

THE STYLISTIC EVOLUTION OF THE
VIOLONCELLO SONATA

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Especially, I should like to thank the head of my Examining Committee, Miss Elizabeth Cowling, who has been my director in this study, and from whose course in "Cello and Music History" I have benefitted greatly. She also shared her library of cello music at my disposal as well as a number of books and has given unfailingly of her time to assist me in this project.

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writing for the 'cello and a keyboard instrument during the Baroque era, the Classical era, the Romantic era, and the twentieth century. The appendix contains a brief list of representative works from these periods which are available in modern publications.

INTRODUCTION

The stylistic history of the 'cello sonata is closely related both to the history of the 'cello and its technique and to the history of the sonata. Thus, the first part of this paper discusses the history of the 'cello. The second part of the paper discusses the history of the sonata, its forms, and their use in writing for the 'cello and a keyboard instrument during the Baroque Era, the Classic Era, the Romantic Era, and the Twentieth Century. The appendix contains a brief list of representative works from these periods which are available in modern publication.

I. HISTORY OF THE VIOLONCELLO

In general, the 'cello may be said to have lagged consistently behind the violin in terms both of the development of technique and of literature. The first appearance of the 'cello was probably in Italy, perhaps in Naples, somewhere around 1550, although many differing opinions as to this date and place may be found.² The first known maker of 'cellos was Gaspare da Salò (1542-1609).³ The

PART I. HISTORY OF THE VIOLONCELLO

'cello apparently appeared in Germany and in France only very early. In England the instrument did not come until the middle of the seventeenth century, and it did not really begin being accepted there until about 1733.⁵

² Donald S.J. van der Straeten, *History of the Violoncello*, the *Violoncello*, the *Violoncello*, and *Violoncello* (3 vols.; London: William Reeves, 1915), p.113.

³ See Georges Alary, "Le Violoncelle," *Encyclopédie de la Musique et dictionnaire du Conservatoire*, Part II: *Instrumentation-Pédagogie*, vol. III: *Les instruments à cordes*, p.113. *Instrumentation-Pédagogie*, ed. Armand Renaud et al., Paris: Librairie Delagrave, 1907, p.113, for date for Germany and the Netherlands; Wilhelm Meixner, *Instrumentation*, vol. II of *Handbuch der Musikwissenschaft*, ed. Ernst Reyer (7 vols.; Leipzig: Breitkopf-Potsdam: Akademische Verlagsgesellschaft Bärenreiter A.G., 1909), p.124, for date of ca. 1600.

⁴ Van der Straeten, p.124. ⁵ 1694., pp.177, 258.

⁶ 1694., pp.307-308.

I. HISTORY OF THE VIOLONCELLO

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¹Edmund S.J. van der Straeten, History of the Violoncello, the Viol da Gamba, their Precursors, and Collateral Instruments (2 vols.; London: William Reeves, 1915), p.125.

²See Georges Alary, "Le Violoncelle," Encyclopédie de la Musique et Dictionnaire du Conservatoire, Part II: Technique-Esthétique-Pédagogie; Vol.III: Technique Instrumentale: Instruments à vent, Instruments percussion, Instruments à cordes, Instruments automatiques, ed. Albert Lavignac and Lionel de la Laurencie (6 vols.; Paris: Librairie Delagrave, 1927), p.1841, for claim for Germany and the Netherlands; Wilhelm Heinitz, Instrumentkunde, vol. II of Handbuch der Musikwissenschaft, ed. Ernst Bucken (7 vols., 3 supplements; Wildpark-Potsdam: Akademische Verlagsgesellschaft Athenaion M.B.H., 1929), p.124, for date of ca. 1600.

³Van der Straeten, p.125. ⁴Ibid., pp.177, 258.

⁵Ibid., pp.307-308.

However, for about a century and a half after its first appearance, the 'cello occupied a subordinate position as an accompanying instrument for vocal music in the church or for violin sonatas; both Corelli and Tartini carried 'cellists with them on their tours to accompany them in performance.⁶ An example of the lag in the development of the literature for the violoncello may be found in the fact that the first violin sonata was written by Marini in 1617,⁷ but the first 'cello sonatas were not written until 1689 by Domenico Gabrielli.⁸ It was not until the end of the seventeenth century that the 'cello began emerging from its subordinate position,⁹ and logically it is not until this time that any names of 'cellists are known.¹⁰ One reason that the 'cello had so much difficulty in finding acceptance was that the corresponding member of the viol family, the bass viol da gamba,

⁶Ibid., p.130.

⁷Curt Sachs, The History of Musical Instruments (New York, W.W. Norton, 1940), p.352.

⁸William Newman gives this date as the middle 1680's (The Sonata in the Baroque Era [Chapel Hill, University of North Carolina Press, 1959], p.19.) However the date on the manuscript is 1689. (Gordon James Kinney, "The Musical Literature for Unaccompanied Violoncello," Doctoral Dissertation, School of Music, Florida State University, 1962 (Ann Arbor: University Microfilms, Inc., 1962), footnote, p.144.

⁹Van der Straeten, p.131. ¹⁰Ibid., pp.137ff.

was extremely popular as a solo instrument; indeed it was by far the most popular of the viols.¹¹

Certain aspects of early 'cello technique should also be noted in this connection. For some time after its appearance the 'cello was bowed gamba-style, that is, palm-up. The change to the palm-down style was in evidence by the 1750's.¹² This style persisted even into the early 1800's.¹³ It is not possible to get the same fullness of tone, with equal exertion of effort from the player, with gamba-style bowing as with the modern palm-down type of bowing. Also the methods of holding the bow even after the palm-down method was adopted were not fixed; some held the bow at the frog similar to the method used today; others held it four or five inches closer to the middle of the stick.¹⁴

An additional problem involving tone was the fact that the entire violin family used thicker strings than did the viol family,¹⁵ and thicker strings are more difficult

¹¹Edward John Payne, "Violoncello Playing," Grove's Dictionary of Music and Musicians, VIII, ed. Eric Blom (Fifth edition; New York: St. Martin's Press, 1954), p.821.

¹²Gerald R. Hayes, The Viols and Other Bowed Instruments, Vol.II of Musical Instruments and their Music 1500-1750 (London: Oxford University Press, 1930), p.206.

¹³Van der Straeten, p.359. ¹⁴Ibid., p.269.

¹⁵Sachs, Musical Instruments, p.347.

to set into immediate vibration. Since the 'cello must of necessity use thicker strings than those of the violin,¹⁶ there was probably a considerable difference in its ability to draw a pleasing tone in comparison to the gamba.

Furthermore, the 'cellos made up until about the middle of the seventeenth century and even into the eighteenth century were apparently larger and broader than the modern 'cello¹⁷ and, Sachs conjectures, probably used even thicker strings than the later 'cellos.¹⁸

Another limiting factor on early 'cello playing was the fact that it was not provided with an endpin, but was rather supported solely by the legs, which must have made it rather awkward to handle. A plate in vander Straeten's history of the 'cello¹⁹ shows C.J. Lidarti, an eight-

¹⁶The pitch of a string depends on its length, thickness, tension, and the specific gravity of the material of which it is made. The methods of deepening the pitch of a string, aside from giving it a longer vibrating length, are to thicken it, use heavier material, i.e., material of a higher specific gravity, and put less tension on it. (Karl Geiringer, Musical Instruments: Their History in Western Culture from the Stone Age to the Present [New York: Oxford University Press, 1945], p.16) All four methods are involved in the differences between violin and 'cello strings.

¹⁷The modern pattern of the 'cello was standardized by Stradivari after 1707. (Ernest N. Doring, How Many Strads?: Our Heritage from the Master [Chicago: William Lewis and Son, 1945], p.41.)

¹⁸Sachs, Musical Instruments, p.362.

¹⁹Facing p.184.

eenth-century 'cellist, holding his 'cello as it must have been held before the endpin came into use. He holds it in place with his legs supporting the lower bouts. The instrument is almost perpendicular and is held somewhat away from the upper part of the body. It would seem that it would be very awkward to get the left hand and arm around the upper body for any sort of extensive passages in the higher positions. It would also be difficult to exert any great degree of pressure on the bow in order to draw a large tone, as the grip of the legs must have been somewhat precarious. Apparently the first to use an endpin was Servais (d.1866), who resorted to it in his old age.²¹ However, its acceptance was anything but immediate; as late as 1899, Arthur Broadley in a book about 'cello playing felt it necessary to discuss holding the 'cello both with and without an endpin.²²

The shortness of the neck of the early 'cellos made playing even as high as fourth position rather awkward.²³ And, in any case, there was no real standardization of fingering patterns. Very awkward fingerings involving

²¹ Payne, Grove's Dictionary, VIII, p.823.

²² Arthur Broadley, Chats to 'Cello Students (London: The Strad, 1899), pp.6-8.

²³ Van der Straeten, p.366.

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whole steps between the second and third fingers or third and fourth fingers and half steps between the second and fourth fingers may be found in various early tutors. (See examples 1-4) The examples shown also show that early 'cellists ~~must~~ have sanctioned much more frequent shifting than modern 'cellists. The modern system of fingering by half-steps, with the exception of the extension of the first finger, was not finally fixed until Duport's Essai sur le doigtier du violoncelle et la conduite de l'archet (Paris, 1806-1819).²⁴

Apparently the first to introduce the use of thumb position was Fransichello (d.1770).²⁵ The extensions of fingering systems into the higher ranges can be seen in the fact that the eighth sonata of Salvatore Lanzetti (c.1710-c.1780) employs a range to a¹.²⁶

In the nineteenth century technical resources of both the bow arm and the left hand were carried to great heights of virtuosity by such men as Romberg, Dotzauer, Servais,

²⁴Payne, Grove's Dictionary, VIII, p.822; Van der Straeten, p.269.

²⁵Van der Straeten, pp. 154-156. ²⁶Ibid., p.167.

Example 1--Whole-steps between the second and third and third and fourth fingers. From "The Gamut for the Violoncello," printed between 1745 and 1746. (Van der Straeten, p.364)

Example 1 shows two staves of music in C major, 4/4 time. The first staff is in bass clef and contains a sequence of whole notes: C2, D2, E2, F2, G2, A2, B2, C3. Fingerings are indicated below the notes: 1, 2, 3 for the first three notes; 1, 2, 3 for the next three notes; 1, 2, 4 for the next three notes; and 1, 2, 3 for the final note. The second staff is in treble clef and contains a sequence of whole notes: C3, D3, E3, F3, G3, A3, B3, C4. Fingerings are indicated below the notes: 1, 2, 3, 4 for the first four notes; and a wavy line for the final note.

Example 2--Whole-steps between the second and third fingers and general fingering patterns. From "The Gamut for the Violoncello," (Van der Straeten, p.365.

Example 2 shows four staves of music in D major, 3/4 time. The first staff is in treble clef and contains a sequence of notes: D4, E4, F#4, G4, A4, B4, C5, D5. Fingerings are indicated below the notes: 1, 2, 3, 2, 1, 3, 2, 1, 3. The second staff is in treble clef and contains a sequence of notes: D4, E4, F#4, G4, A4, B4, C5, D5. Fingerings are indicated below the notes: 2, 3, 2, 3. The third staff is in treble clef and contains a sequence of notes: D4, E4, F#4, G4, A4, B4, C5, D5. Fingerings are indicated below the notes: 2, 3, 2. The fourth staff is in treble clef and contains a sequence of notes: D4, E4, F#4, G4, A4, B4, C5, D5. Fingerings are indicated below the notes: 3, 3, 2, 2, 3.

Example 3--Fingering for chromatic scale, showing half steps between second and fourth fingers. From Michel Corrette's tutor, published in 1741. (Van der Straeten, p.363).

Example 4--Backward shifting patterns. From Corrette's tutor. (Van der Straeten, p.270).

Franchomme, Davidoff, Popper, and others.²⁷ More recent changes in left-hand technique include those of Diran Alexanian and Pablo Casals in their emphasis on extensions rather than abrupt shifts.²⁸

Few persons realize that another aspect of left-hand technique, the vibrato, which is all-pervasive today, was used in the Baroque only exceptionally, as an ornamental device.²⁹

At the end of the eighteenth century, the last changes in the actual construction of the 'cello were made. The bridge was raised and arched more highly, the neck and fingerboard were slanted backward, thinner strings were used, and the ~~bass~~ bar was made heavier. All these changes were made for the sake of the greater brilliancy which music of the time was demanding.³⁰

²⁷Alary, Encyclopédie de la Musique, Part II, vol. III, pp.1879-1882.

²⁸Diran Alexanian, Theoretical and Practical Treatise of the Violoncello, trans. Frederick Fairbanks (Paris-New York: Editions Salabert, 1922), pp.57-59, 158-159; Lillian Littlehales, Pablo Casals, revised and enlarged, (New York, W.W. Norton, 1948), p.147.

²⁹Manfred F. Bukofzer, Music in the Baroque Era (New York: W.W. Norton, 1947), pp.377-378.

³⁰Sachs, Musical Instruments, pp.360-361.

THE SONATA IN THE BAROQUE ERA

History and External Form of the Sonata in the Baroque Era

The word "sonata" was first used only to distinguish an instrumental piece from a vocal one; only later did the term acquire any structural significance.³¹ Such use of the word had its roots back even into the Medieval Era.³² The fact that its history as a definite form or procedure for writing does not begin until the Baroque period is a

PART II. HISTORY OF THE VIOLONCELLO SONATA

really begins the independent existence until this time. Indeed, as Clerval says, "One can even say that instrumental music is entirely the creation of the Baroque."³³

³¹William S. Newman, *The Sonata in the Baroque Era* (Chapel Hill: The University of North Carolina Press, 1991), p. 37.

³²*Ibid.*, p. 36.

³³"On peut même dire que la musique instrumentale est, tout entière, une création de l'ère baroque." Jacques Clerval, *La Musique et la Musique: Essai d'ethnomusicologie* (Paris: Les Éditions de la Librairie Imprimerie, 1968), p. 173.

II. THE 'CELLO SONATA IN THE BAROQUE ERA

History and External Form of the Sonata in the Baroque Era

The word "sonata" was first used only to distinguish an instrumental piece from a vocal one; only later did the term acquire any structural significance.³¹ Such use of the word can be traced back even into the Medieval Era.³² The fact that its history as a definite form or procedure for writing does not begin until the Baroque period is a symbol of the fact that instrumental music did not really begin its independent existence until this time. Indeed, as Clercx says, "One can even say that instrumental music is entirely the creation of the Baroque."³³

³¹William S. Newman, The Sonata in the Baroque Era (Chapel Hill: The University of North Carolina Press, 1959), p.17.

³²Ibid., p.18.

³³("On peut même dire que la musique instrumentale est, tout entière, une création de l'âge baroque.") Susanne Clercx, Le Baroque et la Musique: Essai d'esthétique musicale (Bruxelles: Editions de la Librairie Encyclopédique, 1948), p.171.

The rise of the sonata was not only deeply involved with the rise of independent instrumental music, but also very directly with the rise of the violin family of instruments. "The violin may be said to have made its debut, reached a first peak in both construction and technical exploitation, spread from Italy to other, originally less receptive lands, and attracted some of the first great instrumental virtuosos, all primarily as a vehicle of the sonata."³⁴ One of the characteristics of the Baroque sonata was that it was at one time or another the vehicle for virtuosity,³⁵ a role which in the late Baroque and generally in the time since then has been assumed by the concerto. Among the characteristic virtuoso elements in the Baroque violin sonata were rapid scale passages, wide skips, use of high positions, and the transfer of vocal idioms to the violin.³⁶ Effects such as these were transferred only gradually to the 'cello because of the lag in its technical development as compared to that of the violin.

³⁴Newman, Baroque Era, p.54.

³⁵Ibid., p.28.

³⁶Bukofzer, pp.52-53.

The Baroque sonata seems to have been a direct descendant of the sixteenth-century French chanson,³⁷ as it was transferred to the keyboard or to instrumental ensembles as a "canzona" or "canzona da sonar".³⁸ The chanson was a highly sectionalized piece, which, though imitative, leaned toward a more homophonic style.³⁹ A feature of the French chanson which was retained in the canzona was a repeat of the first section, either literally or with only slight changes, at the end of the composition.⁴⁰ Thus the idea of unification of a work through repetition of one idea was an element even of the early history of the sonata. As the Baroque period progressed, there was an increasing tendency to reduce the number of sections while increasing their length. This in turn led to the actual breaking up of the composition into separate movements.⁴¹

Two types of sonata evolved after its beginnings, the sonata da chiesa and the sonata da camera. The sonata

³⁷Bukofzer, p. 51.

³⁸Willi Apel, "Sonata," Harvard Dictionary of Music (Cambridge: Harvard University Press, 1944), p. 692.

³⁹Willi Apel, "Chanson," Ibid., p. 130.

⁴⁰Bukofzer, p. 353.

⁴¹Ibid., p. 354.

da chiesa represented the breaking down of the canzona into separate movements.⁴² It was standardized by Corelli (1653-1713) in the late Baroque into four movements in the order slow-fast-slow-fast.⁴³ The sonata da camera represented the coming together into a unified whole of diverse dance forms.⁴⁴ These two forms of the Baroque sonata were never differentiated as clearly as textbook definitions seem to indicate, however; the sonata da camera was not always a suite of dances;⁴⁵ the title sonata da chiesa did not necessarily preclude the inclusion of dance-like movements.⁴⁶ The forms began fusing and interchanging stylistic elements even as they became standardized into their textbook forms.⁴⁷

The individual movements of both the sonata da chiesa and the sonata da camera tended to fall into the binary form most frequently, although fugal, variation, or fantasia-

⁴²Newman, Baroque Era, p.70.

⁴³Ibid., p.69; Bukofzer, p.232; H.C. Colles, "Sonata," Grove's Dictionary, VII, p.892.

⁴⁴Newman, Baroque Era, p.70.

⁴⁵Ibid., p.35.

⁴⁶Bukofzer, pp.232-233.

⁴⁷Ibid.,

type movements may also be found.⁴⁸ The binary movement is divided into two sections, sometimes with the second half nearly equal in duration (symmetrical binary form) and sometimes with the second half considerably extended by modulations and figuration (assymetrical binary form). The first section modulates to the dominant or to the relative major if it started from a minor tonic; the second section, after a section of instability and modulation, returns to the tonic.⁴⁹

The sonata from the beginning of its development was something of a meeting ground for various styles. In the early Baroque it "stood between two influences, the dance and the monody, and both in conjunction rapidly displaced what had survived of the original canzona elements."⁵⁰ In the late Baroque **Era** the sonata became the "universal meeting ground"⁵¹ of all the Baroque styles, and it was as a result of this **fact** in its evolution that it underwent the changes which transformed it into the completely different form in which it existed in the classical era.

⁴⁸Newman, Baroque Era, pp.81-91.

⁴⁹Apel, "Binary and Ternary Form," Harvard Dictionary, pp.86-88.

⁵⁰Bukofzer, p.52. ⁵¹Ibid., p.235

Internal Form in the Baroque Sonata

Internal form in the late Baroque, that is, the basic phrase structure and the harmonic and tonal direction, has been perhaps best described by Bukofzer as the "AX procedure" or continuous expansion.⁵² The AX procedure can be charted as AX', A'X'', A''X''', and so on, with A standing for a basic motive, X for its continuous expansion by means of sequence, figuration, etc., and ' standing for the various keys through which A and X pass.⁵³ Thus, Baroque music involved a constant "motivic play".⁵⁴ The motive is seldom more than three to seven notes long, and it is generally characterized by some peculiar rhythmical figure.⁵⁵ The use of patterned figuration which relies on a consistent rhythmic figure was an essential element in Baroque music in general and in the separation of an instrumental idiom from the vocal idiom in particular.⁵⁶

⁵² Bukofzer, pp.358-362.

⁵³ Ibid., p.360.

⁵⁴ Newman, Baroque Era, p.81.

⁵⁵ Ibid., p.85.

⁵⁶ Bukofzer, p.73.

In the late Baroque, particularly with Vivaldi, Veracini, Tartini, and Locatelli, phrase structure becomes more and more regular, the texture becomes more homophonic, and the harmonic rhythm slows perceptibly from what it had been earlier.⁵⁷ Also there is an increasing tendency toward a return of the main idea in the second section of the binary form (called by Apel the "rounded binary form").⁵⁸ "Parallelism at this point seldom lasts more than a measure or so, because the music now remains in or near the tonic where the first half had soon departed from it. But there is no denying at least an incipient ABA design in many such movements."⁵⁹

Continuo Parts in the Baroque Sonata

Sonatas for 'cello and a keyboard instrument in the Baroque, like all works using a keyboard accompaniment, were written and published with only the solo line and a "figured bass", which sometimes was not even figured.⁶⁰

⁵⁷Newman, Baroque Era, p.88.

⁵⁸Apel, "Binary and Ternary Form," Harvard Dictionary, pp.87-88.

⁵⁹Newman, Baroque Era, p.88.

⁶⁰Marc Pincherle, "On the Rights of the Interpreter in the Performance of Seventeenth and Eighteenth Century Music," trans. Isabelle Cazeau, Musical Quarterly, XLIV, no.2 (April, 1958), p.154.

From this material, the keyboard player was expected to be able to produce a full accompaniment. A large number of manuals were published in the eighteenth century covering this area of study; indeed, there were more of these than there were treatises on counterpoint, ornamentation, or performance.

⁶¹ Among the authors of such treatises were Treiber, Keller, Gasparini, Heinichen, Kellner, Mattheson, G.P. Teleman, C.P.E. Bach, Quantz, Schröter, G.M. Teleman, Kirnberger, and Turk.⁶²

Modern editions are normally provided with realizations of these figured basses. These realizations tend to be rather conservative, usually with only three to four parts, including the bass line itself, and proceeding more frequently in chordal blocks than linearly.⁶³ That this was the most frequent form which Baroque realizations took seems

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William J. Mitchell, "Chord and Context in Eighteenth-Century Theory," Journal of the American Musicological Society, Vol. XVI, no.2 (Summer, 1963), p.221.

⁶²

F.T. Arnold, The Art of Accompaniment from a Thorough-Bass as Practiced in the XVIIth and XVIIIth Centuries (London: Oxford University Press, 1931), pp.241-323.

⁶³

See for example Dalla Bella, "Sonate für Violoncello & Basso Continuo," ed. Walther Upmeyer, Nagels Musik-Archiv 83 (Kassel: Nagels Verlag, 1960) and Giuseppe Torelli, "Sonate in G-dur für Violoncello & Klavier," ed. Franz Giegling, Hortus Musicus 69 (Kassel & Basel: Bärenreiter-Verlag, 1955.).

fairly certain.⁶⁴ However, there is also evidence that on occasion octave-doublings could mean that as many as eight parts could be used.⁶⁵ Also precedents for the use of broken chords, arpeggios, and other such figuration may be found.⁶⁶ Indeed, realization practices in the Baroque seem to have been quite free; the bass could be ornamented, chords could be omitted or changed, more than one chord could be taken over a single bass note, and chords could be broken or unbroken.⁶⁷

In relation to the accompaniment of the 'cello in particular, some authors claimed a lower range should be used than that used for treble instruments. The normal range for the middle and upper parts of an accompaniment was from about f or g to f''--about two octaves.⁶⁸ However, Quantz says that the range for the accompaniment of a 'cello should not be so great; C.P.E. Bach agrees, specifying the range as not above b'.⁶⁹ Turk, however, disagrees, saying that for all practical purposes the pitch of lower instruments is accepted by the ear as sounding an octave higher, and

⁶⁴ Arnold, pp.330-331. ⁶⁵ Ibid., pp.334-335.

⁶⁶ Ibid., p.363.

⁶⁷ Fincherle, Musical Quarterly XLIV, no.2, p.154.

⁶⁸ Arnold, p.360. ⁶⁹ Ibid., p.366.

is not obscured by a higher accompaniment.⁷⁰

The general relation of the keyboard to the solo instrument was strictly one of accompaniment. The most basic principle of figured-bass realization which the eighteenth-century manuals seem to emphasize is that the solo line is the more important.⁷¹ Nonetheless, there is some evidence that on occasion an expert keyboard player and improviser might give considerably greater importance to the keyboard part. A contemporary report on J.S. Bach's accompanying says "his accompaniment always resembled a concertante part, elaborated with the greatest care, and taking its place beside the principal part; at the right moment, the principal part was bound to shine. This privilege was also accorded to the bass, without prejudice to the principal part."⁷² However, it would seem that such treatment of the bass was rather rare.⁷³ Generally speaking, the accompanist was expected to add interest only when the solo part was resting or sustaining a note.⁷⁴

⁷⁰Arnold, p.367. ⁷¹Ibid., p.368.

⁷²Ibid., footnote, p.389.

⁷³Ibid., p.391 .

⁷⁴Ibid., p.382.

Style and Character of the 'Cello Part
in the Baroque Sonata
for 'Cello and Keyboard

In the 'cello sonatas of Vivaldi, Marcello, Torelli, Telemann, and Dalla Bella,⁷⁵ which may be taken as typical, the range of the 'cello part does not go beyond g', a', or b'--slightly less than three octaves above the lowest string. The upper part of the range in these sonatas is used quite frequently, although, as has been noted,⁷⁶ the fourth position was somewhat awkward with the shorter neck on the instrument. A good example of the use of the higher range is the first movement of the Marcello Sonata V. (example 5) Indeed, Rarig notes that in slow movements Vivaldi particularly avoids the use of the C-string at all;⁷⁷ the reason for this can easily be imagined if one remembers the considerable thickness

⁷⁵ Antonio Vivaldi, "Six Sonates Originales pour Violoncelle et piano," recueillies et annotées par M. Chaigneau, réalisation de la basse chiffrée par W.M. Rummel (Paris: Editions Salabert, n.d.); Benedetto Marcello, "Sechs Sonaten für Violoncello und bezifferten Bass," ed. Walther Schulz, figured bass realisation by Eberhard Wenzel (Leipzig: Edition Peters, 1958); Torelli, "Sonate in G-dur"; G.P. Telemann, "Sonate für Violoncello und Basso Continuo," Der Getreue Musikmeister 8, Hortus Musicus 13 (Kassel und Basel: Bärenreiter Verlag, 1942); Dalla Bella, "Sonate".

⁷⁶ Above, p.7.

⁷⁷ Howard R. Rarig, "The Instrumental Sonatas of Antonio Vivaldi," Doctoral Dissertation, School of Music, University of Michigan, 1958 (Ann Arbor: University Microfilms, 1958)

of the C-string compared with the low strings of the gamba. Also it must be remembered that the 'cello was possibly still bowed in the underhand gamba-style, which does not allow for as much weight on the string as the overhand, or palm-down, style. The use of the lower strings was generally restricted to "virtuoso" passages involving skips such as those in example 6.⁷⁸ Skips involving more than an octave normally either left or arrived at an open string or else were such that they could be played without a left-hand shift. (example 7) There were, of course, occasionally more awkward skips used. (example 8)

Scale or arpeggio passages extending over a large range were exceptional in Baroque 'cello music. The normal compass of a scale or arpeggio passage was about a tenth; (example 9); occasionally a combination of a scale and broken chord covered a greater area. (example 10) Also, rarely, passages can be found in which a scale covers greater distance. (example 11)

Double-stops are rather rare in these sonatas; most frequently they are to be found in slow movements or as emphasis in an initial phrase or at a cadence. (example 12)

⁷⁸Rarig, p.127.

This rather limited technique is considerably expanded in the sonatas of Baroque composers who were themselves 'cellists. Good examples are the sonatas of J. Barrière, a leading 'cellist in the French school of the eighteenth century.⁷⁹ These sonatas employ a range to e'' and frequent double-stops. (example 13) There are also passages in his sonatas which require thumb position.

Much of the passage-work in Baroque sonatas is based on sequence.

For Vivaldi and his contemporaries sequence served as an element of logical continuation in their music. Formal arrangement of contrasting themes and consistent returns of thematic material were not yet fixed as fundamental to sonata movements. In the absence of these organizing features, thematic statements were succeeded typically by series of sequences that gave variety to the music while shaping its structural outlines.⁸⁰

Most of these sequences involve figures which themselves cover a small range, though the entire sequence may cover quite a large range.

⁷⁹Newman, Baroque Era, p.388; Van der Straeten, pp. 261-262.

⁸⁰Rarig, pp.155-156.

Other devices of passage work include bariolage, in which a line is interrupted by the regular return to a "pedal note" on an open string. (example 14) There are also passages in which this pedal note is a stopped note. Similar in effect are passages in which a figure of two or three notes is used as the pedal. (example 15) Another device is the literal repetition of phrases. (example 16) Syncopation is also occasionally used as a method of continuation. Also typical string crossing patterns are sometimes set up.

Occasionally slow movements may be found which seem to be obvious skeletons that would have been filled out in performance by the various ornamental devices which were used in the Baroque.⁸¹ (example 17)

⁸¹Thurston Dart, The Interpretation of Music (London: Hutchinson and Co., 1955), p.89.

Example 5--Use of the high register. From Marcello, Sonata V, First Movement, m.1-6.

Adagio

Handwritten musical notation for Example 5, showing three staves of music in treble clef with a common time signature. The music features rapid sixteenth-note passages in the high register, with various accidentals and slurs.

Example 6--Use of the lower strings in passages with skips. From Marcello, Sonata II, Second Movement, m.16-17.

a. (*Allegro*)

Handwritten musical notation for Example 6a, showing a single staff in bass clef with a key signature of two sharps (F# and C#). The music consists of eighth-note patterns with skips, ending with a double bar line and a wavy line.

b. From Telemann, Sonata, First Movement, m.11.

b. (*Lento*)

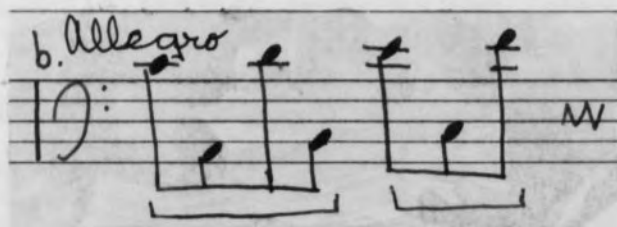
Handwritten musical notation for Example 6b, showing a single staff in bass clef with a key signature of two sharps (F# and C#). The music consists of eighth-note patterns with skips, ending with a double bar line and a wavy line.

Example 7-- Treatment of skips

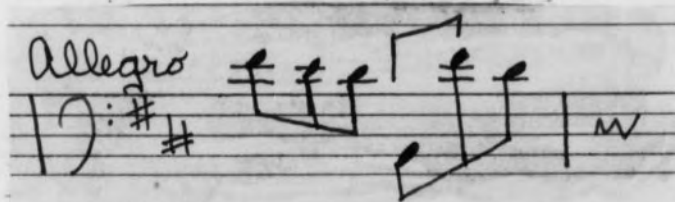
a. Using an open string. From Vivaldi, Sonata II, Second Movement, m.1.



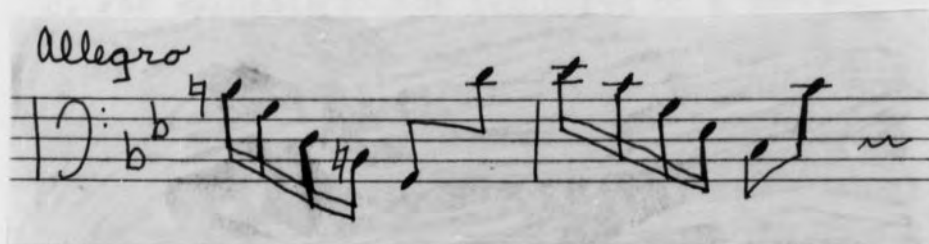
b. Skips not involving a change of position for the left hand. From Vivaldi, Sonata II, ^{second movement} m.2.



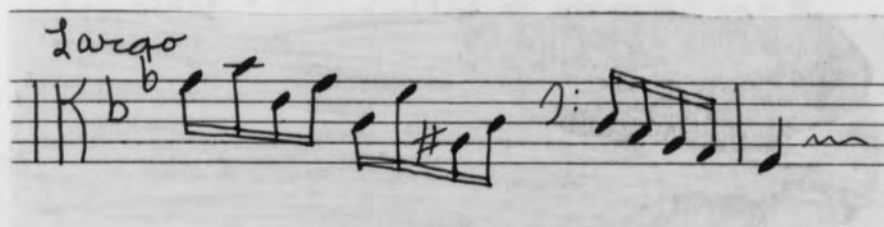
Example 8--More awkward skips. From Telemann, Sonata, Second Movement, m.29.



Example 9--Typical arpeggio ranges. From Vivaldi, Sonata VI, Second Movement, m.20-21.



Example 10--Combination (of a scale and broken chord) covering more than a tenth. From Vivaldi, Sonata VI, First Movement, m.17.

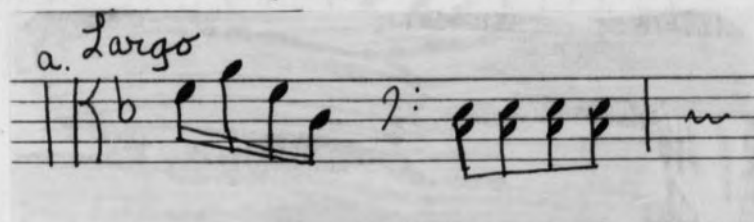


Example 11--Scale passage covering two octaves. From Vivaldi, Sonata V, Second Movement, m.23.

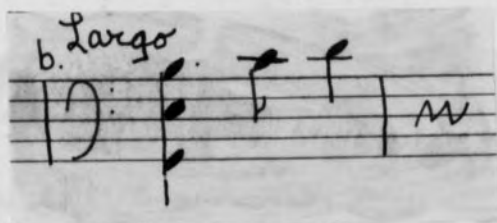


Example 12--Use of double stops.

a. In slow movements. From Vivaldi, Sonata IV, Third Movement, m.5.



b. For emphasis at the beginning of a phrase. From Vivaldi, Sonata I, Third Movement, m.1.



Example 12--continued

c. Use of double stops at the cadence. From
 J. Barrière, Sonata I, Third Movement, m.1.
 (J. Barrière, "Douze Sonates pour Violoncelle Solo
 avec Basse," recueillies et annotées par M.
 Chaigneau, réalisation de la Basse continue par
 W.M. Rummel [2 vols.; Paris Editions Salabert,
 1924]).

c. *Allegro*

The notation shows a single staff in bass clef with a key signature of one sharp (F#). The tempo is marked 'Allegro'. The music consists of several measures of eighth-note patterns. The final measure features a double stop (two notes played simultaneously) indicated by a bracket underneath the notes, followed by a fermata and a 'w' symbol.

Example 13--High range in the Barrière Sonatas.
 From Sonata VI, First Movement, m.28-32.

a. *Largo*

The notation shows two staves in treble clef with a key signature of one sharp (F#). The tempo is marked 'Largo'. The music features a melodic line with a high range, characterized by a series of eighth and sixteenth notes. The final measure includes a fermata and a 'w' symbol.

Double-stops in the Barrière Sonatas. From
 Sonata XI, Second Movement, m.11-15.

Larghetto

b.

The notation shows two staves in bass clef with a key signature of one sharp (F#). The tempo is marked 'Larghetto'. The music consists of a series of double stops (two notes played simultaneously) indicated by brackets underneath the notes. The final measure includes a fermata and a 'w' symbol.

Example 14--Bariolage, From Vivaldi, Sonata IV,
Fourth Movement, m.41-43.

Allegro



Example 15--Use of a "multi-note" pedal. From
Barrière, Sonata I, Third Movement, m.10-12.

Allegro



Example 16--Use of literal repetition. From
Vivaldi, Sonata IV, Second Movement,
m.54-55.

Allegro



Analysis of a Typical Baroque Sonata:
Vivaldi Sonata III in A Minor

First Movement (Key: a minor; form: binary)

The first section of this movement is unusual in that it is not based on sequence, but on the juxtaposition of two rather broad phrases (m.3-8; 11-16) with two statements of the basic motive (m.1-2;9-10) It cadences in the expected relative major (C major). The second section, however, is based on sequence; m.19 begins a sequence of m.17-18 a step higher, moving toward d minor. In m.20 this sequence is broken to move into another two-measure figure (m.21-22). A sequence starts a step higher in m.23, but immediately breaks and moves toward the cadence in d minor in m.26. In m.27-28 the basic motive of the movement returns in the tonic key, an example of the frequent return of initial material in the home key toward the end of the second half of a binary movement which characterizes Vivaldi.⁸² The two-measure phrase which follows (m.29-30 is obviously derived from m.3-4; m.31-32 and m.33-34 are sequences of m.29-30, each a step higher. In m.35 the final drive to the cadence starts; it is prolonged by the deceptive cadence in m.38.

⁸²Newman, Baroque Era, p.88; Rarig, p.305.

Second Movement (Key: a minor; form: binary)

This movement is based on a free sequence of the first measure in the second measure; m.3-4 continue freely, but using rhythmic elements found in the basic motive. In m.5 there is a typical skipping figure, of which m.6 is a sequence. M.7,8, and the beginning of 9 are based on a combination of sequence and repetition. The last part of m.9 and m.10 move freely toward the cadence in m.11. The basic motive returns at the end of this measure, this time continued by different figuration (m.14). The figure stated at the end of m.15 is continued through four sequences, each a step higher. M.18 begins the move to the cadence in C in m.19.

The second half of the movement begins with another statement of the basic motive in C and a continuation (m.20-22). In m.23 a new figure is stated and continued through two full sequences (m.24,25) plus a third incomplete statement (m.26), moving toward e minor. M.27 is made up of a figure and three sequential statements of it. M.28 illustrates the use of a three-note "pedal." Yet another figure begins in m.29 with two sequences, followed by the cadence in m.31 on e. In m.31 the basic motive is stated in the home key (the "return" mentioned in connection with the first movement). M.35 begins ~~an~~

other sequence lasting through m.38. M.39 is built with a short figure and its repetition and m.40 by making the second half a sequence of the first half. M.41 recalls elements of the basic motive (also recalled in most of the sequential patterns). M.42 begins another sequence, this time with four repetitions, lasting into m.44. The end of m.44 and m.45 represent a slight variation of the multi-note "pedal" figure. M.46 is an example of the characteristic broken third motive typical of string writing in the Baroque ⁸³ and moves toward the cadence in m.47, in which begins the basic motive's final statement.

Third Movement (key: a minor; form: binary)

The first ten measures of this movement are based on free sequences of the basic motive stated in m.1-2. M.11 is based on sequence; m.12 states a new motive which is repeated in m. 13. M.14 moves toward the cadence on C in m.15. The second section opens with the basic motive in m.16-17. M. 18 uses the same sequence found in m.11. These three measures lead to the d-minor cadence in m.19. M.20 is the first measure of the basic motive and is

⁸³Rarig, p.128.

sequenced twice (m.21,22). In m.23-24 there is another cadence in d. M.25-28 are variations of the basic motive in the home key (again, the "return"). M.29 simply leads into the motive in m.30, of which m.31 is a sequence. The drive to the final cadence begins in m.32, delayed by the deceptive cadence in m.33.

Fourth Movement (Key: a minor; form: binary)

This movement is based essentially on sequence and repetition. The basic motive is stated in m.1-2 and restated in m.5-6 after two free measures. M.7-8 are also free. The motive in m.9-10 is obviously derived from the basic motive; m.11-12 are a repeat of 9 and 10. M.14 sets up a new motive, stated sequentially in m.15; these two measures are repeated in m.16-17. M.18-19 are based on the syncopation found in the basic motive. These two measures plus m.20 are repeated in m.21-23. From there the movement moves freely to the cadence in C in m.31. In the second section m.32-39 repeat almost literally m.1-8, but in C major this time. M.40-47 are another almost literal repetition of the same material in d minor. M.48-49 are based on the rhythm of the basic motive; M.50-51 are free sequences of m.48-49. M.52 begins the free movement into the d-minor cadence in m.55. M.56-59 are

an exact return of m.1-4 in the home key of a minor. M.60-62 are obviously based on the basic motive and continued by sequence in m.63-65. M.66-68 use the same material found in m.14-16. From here the piece moves freely, although always based on previously heard material, toward the final cadence.

The work of chamber instrumental cycle of Beethoven is
 a new and purpose, consisting of several contrasting
 movements that are based on relatively extended designs
 in "various" style. However, which a few decades
 to see as groups vary fundamentally from the basic
 elements of a sonata of four binary movements in the
 form slow-fast-slow-fast or a suite of three five or
 six dances also in binary form.
 Most of these changes came about through the
 changing position of the sonata as the evening-piece
 of long and serious style, as has already been men-
 tioned. Along the influence on the pre-classic and
 classic sonata were the waltz aria and the operatic air-
 song, the Baroque concerto and chamber concerto, the
 dance as suite, and the sonata as series of the Bar-

William M. Newman, *The Sonata in the Classic Era*
 Chapel Hill: University of North Carolina Press, 1963.

III. THE 'CELLO SONATA IN THE CLASSIC ERA

History and External Form of the Cello Sonata in the Classic Era

At the beginning of the Classic Era, as Newman notes, the sonata had acquired the very general meaning, "a solo or chamber instrumental cycle of aesthetic or diversional purpose, consisting of several contrasting movements that are based on relatively extended designs in 'absolute' music."⁸⁴ However, within a few decades it was to change very fundamentally from the basic schemes of a sonata of four binary movements in the order slow-fast-slow-fast or a suite of some five or six dances also in binary form.

Most of these changes came about through the peculiar position of the sonata as the meeting-ground for many and various styles, as has already been mentioned. Among the influences on the Pre-Classic and Classic sonata were the *da capo* aria and the operatic *sinfonia*, the Baroque concerto and concerto grosso, the sonata da chiesa, and the sonata da camera of the Bar-

⁸⁴William S. Newman, The Sonata in the Classic Era (Chapel Hill: University of North Carolina Press, 1963), p.19.

oque.⁸⁵ More specific aspects of this influence will be discussed in the following paragraphs. Added to these generally formal influences were the textural influences of the French clavecin style, (style galant) and the empfindsamkeit.⁸⁶

The number of movements shifted from a norm of four to a norm of three, fast-slow-fast, in so far as the ensemble and keyboard sonatas are concerned.⁸⁷ This shift may have been the result of the influence of the Neopolitan opera sinfonia⁸⁸ or perhaps the result of dropping the introductory slow movement of the old four-movement style.⁸⁹ This new standardization was by no means an immediate one, however. Two-movement sonatas

⁸⁵ Donald N. Ferguson, A History of Musical Thought (New York: F.S. Crofts, 1935), p.205; Paul Henry Lang, Music in Western Civilization (New York: W.W. Norton, 1941), pp.594-595, 598; Wilfred Mellers, The Sonata Principle, vol. II, Man and his Music (London: Burleigh Press, 1957), p.10; Colles, Grove's, vol.VII, p.899.

⁸⁶ Lang, p. 593; Newman, Classic Era, pp.120-133.

⁸⁷ Apel, "Sonata," Harvard Dictionary, p.694.

⁸⁸ Ferguson, p.265; Apel, Ibid.

⁸⁹ Colles, Grove's, vol. VII, p.896.

were frequent in the Pre-Classic era.⁹⁰ For awhile, as the internal structure was becoming more organized, the number of movements became highly variable.⁹¹

It is on the first movement that historians of the sonata tend to place the greatest emphasis; the composers of the Classic Era also seem to have placed the emphasis on this movement.⁹² It was here that the so-called "sonata-allegro" form was developed, with its characteristic contrasting second theme, development, and recapitulation. Newman makes the point that this form was not nearly so rigid as the text book definitions make it seem, even at the height of Viennese Classicism.⁹³ Nonetheless, these three elements --a contrasting second theme, a development, and a recapitulation--have so characteristically been associated with the sonata-form that at least some inquiry into their origins is indispensable.

Early mentions of a second theme occur in treatises by Riepel and Vogler in 1755 and 1778.⁹⁴ Some claim that the beginnings of the polythematic sonata go back

⁹⁰Newman, Baroque Era, p.72.

⁹¹Colles, Grove's, VII, pp.896-897.

⁹²Newman, Classic Era, p.133.

⁹³Ibid., pp.112-119. ⁹⁴Ibid., p.34.

to Corelli and dall'Abaco.⁹⁵ Early users of duo-themat-
 icism included F. Mica, C.P.E. Bach, M.G. Monn, J. Wagen-
 seil, G. Platti, and Pergolesi.⁹⁶ The dominant was not
 always the area in which the second theme occurred; the
 Neapolitans were particularly fond of minor keys for
 secondary themes.⁹⁷ The insertion of the second theme
 into the sonata, along with that of the development,
 was one of far-reaching importance:

The idea of a second theme, although in the
 beginning it did not much change the size
 and impact of a sonata, nevertheless embodied
 one of the greatest, and in its effect most
 far-reaching, principles of musical archi-
 tecture; namely the principle of building
 extended musical forms in which entirely
 contrasting thoughts converge into an art-
 istically united design. Thus the "second
 theme" became the structural pivot, by means
 of which the gigantic symphonic forms of
 Beethoven, Schubert, Schumann, Berlioz, Brahms,
 Tchaikovsky, and others became possible.
 In fact the wonders of the classic, romantic,
 and in some respects even of the modern
 musical epoch are thinkable only through
 the invention, as it were, of duothematicism.⁹⁸

⁹⁵Lang, p.594.

⁹⁶Ibid., p.595; Marc Pincherle, Vivaldi: Genius of the Baroque, trans.Christopher Hatch (New York: W.W. Norton, 1957), p.246; Rudolph Reti, "The Role of Duothematicism in the Evolution of Sonata Form," Music Review XVII, no.2 (May, 1956), pp.112-113.

⁹⁷Lang, p.595.

⁹⁸Reti, Music Review, XVII, no.2 (May, 1956), p.110.

The idea of recapitulation came perhaps from the da capo aria.⁹⁹ More likely, it was a natural evolution of the idea of return already inherent in the Baroque sonatas of such composers as Vivaldi.¹⁰⁰ The full recapitulation appeared in the second half of the eighteenth century.¹⁰¹

The origins of the idea of development are by far the most difficult to find. It was the latest of the elements of the sonata to appear in anything more than the most rudimentary of forms.¹⁰² One of the most important contributions of Haydn was his sense of development, his "growing unification of the sonata form, with the organic development of often tiny particulars of his melodic themes."¹⁰³ Still, in the greater part of Classical sonatas the development is little more than a short section of modulation and tonal instability leading back to the tonic for the recapitulation. ~~All the elements of the~~

All the elements of the sonata-allegro form were in evidence by the early 1780's at least, although not all

⁹⁹Lang, p.598. ¹⁰⁰Rarig, p.305.

¹⁰¹Newman, Classic Era, p.31. ¹⁰²Ibid., p.155ff.

¹⁰³Curt Sachs, The Commonwealth of Art: Style in the Fine Arts, Music and the Dance (New York: W.W. Norton, 1946), p.173.

sonatas necessarily contained full second themes, full developments, or full recapitulations; but the standard textbook definitions were not established until about 1840 by A.B. Marx and Czerny.¹⁰⁴ It is interesting to see a description of sonata procedure, before these formal definitions, by J.G. Portmann in 1789, which shows the basic outline of the form as we know it:

The plan or outline of a musical piece is the skillful arrangement of the main and subordinate keys, the order of these, what comes first, and ought to follow next, thirdly, fourthly. For example, I shall make the outline for the allegro of a keyboard sonata in D. Thus, I establish the main key of D, in which I begin and modulate. After this I veer toward the dominant...and cadence therein. This constitutes the outline of the first section of the Allegro. In the other section I begin with more remote modulations....these then take me back to D, in which I repeat the theme and my melodic materials and passages ...already heard in the subordinate key. I remain and conclude there.¹⁰⁵

The form of the sonata-allegro as it is taught in textbooks today is one which is familiar to all musicians:

||:first subject (tonic); transition; second subject (dominant); closing theme or cadential decoration:|| development; dominant preparation or retransition; recapitulation of the first subject, transition, second theme, and closing theme, all in the tonic; (coda)||

¹⁰⁴Newman, Classic Era, p.26.

¹⁰⁵Quoted in Newman, Classic Era, p.31.

It represents a combination of the principles of both closed form and open form in that though the exposition is closed, the development is open, free, and dramatic. Sachs suggests that it is to this aspect of the form that the sonata owes its long survival.¹⁰⁶

Much of the quarrel over too exact definitions or definitions which are not exact enough could be eased with the acceptance of the idea that "sonata, like fugue, is not so much a form as a principle, an approach to composition."¹⁰⁷

The forms used for the last two movements of the three-movement classical sonata were not nearly so standardized as was the first movement. The old Baroque binary form still was used, sometimes in all the movements during the pre-classical era.¹⁰⁸ All movements could be found in sonata-form fairly frequently.¹⁰⁹

Aside from sonata-form and binary form, slow-movement forms included ABA patterns, rondo forms, variation forms, and free fantasias.¹¹⁰ The last movement, par-

¹⁰⁶ Sachs, Commonwealth, p.366.

¹⁰⁷ Mellers, p.3.

¹⁰⁸ Apel, "Sonata," Harvard Dictionary, p.694

¹⁰⁹ Newman, Classic Era, p.158.

¹¹⁰ Ibid., pp.158-161.

particularly in the early Classic period, was occasionally a minuet.¹¹¹ Other dance movements which influenced the form and/or style of the last movements included the gigue and the polonaise.¹¹² Also influencing the last movements were the caccia and the march.¹¹³ Other forms included the rondo, the fugue, the sonata-form, and variations.¹¹⁴

¹¹¹ Ibid., p.161.

¹¹² Ibid., pp.163-164.

¹¹³ Ibid.

¹¹⁴ Ibid., p.164.

Internal Form in the Classic Sonata

The changes in texture and in internal form during the Classic Era were due principally to the influence of the French clavecin style (style galant) and the empfindsamkeit which have already been mentioned.¹¹⁵ The early stages of the development of the Classical sonata "represented no high and noble ideals, but rather a reaction against the heaviness of polyphony,"¹¹⁶ just as did the ideals of the style galant and the empfindsamkeit.¹¹⁷ As Lang says, "The Baroque sought to crush, to convert, to exalt, and to bring about redemption; the rococo wished to entertain."¹¹⁸ Or as Grout says, "Music of the Enlightenment was supposed to meet the listener on his own ground, and not compel him to make an anxious effort to understand what was going on; it must please (by agreeable sounds and rational structure) and move (by imitating feelings), but not too often astonish by excessive elaboration) and never puzzle (by too great complexity)."¹¹⁹

¹¹⁵ See above, p.40. ¹¹⁶ Ferguson, p.264.

¹¹⁷ Lang, chapter 12, pp.530-617 ; Donald J. Grout, A History of Western Music (New York: W.W. Norton, 1960), chapter 13, pp.411-436.

¹¹⁸ Lang, p.535.

¹¹⁹ Grout, p.414.

One of the most basic changes occurred in phrase structure. It moved in the direction of symmetrical, periodic structures, which had their roots in dance music.¹²⁰ Phrases and periods were most often constructed in combinations of two, four, and eight measures which were in turn combined with other periods constructed in a similar manner.¹²¹ Antecedent and consequent phrases (or subject-predicate, question-answer, etc.) were discussed in the treatises of the period.¹²² Many early Classic works were only extensions of a basic eight-measure period.¹²³

Cadences became much more frequent, and correspondingly less important in defining structural divisions, than they had been in the late Baroque.¹²⁴ "Lacking the tremendous breath of the baroque, the preclassical composers were winded after a few measures of 'free thinking'; the only remedy for the stranded composer was to make a cadence and start all over again."¹²⁵ One of the greatest problems of the pre-classic era was making the

¹²⁰ Leonard G. Ratner, "Eighteenth-Century Theories of Musical Period Structures," Musical Quarterly, XLII, no.4 (October, 1956), p.443.

¹²¹ Ibid., pp.440-442. ¹²² Ibid., p.440.

¹²³ Ibid., p.451. ¹²⁴ Ibid., p.440.

¹²⁵ Lang, p.600.

music "go" by avoiding this feeling of constantly stopping and starting.¹²⁶ Some of the means which were used in order to extend an eight-measure period were listed by Koch in his eighteenth-century treatise entitled Versuch einer Anleitung zur Composition, 1782-1793;¹²⁷ these methods included:

1. Similar restatement of a motif on another harmony.
2. Reinforcement of a full cadence by varied repetition of the cadence formula
3. Repetition of a motive taking another level of the same harmony.
4. Extension of a section by repeating established metrical formulas
5. Parenthesis, insertion of new material
6. Progression, i.e. sequence
7. Reinforcement of a half-cadence by repetition
8. Closing section strengthened by additional cadence formulas
9. Spinning out a rapidly moving figure
10. Modulating sequence¹²⁸

This type of phrase structure had a "debilitating effect" on the moving bass of the basso continuo of the Baroque, because it "engendered a much slower harmonic rhythm with a more static kind of supporting bass."¹²⁹ The more or less rigid part-writing of the Baroque gave

¹²⁶ Rigsby, Lecture to Music 431, November 5, 1963.

¹²⁷ Ratner, Musical Quarterly, XLII, no.4 (Oct., 1956), footnote, p.441.

¹²⁸ Ibid., p.451. ¹²⁹ Newman, Classic Era, p.96.

way to an almost complete lack of any separate and distinct part aside from the treble line.¹³⁰ The considerable slowing of the harmonic rhythm and the elimination of strict polyphonic part-writing, plus the tendency to restrict the harmonic vocabulary basically to the three primary triads--tonic, dominant, and subdominant¹³¹ gave rise to such figurational devices as the Alberti bass and the "oom-pah-pah" techniques.¹³² Thus the texture of music of the Classic Era, particularly in its early stages, was generally much lighter than that of the Baroque Era.

¹³⁰Lang, pp.593-594.

¹³¹Newman, Classic Era, p.122, 127.

¹³²Ibid., p.3.

Continuation of the Basso Continuo
Sonata in the Classic Era

One of the complications which arises in the attempt to discuss the change of style from the Baroque Era to the Classic Era, particularly in reference to the sonata for a solo instrument with keyboard, is the continuation of the old-style basso continuo, or solo/bass, sonata right up to and slightly beyond 1800.¹³³ Most of these, Newman notes, are violin/bass sonatas,¹³⁴ a statement which may be extended to include the 'cello/bass sonatas of Boccherini, Cirri, Kraft, Bréval, and others.

In connection with these solo/bass sonatas, it is perhaps not amiss to note the statement by Newman that in this era there frequently occur sonatas for violin or 'cello and bass "in which the bass is actually an unfigured 'cello part that constitutes a duet partner quite as much as a harmonic support."¹³⁵ An example of this occurrence is the Kraft Sonata for 'cello and basso continuo¹³⁶ to be analyzed

¹³³Newman, Classic Era, p.4, 678.

¹³⁴Ibid., p.95. ¹³⁵Ibid., p.97.

¹³⁶Anton Kraft, "Sonata, opus 2, no.II for Violoncello and Piano," ed. Claus Adam, introduction by Josef Marx (New York: McGinnis and Marx, 1948).

later; the publisher put out this sonata with the bass realized for piano, but also with the bass edited as a second 'cello part, noting that this option was apparently given at the time at which it was written.¹³⁶ However, the fact that this option was probably taken only when absolutely necessary seems clear from a section of C.P.E. Bach's Versuch which Arnold quotes:

Some individuals have themselves accompanied in a Solo, on the Viola, or even on the Violin, without a keyed instrument. If this is done as a matter of necessity, for lack of good Clavier players, they must be excused; but, apart from that, many faults occur in a performance of this sort. The Solo becomes a duet, if the Bass is well written; if it is bad, ¹³⁷ how jejune it sounds without harmony!

The bass was frequently unfigured, even in Vivaldi's time; in one of Vivaldi's concertos he added figures to the continuo part with the notation, "For the fools," which carries the connotation that the intelligent accompanist would not need the figures.¹³⁸

The clavier part realized from Classic figured basses bore the same strictly accompanimental relation to the solo part that the Baroque realizations did; treatises such as C.P.E. Bach's apply to both eras to some extent.

¹³⁶ Josef Marx, Introduction in Kraft, "Sonata," p.16.

¹³⁷ Arnold, p.328.

¹³⁸ Pincherle, Musical Quarterly, XLIV, no.2 (April, 1958) p. 154.

It is frequently rather difficult to draw the line between Baroque and Pre-Classical works since there are sonatas (such as those of Boccherini)¹³⁹ which use the binary form rather than sonata-form and which use the basso continuo, as just discussed. Generally, the division is made by considering works in which the phrases tend to be constructed in multiples of two measures to be Pre-Classical. (example 18) These works also usually show a tendency toward themes rather than to shorter motives as in Baroque works. (example 19) The sections are built up by combining phrases rather than continuous unfolding of motive, sequence, and so on. Also, the passage work depends more on scale and arpeggio patterns (example 20) and less on sequence. Sequence of course is still used, but a more frequent device is simple repetition. (example 21)

The division between Pre-Classical and Classical works is equally as difficult. The same characteristics of phrase structure and passage work occur in Classical works as in Pre-Classical works. Generally this division is made with the appearance of characteristic Classical forms, such as the sonata-form and the rondo. Thus the

¹³⁹Luigi Boccherini, "Six Sonate per violoncello e pianoforte," realizzazione di Alfredo Piatti, revisione di Gilberto Crepax (Milan: G. Ricordi & C. Editori, 1958).

Kraft Sonata, in spite of its use of basso continuo, is a Classical sonata rather a Pre-Classical sonata because of its use of the sonata and rondo forms.

Example 18--Phrase structure in multiples of two.
From Kraft, Sonata, Third Movement, m.1-8.

Musical score for Example 18, showing two staves of music in G major and 2/4 time. The music consists of two phrases, each four measures long, with a repeat sign at the end of the second phrase.

Example 19--Use of themes rather than motives.
From Kraft, Sonata, First Movement, m.1-4.

Musical score for Example 19, showing two staves of music in G major and common time. The music consists of two phrases, each four measures long, with a repeat sign at the end of the second phrase.

Example 20--Passage work
a. From Boccherini, Sonata I, Third Movement, m.50-52

Musical score for Example 20, showing two staves of music in G major and 3/4 time. The music consists of two phrases, each four measures long, with a repeat sign at the end of the second phrase. The tempo is marked *a. Allegro*.

Example 20--continued

b. From Boccherini, Sonata VI, Second Movement, m.21-22.

b. *Allegro*

c. From Kraft, Sonata, Third Movement, m.150-155.

c. *Rondo-Finale*

Example 21--Use of repetition.

a. From Boccherini, Sonata II, First Movement, m.19-20.

a. *Allegro*

Example 21-continued

b. From Boccherini, Sonata IV, Second Movement,
m.1-4.

Allegro

found in the Boccherini Sonata IV, m.1-4. The wide range of these chords, which required use of the treble clef, had previously been noted by a number of modern editors, but there seems to be some doubt as to what clef should obviously be used in such a case.¹⁴¹ A general rule was formulated, and was still applied essentially as late as Bartlett's treatise on instrumentation,¹⁴² that if a treble clef appeared at the beginning of a piece or followed the bass clef that it was played on octave

¹⁴¹ *ibid.*, Classic No. p.48.

¹⁴² *ibid.*, p.111. ¹⁴³ *ibid.*, p.97.

¹⁴⁴ Hector Berlioz, *Treatise on Instrumentation*, revised and enlarged by Richard Strakos, trans. Theodore Press (New York: Edwin F. Kalmus, 1960), p.77.

Style and Character of the 'Cello Part
in the Classic Sonata for
'Cello and Basso Continuo

Since many of these solo/b.c. 'cello sonatas were written by men who were themselves virtuoso 'cellists and used their sonatas as vehicles for their virtuosity,¹⁴⁰ they employ wide ranges, virtuoso passage work, and frequent double-stops, as may be seen in examples 18-21. The use of cadenzas in sonatas as well as concertos was common.¹⁴¹ Good examples of all these traits may be found in the Boccherini Sonatas and the Kraft Sonata. The wide range of these sonatas, which required use of the treble clef, has presented something of a problem to modern editors, for there seem to be cases where the treble clef should obviously be read an octave lower.¹⁴² A general rule was formulated, and was still applied occasionally as late as Berlioz' treatise on orchestration,¹⁴³ that if a treble clef appeared at the beginning of a piece or followed the bass clef then it was played an octave

¹⁴⁰Newman, Classic Era, p.48.

¹⁴¹Ibid., p.111. ¹⁴²Ibid., p.97.

¹⁴³Hector Berlioz, Treatise on Instrumentation, revised and enlarged by Richard Strauss, trans. Theodore Front (New York: Edwin F. Kalmus, 1948), p.77.

lower than written. If the treble clef followed the tenor clef then it was played as written. Good examples of this practice may be found in the Kraft Sonata, for the editor has left the 'cello part in the piano score in the original clefs,¹⁴⁴ although the 'cello part itself has been edited in terms of the modern practices of reading the clefs as written. (example 22)

¹⁴⁴Marx, Introduction to the Kraft Sonata, p.16.

Example 22--Treble clef read an octave lower.

a. Kraft, Sonata, First Movement, m.18-19.

a. Moderato

b. Kraft, Sonata, First Movement, m.38-40.

b. Moderato

c. Kraft, Sonata, First Movement, m.88.

c. Moderato

Analysis of a Typical Classic Sonata
for 'Cello and Basso Continuo:
Kraft, Sonata op.2 no.II

First Movement (Key: G major; form: sonata-allegro)

Anton Kraft's Sonata, op.2, no.II, is a particularly good example of the devices given by Koch.¹⁴⁵ In the exposition of the first movement the four-measure phrase at the beginning is first elaborated by an almost literal repetition an octave lower in m.5-8, making up an eight-measure period. M.8-14 are nothing more than the "reinforcement of a full cadence by varied repetition of the cadence formula" (number 2 of Koch's rules), finally ending in m.14 in a half-cadence. M.15 begins the transition section with a new four-measure phrase. M.19 repeats the first two measures of this figure, with the last two measures changed. M.23 repeats m.22 with sixteenth-note figuration rather than triplets, and m.24 spins out this rapidly moving figure (number 9 of Koch's rules) into m.25. M.26-27 are a sequence (Koch's rule number 6) of m.24-25 a step lower. M.28-30 simply elaborate the leading-tone seventh in D major (the dominant) with idiomatic string crossings, leading to the end of the transition section on the dominant of the dominant in m.31.

¹⁴⁵See above, p.48.

The second theme begins in m.32, and like the beginning of the first theme, it is continued by an almost literal repetition, this time an octave higher. (m.40-43) M.44-45 are repeated harmonically in m.46-47 with slightly different figuration. M.48-60 are essentially spinning out of rapidly moving figures (number 9 of Koch's rules) through such devices as repetition: M.50 repeats m.49; m.55 repeats m.53 on a different level of harmony (number 1 of Koch's rules); and sequence (m.51-52). This section may be termed the closing section or codetta. M.60-64 illustrate two of Koch's rules, the repetition of a motive on another level of the same harmony (no.3) and the closing section strengthened by additional cadence formulas (no.8). The development section, after the first eight measures (m.65-72) which contain material from the first theme, is little more than passage work with characteristic figuration: octaves, scales and arpeggios. The brief three-measure retransition (m.95-97) again uses material from the first theme. The recapitulation begins in m.95. Beginning in m.105 through m.122 the figuration is slightly changed in order to allow the second theme to appear in the tonic. The second theme returns in m.126. In m.138 the coda begins; it, like most of the development, is made up of figuration, this time with a distinctly cadenza-like

character to it. The movement ends with the same cadential figures that ended the exposition, though now, of course, in the tonic.

Second Movement (Form: ternary; key: C major)

The first A section of the ABA design covers m.1-23. It is made up of two eight-measure periods (m.1-8, 9-16) followed by a third eight-measure period (M.17-24) which recalls the first eight measures. The last measure of this section overlaps with the first measure of the B section, which begins in m.24; it is in the tonic minor (C minor), moving toward its relative major (E^b) in m.29. The B section is made up basically of two periods, but this time the number of measures in each period is uneven. The first period (m.24-37) is extended (m.27 and m.35) through the "extension of a section by repeating established metrical formulas" (Koch's rule number 4) and through parenthesis and inserted material (m.35; Koch's rule number 5). In m.37-41 the first part of the B section returns in slightly more ornamented form. M.41-43 are simply figuration on the dominant preparing for the return of the A section in m.44. Only the first eight measures of A return, and a short codetta begins in m.52.

Third Movement (Form: rondo; Key: G major)

The third movement is a rondo with the scheme ABA'CA. The first part of the theme, or A section, of the rondo is made up of two similar eight-measure periods, and covers m.1-16. The second part of the A section covers m.17-30. The first part returns in shortened form in m.31-40. The B section covers m.41-90; it is made up essentially of figuration and is basically in the dominant (D major). A returns in slightly ornamented and shortened form in m.91-106. The C section begins in m.107 and continues through m.203. It is a long, rambling section with elements of both a development and a cadenza. M.204-244 recapitulate the A section in m.1-40 almost exactly. A short coda begins in m.245.

The Accompanied Clavier Sonata
in the Classic Era

The accompanied clavier sonata is a phenomenon of the Classic Era which is frequently neglected, but which is quite important to the history of the chamber duo sonata. It resulted from the rise and increasing importance of the new instrument, the piano.¹⁴⁶ The piano was invented about 1709,¹⁴⁷ but it did not come into general use until the 1760's.¹⁴⁸ Thus, just as the Baroque sonata history is involved closely with the history of the rise in importance of the violin family,¹⁴⁹ so the Classic Era sonata history is tied up to a similar extent with the rise of the piano.¹⁵⁰ Some of the stylistic changes are enumerated by Newman as follows:

...the clavier was coming to replace the violin as the preferred solo instrument. One might even say that the clavier was trading places with the string instruments it had formerly accompanied. Thus, the left hand, which had

¹⁴⁶Newman, Classic Era, p.80; Newman, "Concerning the Accompanied Clavier Sonata," Musical Quarterly XXXIII, no.3 (July, 1947), pp.337-338.

¹⁴⁷R.E.M. Harding, "Pianoforte," Grove's Dictionary of Music and Musicians, VI, p.724.

¹⁴⁸Newman, Classic Era, p.83. ¹⁴⁹See above, p.14.

¹⁵⁰Newman, Musical Quarterly, XXXIII, no.3 (July, 1947), pp.337-338; Newman, Classic Era, p.80.

often been elaborated in diminutions by the 'cello during the basso continuo era, now became the more elaborate of the two parts when both were provided. At the same time, the right hand, previously accustomed to virtuoso playing only in solo music, now took over the passage work that the violin had played as solo instrument, leaving the latter to do the filling out and reinforcing. Furthermore, as soon as the right hand part was written out, specific melodic responsibilities could be assigned to it that had formerly been borne by the left hand. This meant greater freedom in the clavier bass and a new, lighter, more figurate kind of harmonic support as in the "Alberti bass".¹⁵¹

Thus, in violin-piano combinations the roles were switched so that the violin became solely accompaniment in much of the Classical music for this combination. The violin (or other instrument parts in accompanied sonatas) was frequently marked as optional.¹⁵² The instrument accompanying the clavier most frequently, aside from the violin, was the flute.¹⁵³ There is also some evidence that the 'cello was occasionally used to reinforce the bass line.¹⁵⁴

¹⁵¹ Newman, Musical Quarterly, XXXIII, no.3 (July, 1947), pp.337-338.

¹⁵² Newman, Classic Era, pp.98-104.

¹⁵³ Ibid., p.100.

¹⁵⁴ Ibid., p.101; Newman, Musical Quarterly, XXXIII, no.3 (July, 1947), pp.329-330.

The accompanied clavier sonata persisted as late as Czerny.¹⁵⁵ The roles of the older solo/bass violin sonata of the Baroque and the clavier and accompanied clavier sonatas are summarized well in the Grove's Dictionary article:

...the old violin sonata is in many respects a distinct genus, which maintained its individuality alongside the gradually stereotyped clavier sonata, and only ceased when that type obtained possession of the field and the violin was reintroduced, at first, as it were, furtively, as an accompaniment to the pianoforte.¹⁵⁶

¹⁵⁵Ibid., footnote, p.329.

¹⁵⁶Colles, Grove's Dictionary, VII, p.894.

The Duo Sonata in the Classic Era

Newman carefully points out the the true chamber duo sonata of the Classic and Romantic Eras is rather a descendant of the accompanied clavier sonata than of the solo/bass sonata of the Baroque Era.¹⁵⁷ The sections of duo sonatas in which the violin or 'cello accompanies the piano are, in particular, a legacy of the accompanied clavier sonata.¹⁵⁸ The shift occurred as the accompanimental part for violin or other instrument, became more and more "obligé" and began to assume increasing thematic importance.¹⁵⁹ Probably the first true duo sonatas for violin and piano were Mozart's "Mannheim" sonatas for violin and piano (1778);¹⁶⁰ he had already written several violin-piano sonatas in the accompanied clavier style.¹⁶¹ Some of the important influences leading to the equality of the violin and piano parts in

¹⁵⁷ Newman, Classic Era, p.104.

¹⁵⁸ Newman, Musical Quarterly, XXXIII, no.3 (July, 1947), p.348.

¹⁵⁹ Newman, Classic Era, p.104.

¹⁶⁰ Ibid., p.494.

¹⁶¹ Ibid., pp. 490-494.

these sonatas seem to have been the works of J.C. Bach, Boccherini, Sammartini, and Schuster.¹⁶² The first works with an "obligé" 'cello part with the piano are Beethoven's two sonatas in opus 5 (1796).¹⁶³ Thus, again, there is a noticeable lapse of time between corresponding developments in the literature for the violin and in the literature for the 'cello.

¹⁶²Newman, Musical Quarterly, XXXIII, no.3 (July, 1947), p.347.

¹⁶³Newman, Classic Era, p.105.

¹⁶⁴ Ludwig van Beethoven, "Sonatas for Piano-forte and Violoncello," ed and fingered by Leo Scholz (New York: G. Schirmer, 1905); Joseph Haydn, "Sonata, 4-cello, for Violoncello and Klavier, op. 11," Horpus-Musique 111, ed. Hermann Langlois (Kassel and Basel: Bärenreiter Verlag, 1936).

¹⁶⁵ Much of the following section comes from Thomas F. Stowell, Chamber Music: A Treatise for Students (London: Wadsworth and Co., Ltd. and Stainer and Bell, Ltd., 1931), pp. 127-128.

Style and Character of the 'Cello Part
in the Classic Duo Sonata for
'Cello and Piano

The five sonatas of Beethoven and one by Wölfl for 'cello and piano¹⁶⁴ may be taken as representative of the duo sonata in the Classic Era. The style in these sonatas is completely different from that of the sonatas with basso continuo. With the additional resources provided by a piano part equal in importance with the 'cello part, passage work for its own sake almost completely disappears. Instead what used to be passage work becomes thematic development, involving free interchange and imitation between the piano and the 'cello. (example 23) This exchange characterizes not only the development, but all sections of the movement. There is no lessening of the technical requirements made of the 'cello, but it ceases to be the only important character in the drama.

There are many possibilities in the combination of 'cello and piano.¹⁶⁵ The 'cello can accompany in many ways:

¹⁶⁴ Ludwig van Beethoven, "Sonatas for Pianoforte and Violoncello," ed and fingered by Leo Schulz (New York: G. Schirmer, 1905); Joseph Wölfl, "Sonate, d-moll, für Violoncello und Klavier, op.31," Hortus Musicus III, ed. Folkmark Langin (Kassel und Basel: Bärenreiter Verlag, 1953).

¹⁶⁵ Much of the following section comes from Thomas F. Dunhill, Chamber Music: A Treatise for Students (London: MacMillan and Co., Ltd. and Stainer and Bell, Ltd., 1938), pp.155-179.

taking the actual bass line (example 24), filling in harmonies with a secondary line (example 25), filling in harmonies with double-stops (example 26), arpeggio figures (example 27), and pizzicato passages if the piano is not too heavy (example 28) The piano can state the melody embroidered by figuration and doubled by the 'cello. The melody can be the top note of a series of chords in the 'cello, either bowed or pizzicato. And when it comes to simple melodic presentation, the 'cello is a lyrical instrument par excellence.

Example 23--Thematic interchange between 'cello and piano.
From Wolf, First Movement, m.11-14.

Largo

Handwritten musical score for Example 23, measures 11-14. The score is in 3/4 time and B-flat major. The top staff (Cello) features a long note with a slur over it, followed by four quarter notes with stems pointing down. The bottom staff (Piano) features a rhythmic pattern of eighth notes in the right hand and quarter notes in the left hand.

Continuation of the musical score for Example 23, measures 11-14. The top staff (Cello) features a long note with a slur over it, followed by a quarter rest. The bottom staff (Piano) features a rhythmic pattern of eighth notes in the right hand and quarter notes in the left hand.

Example 23--continued

Handwritten musical score for Example 23, continued. The score is written on two systems of staves. The top system consists of a single staff in bass clef with a key signature of one flat (Bb). It begins with a long, horizontal line representing a sustained note, followed by four quarter notes with stems pointing up. The bottom system consists of two staves: the upper staff is in treble clef and the lower staff is in bass clef, both with a key signature of one flat. The upper staff contains three groups of beamed eighth notes, each group containing four notes. The lower staff contains a series of quarter notes with stems pointing up, corresponding to the notes in the upper staff.

Handwritten musical score for Example 23, continued. The score is written on two systems of staves. The top system consists of a single staff in bass clef with a key signature of one flat (Bb). It begins with a long, horizontal line representing a sustained note, followed by two quarter notes with stems pointing up. The bottom system consists of two staves: the upper staff is in treble clef and the lower staff is in bass clef, both with a key signature of one flat. The upper staff contains three groups of beamed eighth notes, each group containing four notes. The lower staff contains a series of quarter notes with stems pointing up, corresponding to the notes in the upper staff.

Example 24--Bass line in the 'cello.
 a. From Wölfl, Second Movement, m.39.

Andante

b. From Beethoven, First Sonata (op.5, no.1),
 First Movement, m.23-24.

b. Adagio sostenuto

Example 25--Secondary line in the 'cello part. From
Beethoven, Second Sonata (op.5, no.2), Second
Movement, m.12-16.

Allegro

Handwritten musical notation for Example 25, measures 12-16. The score is in G major (one sharp) and 3/4 time. It consists of three staves: Cello (bass clef), Piano (treble clef), and Cello (bass clef). The tempo is marked *Allegro*. The notation includes various rhythmic values, slurs, and dynamic markings such as *sf* (sforzando).

Handwritten musical notation for Example 25, measures 17-21. The score is in G major (one sharp) and 3/4 time. It consists of three staves: Cello (bass clef), Piano (treble clef), and Cello (bass clef). The notation includes various rhythmic values, slurs, and a fermata over the final note of the piano part in measure 21.

Example 26--Harmonies filled in with double-stops in the 'cello part. From Beethoven, First Sonata (opus 5, no.1), Second Movement, m.1.

The musical score for Example 26 is set in B-flat major and 3/4 time. It features three staves. The top staff is the Cello part, marked 'Allegro', containing a series of eighth-note double-stops. The middle staff is the Violin part, starting with a piano (*p*) dynamic and a slur over a series of notes. The bottom staff is the Bass part, also containing eighth-note double-stops. The key signature has one flat (B-flat), and the time signature is 3/4.

Example 27--Arpeggio figures in the 'cello part. From Wölfl, Second Movement, m.25.

The musical score for Example 27 is set in B-flat major and 3/4 time. It features three staves. The top staff is the Cello part, marked 'Andante', containing arpeggiated figures with a forte (*f*) dynamic. The middle staff is the Violin part, containing a series of notes. The bottom staff is the Bass part, containing a series of notes. The key signature has one flat (B-flat), and the time signature is 3/4.

Example 28--Use of pizzicato. From Beethoven, First Sonata (opus 5, no.1), Second Movement, m.85-86.

Allegro vivace

The musical score consists of three staves. The top staff is a vocal line in B-flat major, with notes G4, A4, Bb4, and C5. The middle staff is the piano part, starting with a (ss) marking. It features a melodic line with dynamics *p*, *sf*, and *sfz*, and a 'pizz.' instruction. The bottom staff is the bass line, providing a steady eighth-note accompaniment. The tempo is marked *Allegro vivace*.

IV. THE 'CELLO SONATA IN THE ROMANTIC ERA

The Sonata in the Romantic Era

The musical thought of the nineteenth century was not really congenial with the idea of chamber music.¹⁶⁶ It tended to the very small forms, such as the lied and small piano piece, or else to the possibilities of sonority and color of the large symphonic forms.¹⁶⁷ Also, in the attempt to combine the arts, the Romantic ideal became program music, and instrumental music became prized for its ability to express feelings rather than to participate in the abstract forms of the Classical Era.¹⁶⁸ Indeed it may be said that chamber music "disintegrated" after Schubert until the appearance of Brahms.¹⁶⁹

Works which were written in the sonata-form tended to become large ternary forms,¹⁷⁰ sometimes breaking up

¹⁶⁶ Grout, p.523.

¹⁶⁷ Ibid.; Alfred Einstein, Music in the Romantic Era (New York: W.W. Norton, 1947), p.70.

¹⁶⁸ Einstein, p.32.

¹⁶⁹ Lang, p.73, 785; A. Hyatt King, Chamber Music (London: Max Parrish and Co., Ltd., 1948), p.54.

¹⁷⁰ Lang, p.817.

into fantasy-like sections, particularly in Schumann.¹⁷¹ The increasing use of chromatic harmony made the clear-cut opposition of tonic to dominant, which characterized the Classical sonata, impossible. Also, the lyrical melodies of the Romanticists were not really susceptible to development; they were complete at their first statement.

What was lost was inner unity, architectonic coherence, logic of harmony and melody. The construction of a movement is no longer based on a motivic theme out of which grows the whole structure. The lines are drawn freely, without much regard as to what precedes and what follows them; the harmonies cease to maintain a planned relationship, and lead a capricious life; the melodies became ample and songlike, too unwieldy for symphonic elaboration, and too numerous for clarity; episode upon episode follows in a multi-colored sequence often necessitating extramusical means, such as programs, to give a sense of cohesion and continuity. The expansive force and possibilities of the romantic theme are virtually exhausted with its announcement; it circles around itself without growing, thereby causing a stagnation which often becomes almost offensive.¹⁷²

The emphasis on lyricism led to the increased importance assigned to the second theme,¹⁷³ and it was the second theme that tended to be the most complete at the first statement and offer the least chance for development.

¹⁷¹Rigsby, Lecture to Music 432, February 7, 1964.

¹⁷²Lang, p. 818.

¹⁷³Ibid., p.817.

The Romanticists recognized the basic form of the Classical sonata, but when they used it they bent its shape for expressive purposes and blurred the outlines of sectional divisions. The Romantic Era dealt very freely with form, feeling that Beethoven had shown the way to bursting the shackles of form.¹⁷⁴ Emphasis was placed on color, sonority, and sound for its own sake rather than on form.¹⁷⁵

The composers who did write chamber music were those who were close to Classicism, either in time or thought:¹⁷⁶ Schubert, Schumann, Mendelssohn, Brahms, Franck, Saint-Saens, Fauré, and so on.

The internal texture of music in the Romantic Era became thicker and more opaque through the use of low registers, doubling, and active inner parts.

¹⁷⁴Einstein, p.66.

¹⁷⁵Ibid., p.67.

¹⁷⁶Grout, p.523.

Style and Character of the 'Cello Part
in the Romantic Duo Sonata
for 'Cello and Piano

Taking as examples the two Brahms Sonatas, the two Saint-Saens Sonatas, the Chopin Sonata, and the Grieg Sonata,¹⁷⁷ it may be said that the piano parts of sonatas for 'cello and piano in the Romantic Era became increasingly big and difficult. Indeed, in the Chopin Sonata the piano part seems to overshadow the 'cello part. The full range of the 'cello is called on, (example 29), and in order to match the increased sonority both of the writing for the piano and of the larger grand piano of the nineteenth century, the 'cello must produce a larger and fuller tone than was necessary previously. (example 30) Accompaniment figures in the 'cello make more frequent use of chords (example 31); also, many of the figures use characteristic string crossings. (example 32). The lyrical quality of the 'cello is frequently called on (example 33).

¹⁷⁷Johannes Brahms, "Sonata for Violoncello and Piano, op.38, in e minor" (New York: G. Schirmer, Inc., 1921); Brahms, "Sonata for Violoncello and Piano, op. 99, in F major" (New York: Edition Peters); Frédéric Chopin, "Sonata for Violoncello and Piano, op.65 (New York: G. Schirmer, 1903); C. Saint-Saens, "Sonata for Violoncello and Piano, op.32, in c minor" (Paris: Durand); Saint-Saens, "Sonata for Violoncello and Piano, op.46, in F major" (Paris: Durand); Edvard Grieg, "Sonata for Violoncello and Piano, op.36, in a minor" (New York: Peters Edition).

Example 29--Range of the 'cello part. From Brahms,
Sonata, op.99, First Movement, m.17-21.

Allegro Vivace

Example 30--Piano texture demanding more tone from the 'cello.
From Brahms, Sonata op.99, First Movement, m.1-4.

Allegro vivace

Example 31--Use of chords in the 'cello part.a.From
Chopin, Sonata, op.65, Fourth Movement, m.193-
195.

a. Allegro

Handwritten musical score for the first system of Example 31. It consists of three staves: a cello staff (bass clef), a piano staff (treble clef), and a bass staff (bass clef). The key signature is one sharp (F#). The tempo is marked "a. Allegro". The cello staff shows a sequence of chords: a whole note chord, followed by two eighth notes, and then two more chords. The piano staff has a melodic line with eighth notes and a final chord. The bass staff has a whole note chord, a half note chord, and a final chord.

Handwritten musical score for the second system of Example 31. It consists of three staves: a cello staff (bass clef), a piano staff (treble clef), and a bass staff (bass clef). The key signature is one sharp (F#). The cello staff shows a sequence of chords: a whole note chord, followed by two eighth notes, and then two more chords. The piano staff has a melodic line with eighth notes and a final chord. The bass staff has a whole note chord, a half note chord, and a final chord.

Example 31--continued

b. From Grieg, Sonata, op.36, Third Movement,
m.214-217.

Allegro molto e marcato

Example 32--String crossings in the 'cello part.

a. From Grieg, Sonata, op.36, First Movement,
m.234-235.

Allegro agitato

Example 32--continued

b. From Brahms, Sonata, op.99, First Movement,
m.60-61.

Allegro vivace

Handwritten musical score for Example 32, continued. The score is written on three staves. The top staff is a bass clef with a melodic line and a '6' below it. The middle staff is a treble clef with chords and a '6' above it. The bottom staff is a bass clef with chords. The music is in 4/4 time with a key signature of one sharp (F#). The tempo is marked 'Allegro vivace'.

Example 33--Use of the lyricism of the 'cello. From
Brahms, Sonata, op.99, Second Movement, m.5-11.

Adagio affettuoso

Handwritten musical score for Example 33. The score is written on two staves. The top staff is a bass clef with a melodic line. The bottom staff is a treble clef with a melodic line. The music is in 4/4 time with a key signature of three sharps (F#, C#, G#). The tempo is marked 'Adagio affettuoso'.

Analysis of a Typical Romantic Duo Sonata for
'Cello and Piano: Brahms, Sonata, op.99

First Movement (Key: F major; form: sonata)

The first theme of this movement is stated by the 'cello in the first eight measures, against the tremolo figures in the piano which are one of the leading characteristics of the movement. In measures 9-12, the beginning of the second part of the first theme, the disjunct leaps of the 'cello line are combined with a six-note figure descending step-wise in quarter notes in the piano part, first in the right hand, then in the left. This is followed by a slightly chromatic ascending bass line in the piano which moves into the transition theme. The transition into the second key area begins in m.17. The second theme is announced in the piano beginning in m.34, and taken by the 'cello in m.40. The closing theme begins in m.48; the 'cello entrance in m.51 is slightly reminiscent of the first section of the first theme and the descending line of quarter notes into which it moves recalls the similar line in the piano in the second part of the first theme. This part is stated in the piano in m.56. The 'cello takes the tremolo figure in m.60, while the piano has a series of quarter-note chords recalling the leaps of the first part of the first theme.

The development begins in measure 66 in f minor with a section of the first part of the first theme in the 'cello, followed by the descending line of the second part of the first theme in the bass of the piano and at the same time a rising line in the right hand similar to that in the bass which led to the transition. The development section from m.68 to m.84 is based on the opposition of these two lines. M.85-91 are a transition-like section, leading to a climax in m.92, where the 'cello once more takes the tremolo figures as the second section of the development begins. The piano part develops the leaps of the first section of the first theme, but in quarter and half notes rather than sixteenth and dotted quarters or halves. Finally in m.112-118 the upper notes of the dotted-half note chords in the piano actually state the notes of the first part of the first theme. The retransition begins in m.119, and the recapitulation in m.128. The coda, beginning in m.178, fits the description of a typical Brahms coda, given by Mason, almost exactly:

1. "Isolation of the most essential part of the main theme, and multiplication of it by sequence, with heightening of its most significant features" (m.178-193);
2. "Use of subdominant key to give sense of repose" (beginning in m.194);
3. "Brief reference, also expressively heightened, to a contrasting theme" (m.194-197);
4. "To restore vigor of

emotional tone after these poignancies, a short passage in more rapid movement (a sort of "sprint") to the end." (m.207-211)¹⁷⁸.

Second Movement (Key: F# major; form: ternary)

The second movement is basically in ternary form, ABA, with coda. The A section divides into two parts: m.1-11 and 12-19. Its chief characteristics are the pizzicato in the 'cello in the first section and the two lyrical themes, one in each section. The B section begins in m.20 in f minor and is rather modulatory in character. It again is characterized by a lyrical theme. The return of A is prepared in the four measures from m.40-43 through use of the characteristic pizzicato in the 'cello. A returns in m.44, with slight changes in m.53-62 moving briefly into and out of D major. The coda, beginning in m.63, makes use of both the pizzicato and lyrical passages of the theme from section B (m.66).

¹⁷⁸Daniel Gregory Mason, The Chamber Music of Brahms (New York: MacMillan Company, 1933), p.11.

Third Movement (Key: f minor; form: scherzo and trio)

The third movement, in f minor, is the scherzo and trio movement, but the scherzo does not follow exactly the $\parallel:A:\parallel:BA:\parallel$ form of a scherzo, although the basic outlines of this form can be found. The essence of the scherzo is contained in the first ten measures in which the main theme is stated in the piano, with its characteristic eighth-note motion and the two against three of the right hand and left hand. The entrance of the 'cello for the first time with thematic material in m.11 is obviously based on the material which the piano has already stated. M.33-50 give a certain sense of a repeat of a portion of the A section. What corresponds to the B section begins in m.51, but is still obviously based on the first theme. There is again a sense of a return of A in m.85. The trio section follows the $\parallel:A:\parallel:BA:\parallel$ pattern quite faithfully. The A section lasts from m.129 to 144 and is repeated. The B section starts in m.145, and A returns in shortened form in m.180. This second section is also repeated. The trio is characterized by the lyrical 'cello part.

Fourth Movement (Key: F major; form: rondo)

The fourth movement, is a rondo; the A theme is a folk-like melody, heard first in the 'cello and then in the piano. The first contrasting section (B) in a minor begins in m.23. A returns in m.45. The second contrasting section (C) begins in m.57, in B^b minor. A returns in m.85 in the Neapolitan key area (G^b major) and the B section returns in d minor in m.102. The coda begins in m.128 with the theme stated in the pizzicato of the 'cello, which finally moves into the "sprint to the finish" in m.139.

These two passages have brought back such definite
of form as a unified structure is a complex of ordered
and interrelated ideas which unfolds in time. -180-

The theoretical subject has seen very little change
in concepts of melody, harmony, rhythm, color, texture,
and timbre, but at least within the grasp of composers

179 Joseph Hadden, Introduction to Music
New York: W.W. Norton and Co., 1941, p. 61.

180 Allen Forte, Concepts and Techniques of Modern Music
New York: Oxford University Press, 1953, p. 7.

V. THE 'CELLO SONATA IN THE TWENTIETH CENTURY

The Sonata in the Twentieth Century

In the twentieth century, there has been a reaction against the derivation of form from external programs and from the expression of ideas and moods.

Contemporary composers have embraced the classical conception of form as a construction based on purely musical elements. They have restored form to its classical position as an absolute value in art, the symbol of purity and perfection of style. For the twentieth-century composer the purely musical elements of his art--line, harmony, rhythm, color--have as much appeal as had the literary or descriptive program for his romantic predecessor.¹⁷⁹

These new concepts have brought back such definitions of form as, "A musical structure is a complex of ordered and interrelated tonal events which unfolds in time."¹⁸⁰

The twentieth century has seen very basic changes in concepts of melody, harmony, rhythm, color, texture, and tonality, but at least within one group of composers

¹⁷⁹ Joseph Machlis, Introduction to Contemporary Music (New York: W.W. Norton and Co., 1961), p.62.

¹⁸⁰ Allen Forte, Contemporary Tone-Structures (New York: Bureau of Publications, Teachers College, Columbia University, 1955), p.7.

formal concepts have not really changed greatly, according to Machlis.¹⁸¹ Most of the composers who continue to use traditional forms belong to the more conservative line of musicians in the twentieth century.

Composers with less conservative tendencies, those using the techniques of atonality, serialism, and electronic music have increasingly sought new formal organizations, feeling that the sonata forms are tied up too closely with the idea of tonal music to be useful in atonal and serial music. Krenek, for instance, feels that the idea of variation is more appropriate to twelve-tone serialism.¹⁸² However, Schönberg, Berg, and Webern also turned back to quartets, concertos, or symphonies after work with variation and fugue.¹⁸³

It does seem to be true that within the field of the 'cello sonata composers have tended to use the modes, or other five- to seven-tone scale formations, and retain

¹⁸¹Machlis, p.63.

¹⁸²Ernst Krenek, Music Here and Now, trans. Barthold Fles (New York: W.W. Norton and Co., Inc., 1939), pp.182-187.

¹⁸³Egon Wellesz, "The Origins of Schönberg's Twelve-Tone System: A lecture delivered by Egon Wellesz, Fellow of Lincoln College, Oxford, in the Whitthall Pavilion of the Library of Congress, January 10, 1957" (Washington: Library of Congress, 1958), p.11.

a tonal center, even though the music may be highly complicated in its chromaticism. For instance, Britten's Sonata for 'cello and piano, published in 1961, openly centers on C.¹⁸⁴

Some of the changes in sonata-form in the twentieth century include, according to Machlis, shortened recapitulations, the appearance of themes in reverse order in the recapitulation, the use of developmental techniques all the way through, and highly variable key relationships.¹⁸⁵ Many of these techniques are not really new; for instance, shortening of recapitulations was not an unknown idea in the nineteenth century.¹⁸⁶

Internally, melodic lines have become somewhat more complex in their wider range, particularly through more complex techniques of octave transfer.¹⁸⁷ Harmonic texture has become more chromatic in the increased use of modal exchange, that is, exchange of chords between

¹⁸⁴ Benjamin Britten, "Sonata in C for Violoncello and Piano, op.65" (New York: Boosey and Hawkes, 1961).

¹⁸⁵ Machlis, pp.63-66.

¹⁸⁶ Adolfo Salazar, Music in Our Time: Trends in Music Since the Romantic Era, trans. Isabel Pope (New York: W.W. Norton, 1946), p.39.

¹⁸⁷ Forte, p.15.

modes, retaining the same tonal center. In the eighteenth and nineteenth centuries, this exchange was generally restricted to the exchange between parallel major and minor modes. Composers of the late nineteenth and early twentieth century, however, have turned to the use of dorian, phrygian, lydian, mixolydian, and rarely, locrian modes, as well as such formations as the Indian scale, Hungarian major and minor, Hebraic scales, Neopolitan minor, and the Persian Double Harmonic, and various pentatonic modes (example 34).¹⁸⁸ Also chordal constructions in fourths as well as thirds and harmonies derived from a single basic structure are used.¹⁸⁹ In the twelve-tone serial technique harmonies are generally the result of the combinations of contrapuntal lines or of row segmentation.¹⁹⁰

The sections of traditional forms are articulated more through changes in texture, color, or tempo than through key relationships.¹⁹¹ The number of movements is also subject to variation from the standard three or four; the Britten Sonata for 'cello and piano is an example in its five movements.

¹⁸⁸Thomas Cousins, Lectures in Composition 205, September, 1963-January, 1964; Vincent Persichetti, Twentieth Century Harmony: Creative Aspects and Practice (New York: W.W. Norton, 1961), pp.31-65.

¹⁸⁹Cousins, Ibid.; Persichetti, pp.66-104.

¹⁹⁰Cousins, Composition 206 Lectures, Feb.-May, 1964.

¹⁹¹Alexius, Theory 302 Lecture, March 23, 1962.

Example 34--Scale formations.

Handwritten musical notation showing scale formations in treble clef:

Hungarian Major: $\text{C} \sharp \text{D} \sharp \text{E} \text{F} \sharp \text{G} \text{A} \text{B}$

Hungarian Minor: $\text{C} \text{D} \text{E} \text{F} \text{G} \text{A} \flat \text{B}$

Hebraic Scale: $\text{C} \text{D} \text{E} \text{F} \text{G} \text{A} \text{B} \text{C}$

Persian Double Harmonic: $\text{C} \text{D} \text{E} \text{F} \text{G} \text{A} \flat \text{B}$

Neapolitan minor: $\text{C} \text{D} \text{E} \text{F} \text{G} \text{A} \flat \text{B}$

Pentatonic scales: $\text{C} \text{D} \text{E} \text{G} \text{A}$ and $\text{C} \text{D} \text{E} \text{F} \text{G}$

Handwritten text, likely a list of references or a bibliography, mentioning composers like Liszt and works like "Sonata for Cello and Piano".

Style and Character of the 'Cello Part in the
Twentieth-Century Sonata
for 'Cello and Piano

Taking as examples the 'cello and piano sonatas by Britten, Giorni, Diamond, Carter, and Shostakovich,¹⁹² it may be said that in twentieth-century writing for the 'cello there has been a tendency to exploit ranges and elements of the technique of 'cello playing which have not previously been used in the solo literature. These effects include extensive use of pizzicato, sometimes for a whole movement as in the Britten Sonata Second Movement, and including the use of left-hand pizzicato (example 35); the use of harmonics, both natural and artificial (example 36); long passages for muted 'cello as in the Shostakovich Sonata third movement; passages played sul ponticello, that is, near the bridge, giving a glassy effect; new sonorities in double stops (example 37); effects with glissandi (example 38); flautando effects (example 39); passages senza vibrato; and the use of the peculiar colors of the high ranges of the three lower strings (example 40). The relationship with the piano has remained that of equal partners.

¹⁹²Britten, Sonata; Aurelio Giorni, "Sonata in d for 'Cello and Piano (New York: G. Schirmer, 1925); David Diamond, "Sonata for 'Cello and Piano," New Music, vol. XIII, no. 1 (Oct., 1939); Elliot Carter, "Sonata for 'Cello and Piano" (New York: G. Schirmer, 1953); Dmitri Shostakovich, "Sonata, op. 40, for 'Cello and Piano" (New York: Leeds Music Corporation, 1947).

Example 35--Use of left-hand pizzicato.

a. From Carter, Sonata, Fourth Movement, m.62.

b. From Britten, Sonata, Second Movement, m.41-42.

Example 36--Use of Harmonics.

a. Natural Harmonics. From Shostakovich, Sonata, Second Movement, m.76-77.

b. Artificial harmonics. From Carter, Sonata, Fourth Movement, m.169-170.

Example 37--Use of double-stops. From Carter, Sonata, Second Movement, m.113-114.

Handwritten musical notation for Example 37, showing double-stops in a two-staff system. The top staff is treble clef and the bottom is bass clef. The tempo is "Vivace". The key signature has one flat (B-flat). The notation includes double-stops in both hands, with various dynamics like "f" and "p", and articulation marks like "pizz." and "acc.". There are also some handwritten annotations like "colla" and "V".

Example 38--Use of glissandi.
a. From Shostakovich, Sonata, Second Movement, m.54-56.

Handwritten musical notation for Example 38a, showing glissandi in a single bass clef staff. The tempo is "Moderato con moto". The key signature has two sharps (F# and C#). The notation includes glissandi marked "gliss.", dynamics like "f" and "p", and articulation marks like "pizz.".

b. From Carter, Sonata, Fourth Movement, m.182.

Handwritten musical notation for Example 38b, showing glissandi in a single bass clef staff. The tempo is "Allegro". The notation includes glissandi marked "gliss.", dynamics like "pizz.", and the instruction "(not plucked)".

Example 39--Use of flautando. From Carter, Sonata,
Fourth Movement, m.86-87.

allegro

flautando

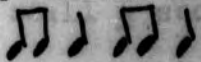

Example 40--Use of the upper range of the C-string.
From Shostakovich, Sonata, Second Movement, m.103-
110.

Moderato con moto

sul G

Analysis of a Typical Twentieth-Century
 Duo Sonata for 'Cello and Piano:
 Shostakovich, Sonata, op.40

First Movement (Mode and key: Aeolian on d; Form: Sonata)

The first movement of the Shostakovich Sonata is in sonata-form. The first theme is in the aeolian mode on d, characterized by occasional modal exchange, for instance, in m.5, from the mixolydian and phrygian modes. The first part of the first thematic area consists of a lyrical theme in the 'cello. (m.1-25) A second element of the first thematic area begins in the piano in m.28, and is combined with the first element of the first thematic area, again heard in the 'cello, an octave higher than the first time (m.40-46). After a short transition section the second thematic area begins in m.54. It is basically in B major, but again there is much modal exchange. The theme is first stated in the piano, with an accompanimental figure in the 'cello. The 'cello takes the theme in m.71. The development begins in 114, using a figure heard in the piano at the end of the exposition in m.107-110. The  rhythm of this motive pervades much of the development. In m.120 the piano briefly introduces the theme from the first part of the first thematic area. The 'cello part moves freely over the  rhythm in the piano toward a climax in a chordal section, beginning

in m.145. Elements of the second theme are developed beginning in m.176. The recapitulation begins in m.200. It is an example of foreshortening in that only the first theme is heard.

Second Movement (Mode and key: aeolian on a; form: ABA)

The second movement is the scherzo movement. Although it is written as a continuous movement, it contains elements of the scherzo and trio forms. The A section covers m.1-75. It is characterized by two ostinato-like figures in the 'cello, one in m.1-17, the other in m.19-26. Two thematic elements are stated in the piano over these ostinatos, the first in m.3-17 and the second in m.22-33. The 'cello picks up the first thematic element in m.35 while the piano takes the first ostinato figure. There is a short development-like section on these materials.

The B section, or trio, covers m.76-122. It contains elements of a smaller aba section within it. The small a section covers m.76-95 and is characterized by an unusual use of some of the natural harmonics found on the 'cello. (example 36a) The small b section covers m.96-111; the melody is heard first in the piano against a triplet figure in the 'cello (m.96-102); the two parts then exchange (m.103-111). There is a brief return of

the small a section in m.112-122. The large A section returns in m.123. There is a brief coda taken from the small b section, beginning in m.198.

Third Movement (Mode and key: aeolian on b; form: ABABA)

The third movement is the slow movement and is basically in the aeolian mode on b, although it is quite chromatic. It is in rather free form. What might be called A is heard in m.1-20. A second thematic idea (B) begins in m.21; this idea spins itself out in rhapsodic fashion in the 'cello all the way through m.56. In m.57-71 there is a brief reminiscence of the A thematic area a tritone lower than when first heard. The B theme returns in m.72, this time in the piano with a counter-subject in the 'cello. The A theme returns once more in m.88, this time beginning a minor third below its original statement. The movement makes use of the effects of the mute and the effects of the high registers of the D, G, and C strings.

Fourth Movement (Mode and key: Aeolian on d; form: rondo)

The fourth movement is an ABACADA rondo. The A section covers m.1-40; it includes three different parts. The first, heard in the piano in m.1-16, and the second, heard in the 'cello in m.17-31, are quite similar. The

third is a codetta-like phrase heard in the 'cello in m.32-39.

VI. CONCLUSION

The first contrasting section (B) is heard in m.43-87. It is characterized by running triplet figuration in the 'cello. There is a brief reminiscence of the codetta-like section of A in m.88-102.

The second contrasting section (C) covers m.103-157. It is a flowing, fluent-sounding melody, heard in both the 'cello and piano. A returns in m.158, this time on f instead of d. This statement also is shortened.

The third contrasting section (D) covers m.181-251. It is characterized by running sixteenth notes in the piano and string crossings in the 'cello. At the end of this section the 'cello part builds up into trills (m.227) and finally breaks into sixteenth-note figuration. Above this figuration in the 'cello, the piano begins the final statement of the A theme in m.242. The 'cello states the second part of A in m.258. The third element of A, or codetta, begins in m.273, but instead of completing the statement merges with the coda.

offers many possibilities for the solution of the problem of unity within variety and variety within unity with which all formal ideas are preoccupied.

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The absolute supremacy of form is a consequence of the fact that music as an art has no correlative in the world of our daily experience.¹⁹⁴

VI. CONCLUSION

The development of the sonata for 'cello and a keyboard instrument has been influenced by changes in the construction and technique of the 'cello and of the piano, by changes in conceptions of form, and by changes in the klang ideal, or ideal sound, in the various eras of history. Impetus for change comes sometimes from new techniques and sometimes from new demands made by composers. For instance, the new kind of playing demanded by Beethoven's writing for the 'cello completely changed the technique which had been brought to a peak by Romberg.¹⁹³ Various eras in history have demanded different tone qualities and different techniques of the 'cello; and the recognition of the variety of possibilities in this instrument, which these differing demands have brought out, seems to have affected twentieth-century composers and caused a decided increase in 'cello works.

The sonata idea offers many possibilities for the solution of the problem of unity within variety and variety within unity with which all formal ideas are preoccupied.

¹⁹³van der Straeten, p.384.

"The absolute supremacy of form is a consequence of the fact that music alone among the arts has no correlative in the world of our daily experience."¹⁹⁴

It seems that the possibilities in the sonata idea and in the combination of 'cello and piano have not yet been exhausted.

¹⁹⁴Erwin Stein, Form and Performance (New York: Alfred A. Knopf, 1962), p.17.

A REPRESENTATIVE LIST OF SONATA
FOR VIOLA AND PIANO
BY
EDWARD

- Barrière, J. "Sonata in G major" Schott.
- Della Bella, Domenico. "Sonata in G major" Schott.
83. Nagels Verlag.
- Fesch, W.d. "Sonata in F." Schott.
- _____. "Sonata in G." Schott.
- _____. "Sonata in G." Schott.
- Gabrielli, Domenico. "Sonata in G major" Schott.
- Geminiani. "Sonatas in G major, G minor, and G major." Schott.
- Marcello, Benedetto. "Sonata in G major" Schott.

APPENDIX

- Tedesco, G.F. "Sonata in G major" Schott.
- Torrelli, Giuseppe. "Sonata in G major" Schott.
Forsreiter.
- Vivaldi, Antonio. "Six Sonatas for Violin and Viola." Schott.
Salabert.
- _____. "Pre-Classical"
- Loccherini, Luigi. "Six Sonatas" Schott.
- _____. "Sonata no. 7 in G" Schott.
- Bréval, J.B. "Sonata no. 1 in G." Schott.
Music by Celebrated Masters of the Seventeenth
and Eighteenth Centuries no. 57. Schott and Co.
- Cirri, Giambattista. "Six Sonatas in G." Schott.
- Sammartini(?). "Sonata in G major." Schott.

A REPRESENTATIVE LIST OF SONATAS
FOR 'CELLO AND PIANO IN MODERN
EDITIONS

Baroque

- Barrière, J. "Douze Sonates." Editions Salabert.
- Dalla Bella, Domenico. "Sonate." Nagels Musik-Archiv
83. Nagels Verlag.
- Fesch, W.d. "Sonata in F." Simrock.
- _____. "Sonata in d." Bärenreiter.
- _____. "Sonata in G." Ricordi.
- Gabrielli, Domenico. "Sonatas in G. and A." Schott.
- Geminiani. "Sonatas in d and a, op.5, no.2 and no.6."
Schott.
- Marcello, Benedetto. "Sechs Sonaten." Peters Edition.
- Telemann, G.P. "Sonate." Hortus Musicus 13. Bärenreiter.
- Torelli, Giuseppe. "Sonate in G-dur." Hortus Musicus 69.
Bärenreiter.
- Vivaldi, Antonio. "Six Sonates Originales." Editions
Salabert.

Pre-Classical

- Boccherini, Luigi. "Six Sonatas." Ricordi.
- _____. "Sonata no.7 in B^b." Schott and Co.
- Bréval, J.B. "Sonata no.1 in C." Classical Violoncello
Music by Celebrated Masters of the Seventeenth
and Eighteenth Centuries no.21. Schott and Co.
- Cirri, Giambattista. "Six Sonatas, op.16." Zanibon.
- Sammartini(?). "Sonata in G major." Ricordi.

- _____. "Classical in d, op.109." Durand.
- Beethoven, Ludwig van. "Sonatas." G. Schirmer.
- Kraft, Anton. "Sonata, op.2, no.II." McGinnis and Marx.
- Wölfl, Joseph. "Sonata in d." Hortus Musicus III.
Bärenreiter.

Regar, Max. "Sonata no.1, op.5." Schott.

_____. "Sonata no.2, op.28." Universal.

Romantic

- Boëllmann, Leon. "Sonata, op.40." Durand.
- Brahms, Johannes. "Sonata in e, op.38." G. Schirmer.
- _____. "Sonata in F, op.99." Peters Edition.
- Chopin, Frederick. "Sonata op.65." G. Schirmer.
- Grieg, Edvard. "Sonata, op.36." Peters Edition.
- Mendelssohn, Felix. "Sonata in B, op.45." Universal
Edition.
- _____. "Sonata in D, op.58." Universal Edition.
- Saint-Saens, Camille. "Sonata in c, op.32." Durand.
- _____. "Sonata in F, op.46." Durand.

Casado, Gaspar. "Sonata in altpanischen Stils." Universal.

_____. "Sonata Post-Romantic" Universal Edition.

- Bridge, Frank. "Sonata." Winthrop Rogers.
- Debussy, Claude. "Sonata." Elkan-Vogel.
- Delius, Frederick. "Sonata" in Universal Edition.
- Dierna, Aurelio. "Sonata in d." G. Schirmer.
- Dohnanyi, Ernst von. "Sonata in b^b, op.8." Schott.
- Gretchaninow, Alexander. "Sonata." Schott.

- Fauré, Gabriel. "Sonata no.1 in d, op.109." Durand.
- _____. "Sonata no.2 in g." Ebenda.
- D'Indy, Vincent. "Sonata, op.84." Rouart.
- Rachmaninoff, Sergei. "Sonata in g, op.19." Universal.
- Reger, Max. "Sonata no.1, op.5." Schott.
- _____. "Sonata no.2, op.28." Universal.
- _____. "Sonata no.3, op.78." Ebenda.
- _____. "Sonata no.4, op.116." Peters.
- Strauss, Richard. "Sonata in F, op.6." Universal.
- _____. "Sonata Contemporary" Soviet Music, Moscow.
- Bax, Arnold. "Sonata." Murdoch.
- Barber, Samuel. "Sonata, op.6." G. Schirmer.
- Britten, Benjamin. "Sonata in C." Boosey and Hawkes.
- Carter, Elliot. "Sonata." G. Schirmer.
- Casella, Alfredo. "Sonata in C." Universal.
- Cassado, Gaspar. "Sonata im altspanischen Stile." Universal.
- _____. "Sonata in e." Universal Edition.
- Diamond, David. "Sonata." Theodore Presser.
- Finney, Ross Lee. "Second Sonata." Independent Music Publishers of New York.
- Giorni, Aurelio. "Sonata in d." G. Schirmer.
- Gretchaninov, Alexander. "Sonata." Schott.

- Hindemith, Paul. "Sonata, op.11, no.3." Schott.
 _____. "Sonata (1948)." Schott.
- Honegger, Arthur. "Sonata." La Sirene.
- Jacob, Gordon. "Sonata." Mills Music
- Kodaly, Zoltan. "Sonata, op.4." Universal Edition.
- Malipiero, G.F. "Sonata in d." Schmidl.
- Martinu, Bohuslav. "Sonata no.1." Mercury.
 _____. "Sonata no.2." Associated Music Publishers.
 _____. "Sonata no.3." Artia.
- Miaskovsky, Nikolai. "Sonata, op.12." Soviet Music, Moscow.
 _____. "Sonata op.81." Soviet Music, Moscow.
- Milhaud, Darius. "Sonata." Salabert.
- Poulenc, Francis. "Sonata." Mercury Music.
- Prokofieff, Serge. "Sonata." Leeds Music Corporation.
- Shostakovich, Dmitri. "Sonata, op.40." Leeds Music Corporation.
- Tcherepnin, Alexander. "Sonata in D, op.29." Durand.
 _____. "Sonata in G, op.30, no.1." Universal.
 _____. "Sonata in F[♯], op.30, no.2." Universal.
- Villa-Lobos, Heitor. "Sonata, op.66." Schott.

Dictionaries and Encyclopedias

Lavignac, Albert, and Laurenot, Lionel de la, eds.: Encyclopédie de la Musique et Dictionnaire du Conservatoire, Deuxième Partie: Technique-Instrumentale-Méthodes, Vol. III: Technique Instrumentale: Instruments à vent, Instruments à percussion, Instruments à cordes, Instruments automatiques. Paris: Librairie Delagrave, 1927.

Apel, Willi: Harvard Dictionary of Music. Cambridge: Harvard University Press, 1944.

Biographical Bibliography of Musicians. Edited by Nicholas Slonimsky, Fifth Edition. New York: G. Schirmer, 1958.

Biographical Dictionary of Music and Musicians. Edited by Eric Blom. Fifth edition. New York: St. Martin's Press, 1954.

Sücken, Ernst, ed. Handbuch der Musikwissenschaft. Vol. II. Instrumentalmusik, by Wilhelm Krumpholtz. Wildpark-Potsdam: Akademische Verlagsgesellschaft Athenaion M.B.H., 1929.

Books

Cleve, Carl. Theoretical and Practical Treatise of the Violoncello. English version by Frederick Pitts. Paris-New York: Edouard Schubert, 1932.

Stumm, Wilhelm. Kammermusik-Gesamte des Verzeichnisses der seit 1841 veröffentlichten Werke von Komponisten bis August 1944. Leipzig: Friedrich Hofmeister, 1945.

Dictionaries and Encyclopedias

Lavignac, Albert, and Laurencie, Lionel de la, eds.
Encyclopédie de la Musique et Dictionnaire du
Conservatoire, Deuxième Partie: Technique-Esthétique-
Pédagogie, Vol.III: Technique Instrumentale:
Instruments à vent, Instruments percussion,
Instruments à cordes, Instruments automatiques.
 Paris: Librairie Delagrave, 1927.

Apel, Willi. Harvard Dictionary of Music. Cambridge:
 Harvard University Press, 1944.

Baker's Biographical Dictionary of Musicians. Edited by
 Nicholas Slonimsky. Fifth Edition. New York:
 G. Schirmer, 1958.

Grove's Dictionary of Music and Musicians. Edited by
 Eric Blom. Fifth edition. New York: St. Martin's
 Press, 1954.

Bücker, Ernst, ed. Handbuch der Musikwissenschaft.
 Vol. II. Instrumentkunde, by Wilhelm Heinitz.
 Wildpark-Potsdam: Akademische Verlagsgesellschaft
 Athenaion M.B.H., 1929.

Books

Alexanian, Diran. Theoretical and Practical Treatise of
the Violoncello. English version by Frederick Fair-
 banks. Paris-New York: Editions Salabert, 1922.

Altmann, Wilhelm. Kammermusik-Katalog: Ein Verzeichnis
von seit 1841 veröffentlichten Kammermusikwerken;
Sechste bis August 1944 ergänzte Auflage. Leipzig:
 Friedrich Hofmeister, 1945.

- Arnold, F. T., The Art of Accompaniment from a Thorough-bass as Practised in the XVIIth and XVIIIth Centuries. London: Oxford University Press, 1931.
- Berlioz, Hector. Treatise on Instrumentation. Revised and enlarged by Richard Strauss. Translated by Theodore Front. New York: Edwin F. Kalmus, 1948.
- Broadley, Arthur. Chats to 'Cello Students. London: The Strad, 1899.
- Bukofzer, Manfred F. Music in the Baroque Era. New York: W.W. Norton, 1947.
- Clercx, Suzanne. Le Baroque et la Musique: Essai d'Esthétique musicale. Bruxelles: Editions de la Librairie Encyclopédique, 1948.
- Dart, Thurston. The Interpretation of Music. London: Hutchinson and Co., 1955.
- Doring, Ernest N. How Many Strads?: Our Heritage from the Master. Chicago: William Lewis and Son, 1945.
- Dunhill, Thomas F. Chamber Music: A Treatise for Students. London: MacMillan and Co. and Stainer and Bell, Ltd., 1938.
- Einstein, Alfred. Music in the Romantic Era. New York: W.W. Norton, 1947.
- Ferguson, Donald N. A History of Musical Thought. New York: F.S. Crofts, 1935.
- Forte, Allen. Contemporary Tone-Structures. New York: Bureau of Publications, Teachers College, Columbia University, 1955.
- Geiringer, Karl. Musical Instruments: Their History in Western Culture from the Stone Age to the Present. New York: Oxford University Press, 1945.
- Grout, Donald J., A History of Western Music. New York: W.W. Norton, 1960.

- Hayes, Gerald R. Musical Instruments and Their Music, 1500-1750. Vol. II. The Viols and Other Bowed Instruments. London: Oxford University Press, 1930.
- King, A. Hyatt. Chamber Music. London: Max Parrish and Co., 1948.
- Krenek, Ernst. Music Here and Now. Translated by Barthold Fles. New York: W.W. Norton and Co., 1939.
- Lang, Paul Henry. Music in Western Civilization. New York: W.W. Norton, 1941.
- Machlis, Joseph. Introduction to Contemporary Music. New York: W.W. Norton, 1961.
- Mason, Daniel Gregory. The Chamber Music of Brahms. New York: MacMillan Co., 1933.
- Mellers, Wilfrid. Man and his Music: The Sonata Principle. London: Burleigh Press, 1957.
- Newman, William S. The Sonata in the Baroque Era. Chapel Hill: University of North Carolina Press, 1959.
- Newman, William S. The Sonata in the Classic Era. Chapel Hill: University of North Carolina Press, 1963.
- Persichetti, Vincent. Twentieth-Century Harmony: Creative Aspects and Practice. New York: W.W. Norton, 1961.
- Pincherle, Marc. Vivaldi: Genius of the Baroque. Translated by Christopher Hatch. New York: W.W. Norton, 1957.
- Richter, Johannes Friedrich. Kammermusik-Katalog: Verzeichnis der von 1944 bis 1958 veröffentlichten Werke für Kammermusik und Klavier vier- und sechshändig sowie für zwei und mehr Klavier. Leipzig: Veb Friedrich Hofmeister Musikverlag, 1960.

- Sachs, Curt. The Commonwealth of Art: Style in the Fine Arts, Music and the Dance. New York: W.W. Norton, 1946.
- _____. The History of Musical Instruments. New York: W.W. Norton Co., 1940.
- Salazar, Adolfo. Music in our Time: Trends in Music Since the Romantic Era. Translated by Isabel Pope. New York: W.W. Norton, 1946.
- Stein, Erwin. Form and Performance. New York: Alfred A. Knopf, 1962.
- Straeten, Edmund S.J. van der, History of the Violoncello, the Viol da Gamba, their Precursors, and Collateral Instruments. 2 vols.: London: William Reeves, 1915.
- Tovey, Donald F. Essays in Musical Analysis: Chamber Music. London: Oxford University Press, 1944.
- Weigl, Bruno. Handbuch der Violoncell-Literatur. Vienna: Universal Edition, 1928.

Periodicals

- Mitchell, William J. "Chord and Context in Eighteenth-Century Theory," Journal of the American Musicological Society, XVI, no.2 (Summer, 1963), 221-239.
- Newman, William S. "Concerning the Accompanied Clavier Sonata," Musical Quarterly, XXXIII, no.3 (July, 1947), 327-349.
- Pincherle, Marc. "On the Rights of the Interpreter in the Performance of Seventeenth and Eighteenth Century Music," Musical Quarterly, XLIV, no.2 (April, 1958), 145-166.

- Ratner, Leonard G. "Eighteenth-Century Theories of Musical Period Structure," Musical Quarterly, XLII, no.4 (October, 1956), 439-454.
- Reti, Rudolph. "The Role of Duothematicism in the Evolution of Sonata Form," Music Review, XVII, no.2 (May, 1956), 110-119.

Music

- Barrière, J. "Douze Sonates pour violoncelle solo avec basse." Recueillies et annotées par Marguerite Chaigneau. Réalisation de la basse continue par Walter Morse Rummel. Paris: Editions Salabert, 1924.
- Beethoven, Ludwig van. "Sonatas for Pianoforte and Violoncello." Edited and fingered by Leo Schulz. New York: G. Schirmer, 1905.
- Boccherini, Luigi. "Six Sonate per violoncello e pianoforte." Realizzazione di Alfredo Piatti. Revisione di Gilberto Crepax. Milan: G. Ricordi & C. Editori, 1958.
- Britten, Benjamin. "Sonata in C for Violoncello and Piano, op.65." New York: Boosey and Hawkes, 1961.
- Carter, Elliot. "Sonata for Violoncello and Piano." New York: G. Schirmer (Society for the Publication of American Music), 1953.
- Dalla Bella, Domenico. "Sonate für Violoncello und Basso Continuo." Herausgegeben von Walter Upmeyer. Nagels Musik-Archiv 83. Kassel: Nagels Verlag, 1960.
- Diamond, David. "Sonata for Violoncello and Piano." New Music, XIII, no.1 (Oct., 1939).
- Giorni, Aurelio. "Sonata in d minor for Violoncello and Piano." New York: G. Schirmer (Society for the Publication of American Music), 1925.

- Kraft, Anton. "Sonata op.2, no.II, for Violoncello and Piano." Edited and bass set by Claus Adam. New York: McGinnis and Marx, 1948.
- Marcello, Benedetto. "Sechs Sonaten für Violoncello und Bezifferten Bass." Nachden Pariser und Londoner Erstdruckten. Herausgegeben von Walther Schulz. Aussetzung des Bezifferten Basses von Eberhard Wenzel. Leipzig: Edition Peters, 1958.
- Shostakovich, Dmitri. "Sonata, op.40, for Violoncello and Piano." New York: Leeds Music Corporation, 1947.
- Telemann, G.P. "Sonate für Violoncello und Bass Continuo," Der Getreue Musikmeister, Heft 8. Herausgegeben von Dietz Degen. Hortus Musicus 13. Kassel und Basel: Bärenreiter Verlag.
- Torelli, Giuseppe. "Sonate in G-dur für Violoncello und Klavier." Herausgegeben von Franz Giegling. Hortus Musicus 69. Kassel und Basel: Bärenreiter Verlag, 1955.
- Vivaldi, Antonio. "Six Sonates originales pour Violoncelle et Piano." Recueillies et annotées par M. Chaigneau. Réalisation de la basse chiffrée par W. Morse Rummel. Paris: Editions Salabert.
- Wolfl, Joseph. "Sonate, D-moll, für Violoncello und Klavier, op.31." Herausgegeben von Folkmar Langin. Hortus Musicus 111. Kassel und Basel: Bärenreiter Verlag, 1953.

Other Sources

- Alexius, Carl. Lectures in Music 302 ("Form and Analysis"). School of Music, Woman's College of the University of North Carolina. February-May, 1962.
- Cousins, Thomas. Lectures in Music 205-206 ("Composition"). School of Music, University of North Carolina at Greensboro. September-May, 1963-1964.

- Kinney, Gordon James. "The Musical Literature for Unaccompanied Violoncello." Doctoral Dissertation at Florida State University, 1962. Ann Arbor: University Microfilms, Inc., 1962.
- Rarig, Howard R. "The Instrumental Sonatas of Antonio Vivaldi." Doctoral Dissertation, University of Michigan, 1958. Ann Arbor: University Microfilms, Inc., 1958.
- Rigsby, Lee. Lectures in Music 431-432 (History of Music). School of Music, University of North Carolina at Greensboro. September-May, 1963-1964.
- Wellesz, Egon. "The Origins of Schönberg's Twelve-Tone System." A lecture delivered in the Whitthall Pavilion of the Library of Congress, January 10, 1957. Washington: Library of Congress, 1958.