions at *La scala* and other theaters from 1824 to 1861, with information about the nature of the orchestra, the distribution of instruments, new instruments, the band on the stage, etc.

**Conducting**


*Scaramelli’s* was among the first treatises concerning orchestral direction in the 19th century, reflecting his experiences as first violinist in the theater of Trieste, and amplifying upon *Galeazzi*. Scaramelli’s orchestra consisted of strings (20, —, 4, 2, 5), woodwinds (2, 2, 2, 2), brass (2, 2, —, —), and occasionally 2 trombones, English horn, cymbals, triangle, tambourine, and harp. Cavallini prints the entire treatise.

**Tempo**


Talsma’s theory that early 19th-century markings, up to Allegretto, indicated two swings (rather than one) of the metronome is contradicted by a number of quotes, indicating that allegro tempi (as in Chopin’s or Thalberg’s etudes) were so fast as to be apparently unplayable.
THE TWENTIETH CENTURY

General Studies

Surveys

  Recordings provide invaluable source materials, as do instrumental method books. In the early century the extent of use of vibrato and of portamento were still controversial (*Flesch, for instance, described various types of portamento*). Tempos often fluctuated (they became slower, for example, during lyrical themes), and Weingartner and Toscanini, although critical of "rubato" conductors, were themselves not entirely strict. Bartók, as well, frequently indulged in flexible tempos.

  New problems have emerged. Sources may be aleatoric and define the sounds or pitches to be used only very loosely. Moreover, a composer’s own recordings may lack authority since the realizations at times depart from the score (e.g. Boulez’s *Pli selon pli*). And it may be difficult to determine when a work should be taken at face value or as an expression of irony.

Composers

Messiaen

  Concerns the dispositions and capabilities of various organs Messiaen had contact with or for which he conceived particular works. A distinct challenge for the organist is the adapting of Messiaen’s specific registrations to other instruments, as he himself did, for example on the Johanneskirche organ in Düsseldorf, where he found it necessary to alter registrations conceived for the organ of the Trinité in Paris.

In piano works such as *Herma* or *Evryali* playing all the notes exactly and at the required speed is beyond human possibility. Hill suggests strategies (omitting certain notes, transposing others to different octaves, etc.) whereby the intended effect may be approximated.


Stockhausen explains his notation: the long vertical markings are like bar lines, shorter ones are "beat lines," durations are indicated in seconds, pitches and rhythms are spatially approximated. For each concert the score may be rearranged. He is aiming at a general effect: "you don't have to count all the leaves to enjoy the foliage."


Describes various devices for contrabass encountered in contemporary works and their realization: two-handed pizzicato, circular bowing, vocal sounds, multiphonics, contrabass as a drum, prepared contrabass, etc. (devices Turetzky himself has often introduced in his own performances).

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**REFLECTIONS ON PERFORMANCE PRACTICE**


Proclaims that the interpreter needs to reinvent the author's [the composer's] original. "The author proposes... the interpreter... disposes." Boulez approves of no historical
nostalgia, in fact he deems it unattainable whether in respect to Berg's *mise en scene* (the point of reference in this essay) or to musical works in general.


Is music an objective entity, resulting from a composer's intentions, or a subjective entity, "existing only insofar as we can recreate it in our own image?" The latter view has been advanced by a number of recent historians, who feel we can only know the past in terms of our own predispositions. Donington, on the other hand, feels this to be but a half truth, since earlier music can in some measure be recovered as it once was.


Revisions of articles written since 1982 plus four new items. Neumann continues to "question many orthodox beliefs of the performance practice tradition": on-the-beat ornaments, upper-note trills, the French overture style, the international validity of *notes inégales*, and that period instruments are *ipso facto* preferable to modern ones in performing early music.


A number of "false leads" (pitch a half-step lower, non-vibrato, *messa di voce*, etc.) have gained general acceptance and a kind of universal validity. Another problem is the overly-broad application of theoretical rules, for example by Dolmetsch, Dart, and Donington (the "establishment"), who promulgated the "cite-and-apply" method. In part 2 of the essay Neumann enquires to what extent the present has its own effect on audiences. Do we require swifter tempos and a heightened sense of tone color? He also asks whether the essence of past music, what creates its meaning, does not lie in its structural components, such as harmony or melody. Performance aspects, like pitch or tone color, seem to have a lesser role, one that has been exaggerated by performers of early instruments.
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