

UNIVERSITY OF CALIFORNIA

Santa Barbara

Translational Symmetry in Recapitulatory Binary Forms, 1701-1759

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Music

by

Richard Luke Hannington

Committee in charge:

Professor Lee Rothfarb, Chair

Professor Ben Levy

Professor Stephanie Tcharos

September 2019

The dissertation of Richard Luke Hannington is approved.

Benjamin Levy

Stephanie Tcharos

Lee Rothfarb, Committee Chair

September 2019

Translational Symmetry in Recapitulatory Binary Forms, 1701-1759

Copyright © 2019

by

Luke Hannington

ACKNOWLEDGEMENTS

I should like to thank all the Professors and Staff at UCSB who have made this process so rewarding, especially Dr. Rothfarb. Also, I should like to thank my fellow students, particularly Linda Shaver Gleason, Kaite Zigterman and Matthew Roy who kept me sane. But I am also aware that this project is a culmination of an education that belong long-long ago. To that end I should also like to thank all my teachers including:

Aqualina, Armstrong, Austin, Bamford, Berry, Bird, Bloom, Boyce, Boyle, Bremer, Briggs, Bright, Braunton, Campbell, Chana, Corchran, Chang, Clugston, Cox, Dale, Doyle, DiBartolo, Emmit, Evans, Feigin, Flockhart, Ford, Forney, Gardiner, Hart, Harrison, Gerhart, Gorrow, Grove, Gryffiths, Hadfield, Haynes, Haynow, Hickman, Hiscocks, Hubbard, Inglis, Janow, Katz, LaMarca, Levine, Levy, Lewis, Loeb, Mabin, Maldonaldo, Manning, Marcus, Matthews, Marshall, Miles, Miller, Murray, Nathan, Neville, Osborne, Owen, Parkes, Paul, Peach, Planchart, Randall, Raven, Richardson, Richman, Robinson, Rose, Rothfarb, Rundle, Schudemore, Shockley, Smalley, Smith, Stapleton, Stoddart, Taba, Tcharos, Thomas, Turner, Uranker, van den Toorn, Whitbread, White, Wragg, and York.

VITA OF JOHN LUKE HANNINGTON
May 2014

EDUCATION

Bachelor of Music, Composition, California State University, Long Beach (Magna Cum Laude)

Master of Music, Composition, California State University, Long Beach

Master of Arts in Music, Musicology, California State University, Long Beach

Master of Arts in Music, Music Theory, California State University, Long Beach

Doctor of Philosophy in Music, University of California, Santa Barbara

PROFESSIONAL EMPLOYMENT

California State University, Instructor, Long Beach, 2011-2012: Intro to Music Theory, Form and Analysis, Harmony I, Musicianship I, Music for the Elementary School Teacher.

University of California, Associate (Instructor of record), Santa Barbara: Music Theory for Non-Majors, Teaching at the University.

California State University, Instructor, Long Beach, 2018-2019: Form and Analysis, Harmony I and II, Musicianship I and II.

PUBLICATIONS

Hannington, Luke. "Melodrama Made Good: Ennoblement by Deletion in Edgar Stillman Kelley's Score to Ben-Hur." *Journal of Film Music*, 2013.

AWARDS

Dean's List: 2005, 2006

Presidents List: 2005

ABSTRACT

Translational Symmetry in Recapitulatory Binary Forms, 1701-1759

by

Richard Luke Hannington

This study traces the development of binary procedures through the first half of the eighteenth-century with a view of tracing the development of those characteristics that coalesced to form sonata form. It is the culmination of a corpus study of some 800 instrumental binary works. These were analyzed in two dimensions. The first is translational symmetry, the degree to which each half resembles each other. The second is harmonic trajectory, the number and disposition of threshold cadences, those cadences that define boundaries between parts of a form. The study concludes with a meta-analysis that shows that the move from simple binary forms with few cadences to highly symmetrical binary forms with well-defined key areas is discernible but far-from-smooth process.

TABLE OF CONTENTS

I. Introduction	1
A. Burlington and Pop on Symmetry and good Taste in the Eighteenth Century	1
B. Symmetry in Music	6
C. This Study	9
II. Types of Symmetry Found in Eighteenth-Century Binary Forms	11
A. Translational Symmetry in Geometry and Music	11
B. Binary Form and Degrees of Symmetry	13
C. Simple Binary	15
D. Rounded Binary	16
E. Balanced Binary	19
F. Incipit Binary	21
G. Top and Tails	22
H. Type-2 Binary	25
I. Type-3 Binary	27
J. Conclusion	30
III. Cadential Patterns and Action Spaces in Early Eighteenth-Century Binary Presentations	32
A. Action Spaces vs. Threshold Cadences	32
B . Analysis by Cadential Definition	33
C . One-Cadence Presentations	36
D . Two-Cadence Presentations.....	42

E . Three-Cadence (and Four-Cadence) Presentations	44
F . Three-Pole, Four Cadence Designs	46
G . Three-Cadence Presentations.....	47
IV. <i>Fortspinnungsthemen</i> and their use in Binary Presentations	57
A. Action Spaces without Cadential Gateposts.....	57
B. <i>Fortsinnungsthema</i> Defined	61
C. <i>Fortsinnung</i> Presentations	67
V. Binary Procedures Before 1701	76
A. Estampies.....	76
B. Post-Cadential Extensions and Petite Reprises.....	77
C. PCE's Contribution to Binary Symmetry	79
D. Petite Reprises.....	80
E. <i>Fortspinnungsthemen</i>	84
F. Harmonic Trajectory.....	76
G. Cadential Trajectories	88
H. Symmetry.....	94
I. All-Tonic Type-3 Binaries	95
J. Conclusion	97
VI. Cadential Trajectory 1701-1750	101
A. 1700s	102
B. 1710s.....	114
C. 1720s.....	121
D. 1730s	131

E. 1740s.....	142
F. Conclusion: The Acendency of the three-cadence exposition	114
VI. Translational Symmetries 1701-1750	153
A. Symmetries in 2-Cadence, Type-3 Pieces	154
B. Symmetries in Post Corellian 2-Cadence, Type-3 Pieces	159
C. Symmetries in 3-Cadence, Type-3 Pieces	166
D. Other Symmetries	172

LIST OF EXAMPLES

Example 1. Joseph Riepel’s Symphony, an example Translational Symmetry	8
Example 2. Simple Binary: Minuet #6 from NN.	16
Example 3. Rounded Binary Form: NN #27	18
Example 4. Balanced Binary: NN#18	21
Example 5. Top and Tails Binary: NN #32	23
Example 6. Type-2 Binary: NN #4, a “Cut and Paste” binary	27
Example 7. Type-3 Binary: NN #10	28
Example 8. NN #2: A One-Cadence Presentation with an All-Tonic Presentation... 37	
Example 9. All Tonic, One-Cadence, Simple Binary Form: NN #3	38
Example 10. A One-Cadence Simple Binary Presentation Ending in a Half-Cadence: NN #6	39
Example 11. One-Cadence Presentation with Direct Modulation: NN. #9.....	40
Example 12. A typical two-cadence presentation: NN #5	43
Example 13. Two-Cadence, Type-2 Binary: NN #7.....	44
Example 14. Four-Cadence Presentation NN. 23	46
Example 15. Three-Cadence P/M design: NN. 30.....	49
Example 16. Three-Cadence M/C Presentation: NN24	51
Example 17. Presentation from Alberti Sonata in F, II, Op. 1 Allegro Assai 2	56
Example 18. A <i>Fortspinnungsthemata</i> in Vivaldi <i>Sarabanda</i>	59
Example 19. Molter: Trio Sonata in B minor. II. Allegro.....	59
Example 20. Platti: Sonata #1 in D. II Allegro.....	60
Example 21. Marcello Cello Sonata in D	60
Example 22. Vivaldi <i>Sarabanda</i> from sonata in F	61

Example 23. Cadential ambiguity in Vivaldi’s Sonata in B minor.....	62
Example 24. Vivaldi: Corrente Allegro from Sonata in B minor	64
Example 25. Marcello: Sonata in F.....	66
Example 26. Vivaldi <i>Preludio</i> in g minor	67
Example 27. Marcello: Allegro in G major	68
Example 28. Vivaldi: Gigue from Sonata in F	69
Example 29. Vivaldi: <i>Preludio</i> from Sonata VII in C Major	70
Example 30. <i>La quinte estampie real</i> , F-pn fr.844, f.104	73
Example 31. Varieties of PCE in Elizabethan Keyboard Literature.....	75
Example 32. <i>La bella Franceschina</i>	77
Example 33. Herold, Gavotte in G minor.....	78
Example 34. <i>A Petite Reprise</i> , Clerambault, <i>Pieces de Clavecin</i> , Suite in C major, Gavotte	79
Example 35. Krieger: Gavotte from “ <i>Seehs Musicalisdie Portien</i> ” 1697	80
Example 36. A Seventeenth-Century Forrtspinnung: <i>Il Giasone</i> by Francesco Cavalli	81
Example 37. Sonata in G minor by Aldrovandini.....	82
Example 38. Corelli: Giga Allegro from the sonata in A.....	86
Example 39. Corelli: <i>Preludio</i> from Sonata VII in D minor	87
Example 40. Corelli: <i>Preludio</i> from Sonata VII.....	88
Example 41. Corelli: <i>Preludio</i> from Suite VIII.....	90
Example 42. Simple Binary Gavotta from Sonata X in F major.	92
Example 43. Corelli: <i>Tempo di Gavotta</i>	94
Example 44. Two-Cadence P/T presentation, Vivaldi <i>Preludio</i>	101

Example 45. <i>Fortspinnungsthem</i> a/period from Vivaldi's <i>Allemanda</i> from Suite #4 .	106
Example 46. 3-Cadence Presentation, Giga Allegro from Vivaldi's Sonata #2, Op. 2	103
Example 47. Extended I-cadence presentation, Vivaldi <i>Allemanda Allegro</i>	105
Example 48. Three-Pole, Four-Cadence presentation, Giga Allegro from Vivaldi, Op. 2 VII.....	107
Example 49. Integration in Vivaldi's Compositional Style: <i>Preludio</i> from Sonata VII.....	109
Example 50. Telemann 2-cadence Presentation.	112
Example 51. Dall'abaca: <i>Sarabanda Allegro</i> , 1-Cadence Presentation.....	113
Example 52. Telemann 1-cadence Presentation	113
Example 53. Telemann 3-Cadence Allegro from Sonata #4.....	114
Example 54. 3-cadence presentation, dall'Abaco's <i>Allemanda Allegro</i> from Sonata VII.	115
Example 55. 3-cadence "misfire" Dall'abaca.....	116
Example 56. Roman Two-Cadence Binary Form.....	119
Example 57. Allegro from Somis's Sonata #1 Op.1	120
Example 58. Chelleri: Sonata #4 in D.....	121
Example 59. Roman's <i>A tempo giusto</i> from his sonata in D.....	122
Example 60. Chelleri 1-cadence	122
Example 61. 3- Cadence Chelleri Allegro from Sonata in F.....	124
Example 62. Somis: Sonata in A, Allegro.....	125
Example 63. Somis: Sonata in A, Allegro Chelleri 3-cadence Sonata #1.....	126
Example 64 Somis: Sonata in G <i>Allegro ona poco</i> . A 4-cadence, 2-pole presentation.....	127

Example 65. Alberti: Minuet in C. A 2-cadence presentation.....	130
Example 66. Cadential Evasion in the Allegro Moderato from Alberti's Sonata in F	132
Example 67. Alberti 3-cadence presentation.....	134
Example 68. Giustini 3-cadence	136
Example 69. Giustini: Minuet.....	136
Example 70. Giustini: Gigue Allegro.....	137
Example 71. Platti, Allegro from Sonata in D.....	140
Example 72. Kobrich: <i>Partien</i> in G, <i>Allegro un poco</i> , A Compact 3-cadence presentation.....	140
Example 73. Nichelmann 2-cadence second theme.....	143
Example 74. Platti: Sarabanda Adagio. An Extended 1-Cadence form.....	144
Example 75. Corrette: Giga Allegro. An eccentric 4-Cadence design	147
Example 76. Vivaldi: <i>Sarabanda Andante</i> from Sonata in F	152
Example 77. Scale-wise Bass Connections from III to i.....	153
Example 78. Type-3 Symmetry in Roman's Sonata in E minor	154
Example 79. Chelleri: Sonata in D.....	156
Example 80. Giustini's Type-3 Presentation from the first Movement of his Sonata in D	161
Example 81. Cherelli: Sonata in E major, I. Allegro	163
Example 82. Platti: Sonata in D, Allegro	167
Example 83. Chelleri: Sonata in F, Allegro.....	171
Example 84. Somis: Organ Sonata in Bb.	174
Example 85. Alberti: Sonata in F, Allegro Moderato	176
Example 86. Type-2 Symmetry in Somis: Sonata in G	179

Example 87. Platti: Sonata in A minor, <i>Aria Larghetto</i>	181
Example 88. Roman: Sonata in G, Allegro	183
Example 89. C.P.E. Bach: Sonata in F, 2-Cadence Type-2 Binary, Part 1.....	184
Example 90. C.P.E. Bach Sonata in F, 2-Cadence Type-2 Binary, Part 2.....	185

LIST OF FIGURES

Figure 1. Plan for Palladio's <i>Villa Rotunda</i> from <i>I Quattro libri dell'Architettura</i> (1570)	3
Figure 2. Translation (<i>t</i>).....	11
Figure 3. Two-Dimensional Translational Symmetry	12
Figure 4. Fundamental Eighteenth-Century Binary Form.....	13
Figure 5. Simple Binary Form	15
Figure 6. Rounded Binary Form	17
Figure 7. Balanced Binary Form.....	20
Figure 8. Top and Tails Binary	22
Figure 9. Type-2 Binary	25
Figure 10. Type-3 Binary	27
Figure 11. Potential harmonic stagnation in recapitulatory binary forms	29
Figure 12. Summary of Eighteenth-Century Binary Symmetries.....	31
Figure 13. Hepokoski and Darcy's sonata exposition, with threshold cadences indicated.....	34
Figure 14. One-Cadence Binary Presentation	36
Figure 15. The two-cadence presentation.....	42
Figure 16. The four-cadence presentation	45
Figure 17. Three-pole presentation, additional cadence in III.....	47
Figure 18. Three-pole presentation, minor feint in v	47
Figure 19. Three-Cadence P/M Presentation.....	48
Figure 20. Three-Cadence M/C Presentation	50
Figure 21. Overview of Mid-Eighteenth-Century Presentations	54

Figure 22. Fischer’s Spaces in a <i>Fortspinnungsthemata</i>	58
Figure 23. Harmonic trajectory of Corelli: Prelude from Sonata VII.....	89
Figure 24. Corelli: <i>Preludio</i> from Suite VIII.....	90
Figure 25. Breakdown of Harmonic trajectories in Corelli Op. 5	95
Figure 26. Breakdown of Symmetries in Corelli’s Op. 5.....	96
Figure 27. Breakdown of Cadential Trajectories by Decade: 1700-1749.....	97
Figure 28. Cadential Trajectories the first decade of the eighteenth century	100
Figure 29. The three-pole, four-cadence presentation in minor	106
Figure 30. The three-pole, four-cadence presentation in major.....	106
Figure 31. Frequency of cadential trajectories in the 1710s.....	110
Figure 32. Cadential trajectories of the 1720s	118
Figure 33. Cadential trajectories of the 1730s	128
Figure 34. Cadential Trajectories in the 1740s	138

LIST OF TABLES

Table 1. Frequency of Presentation Types 1700-1749..... 152

I: Introduction

His *Gardens* next your Admiration call,
On ev'ry side you look, behold the Wall!
No pleasing Intricacies intervene,
No artful Wildeness to perplex the Scene:
Grove nods at Grove, each Ally has a Brother,
And half the Platform just reflects the other.

–Alexander Pope

This study was spurred by my investigations into the history of sonata form. Although there are many divergent theories of sonata form they all have one thing in common: they are all *a posteriori*.¹ How could such a seemingly prescriptive form come about all across Europe at roughly the same instant with no “instruction manual”? This question spurred me to consider sonata form as an emergent process. Could it have emerged from the application of a few basic principles? What might those principles be? These questions led me to investigate symmetry.

A. Burlington and Pope On Symmetry and Good Taste in the Eighteenth Century

In 1718, Richard Boyle, 3rd Earl of Burlington, returned from his first grand tour with a collection of drawings of ancient Roman buildings and an evangelical zeal to impress their worth onto the British public. These drawings, by the sixteenth-century Italian architect Andrea Palladio, were published in 1730 by Burlington at his own

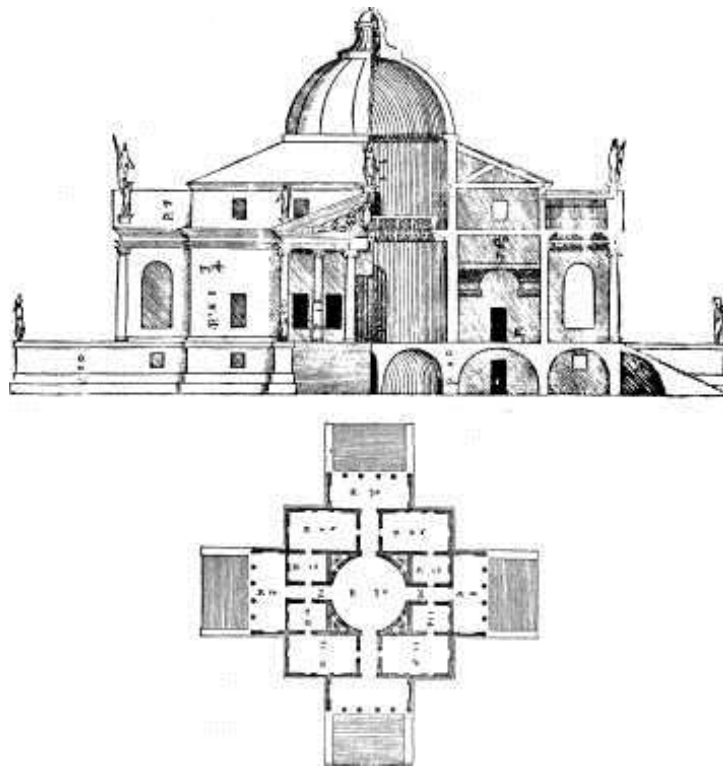
¹ Francesco Galeazzi, *Theoretical-practical Elements of Music* (Urbana, IL: University of Illinois Press, 2012). David Gramit, *Beyond the Art of Finger Dexterity: Reassessing Carl Czerny* (Rochester, N.Y: University of Rochester Press, 2010). Noel Howard Magee, *Anton Reicha as Theorist* (1977). Adolf Bernhard Marx and Scott Burnham, *Musical Form in the Age of Beethoven: Selected Writings on Theory and Method* (Cambridge: Cambridge University Press, 2006).

expense as *Fabbriche Antiche diseguate da Andrea Palladio*.² The book proved seminal, forming the basis for a new style of architecture to become known as “Palladian.”

Although Palladian architecture championed symmetry and a Greco-Roman sense of proportion, it was not merely an exercise in mirror-symmetry. Palladio took great pains to incorporate his architecture into the landscape. His most famous building, *Villa Capra Rotonda*, was a square building that encompasses a central rotunda (Figure 1). This square is oriented forty-five degrees to the cardinal compass points, thus ensuring that all sides have maximal exposure to sunlight. Mathematically derived mirror symmetry thus yielded to nature. It was this combination of divine, mathematical symmetry situated amid the carnal, near symmetry of nature that was to become the *sine qua non* of eighteenth-century good taste in architecture and garden design.

² Andrea Palladio, Richard Boyle Cork, and Paul Fourdrinier, *Fabbriche Antiche Diseguate Da Andrea Palladio Vicentino E Date in Luce Da Riccardo Conte Di Burlington* (London, 1730).

Figure 1. Plan for Palladio's *Villa Rotunda* from *I Quattro libri dell'Architettura* (1570)



Fortunately, we do not have to rely entirely on pictorial evidence for this aesthetic point of view. These tastes were also articulated in essays and poetry. One instance is Alexander Pope's poem *AN EPISTLE To the Right Honourable RICHARD Earl of BURLINGTON*, written in 1731 on the occasion of the publication of *Fabbriche Antiche diseguate da Andrea Palladio*.³ In that epistle, Pope applied Burlington's aesthetic preoccupations to discuss his own interest into the aesthetics of garden design. But the

³ Alexander Pope, *An Epistle to the Right Honourable Richard Earl of Burlington Occasiond by His Publishing Palladios Designs of the Baths, Arches, Theatres, &c. of Ancient Rome* (London: Printed for L. Gilliver, 1731).

poem is much more than merely a meditation on what constitutes beauty. It is, in the words of Phillip Ayres, “the minute dissection of false taste and vanity of expense, and the promotion of positive artistic and moral values.”⁴

It unfolds in three sections. The first, lines 1-98, discusses good and bad taste in architecture and garden design. The second section, lines 99-176, presents a semi-fictional personification of poor taste: Timon’s villa and grounds. The final section, lines 177-204, heralds a glorious future of good taste, prosperity and social accord bequeathed to the country by a patron’s good taste, such as Burlington’s. Good taste is presented in the first section as a collaboration with nature:

To rear the Column, or the Arch to bend,
To swell the Terras, or to sink the Grot;
In all, let *Nature* never be forgot.
Consult the *Genius* of the *Place* in all,
That tells the Waters or to rise, or fall,

But this cooperation must be tempered by proportion and balance:

Begin with *Sense*, of ev'ry Art the Soul,
Parts answ'ring Parts, shall slide into a Whole...

The epigraph that begins this chapter is a warning about what happens if human order is imposed contrary to nature: vanity surely follows.

At *Timon's Villa* let us pass a Day,
Where all cry out, "What Sums are thrown away!"

⁴ Philip Ayres, "Popes Epistle to Burlington: The Vitruvian Analogies," *Studies in English Literature, 1500-1900* 30, no. 3 (1990).

So proud, so grand, of that stupendous Air,
Soft and Agreeable come never there.

“Soft and agreeable nature” is replaced by stiff, formal, symmetry where “Grove nods at Grove, each Ally has a Brother, And half the platform just reflects the other.”

Pope’s precepts of aesthetics in architecture and garden design could equally be brought to bear on the aesthetics of music, though perhaps in the opposite direction. For, while the Gothic architecture and *parterre* gardens of the previous century could be seen as stiff and overly symmetrical and could be said to benefit from a judicious injection of naturalistic asymmetry, the music of the late baroque could be criticized in the opposite direction: too naturalistic, too flowing. It is music that could perhaps benefit from the imposition of symmetry. Consider, for example, a piece like Buxtehude’s Toccata in D minor, BuxVW 155. The piece is a free fantasia, but not totally free. Motives morph into new ones gradually, taking on new shapes and characters. The motives change as nature does—in a slow evolutionary process of constant becoming. Buxtehude’s Toccata ends more through sheer insistence than resolution. He applies the brakes with an extended tonic pedal which does not end the piece so much as grind it to a halt. One can easily imagine an alternate piece with further unravellings of the material going on unheard into eternity.

This would be unthinkable in a sonata form. Perhaps the greatest achievement of sonata form is that on first listening an educated ear could intuit the length of the whole from its constituent parts. A short first theme area is unlikely to yield to an extended second key area. A long exposition is unlikely to have a very brief development.

Hepokoski and Darcy argue that the type of Medial Caesura gives a prediction of the

scope of the sonata. The length of a section sets up expectations in the listener that could be exploited for expressive purposes. Deviations from these norms has consequences that can be judged by the listener. The structure provides for the listener what is immediately apparent to a viewer of the plastic arts: the ability to appreciate symmetry. This is a unique achievement in music. How that symmetry arose is the focus of this study.

B. Symmetry in Music

This dissertation is concerned with translational symmetry in eighteenth-century music. Translational symmetry is the kind familiar from wallpaper or wrapping paper in which an image is repeated, rubber stamp-like, to make a large composite image. The process of producing translational patterns is sometimes called “slide symmetry.”

Translational symmetries are the easiest type to discern in music. Repeated sections, even those at different pitch-levels, conform closest to our everyday human experience. They repeat in the same way that recurring events like the seasons do: forward, and in the same order.⁵

The incorporation of symmetry into the architecture of music is not as well documented as in the plastic arts. In the eighteenth century, there are surprisingly few discussions of symmetry in music – even when it is manifestly present. Joseph Reipel’s *Angfangsgründe zur Musikalischen Setzkunst* (1752) mentions, almost in passing, that there should be a “similarity between the parts” in both halves of a binary piece. In shorter pieces, this could amount to a mere similarity in motives used in both halves. But

⁵ The symmetries in the plastic arts – such as those seen in architecture – may be read in either direction.

in Riepel's longer examples, the repetitions could be large. Consider his symphonic example (Ex. 1.). His main objective there is to show that large binary pieces can be generated by expanding shorter dance works. But this could also be taken as a demonstration of translational symmetry. The opening section of the piece, the presentation, unveils three motives: "A" (mm. 1-4) a tonic phrase that is immediately repeated (mm. 5-8), "B" two measures in the dominant (mm. 9-10), and "C" that closes the presentation (mm. 11-15). All of these recur on the other side of the double bar line. "A" comes immediately after the double bar, sounded at the dominant. After a developmental episode, "B" recurs in the tonic, followed by the closing "C" material at m. 42. Riepel does not feel the need to belabor the point about these repetitions, even though a few decades before his thesis such repetitions would not have been assumed.

Example 1. Joseph Riepel's Symphony, an example Translational Symmetry

Allegro
Presentation

A

5

9

13

Development

A

16

19

24

29

33

Recapitulation

C

38

42

46

This study seeks to trace the development of binary forms from 1701 to 1759 through the lens of symmetry.⁶ There are two operating hypotheses. The first is that binary forms moved from less to more symmetrical during the first half of the eighteenth century. Second, the opening halves of binary forms changed from being structures defined more by characteristic musical schemata (opening motive, transitional material, cadential material) than by cadential thresholds, to structures whose boundaries were primarily delineated by cadences. Although this study was spurred by an interest in sonata form formulation, it is not about sonatas. It is more interested in those binary procedures that came before the sonata era. As such, it terminates in 1751, roughly a decade before the arrival of the sonata era proper.

C. This Study

This study represents a preliminary report on an ongoing corpus study. The eventual study will include some 800 opera that constitute the readily-available chamber works for soloist with accompaniment and solo keyboard works that can be definitively dated to a particular decade. The current study investigates 14 pre-selected opuses that represent the more progressive tendencies of the early eighteenth century. The study is in two halves. The first half consists of a chapter each on the theoretical concepts applied in the second half: symmetry, cadential trajectory, and *Fortspiennungsthemen*. This section concludes with a chapter discussing those binary procedures that were already in use before the eighteenth-century. The second half consists of three chapters. The first examines the

⁶ 1701 is not only as a convenient beginning-of-the-century date but it is also a date by which the shift from modality to tonality can be said to be generally complete. 1759 is the date of Leopold Mozart's *Nannerl Notenbuch*.

second of my two hypotheses by tracing developments in cadential trajectory decade-by-decade. The second chapter examines the first of my two hypotheses, that binary forms evolved from less to more symmetric during the first half of the eighteenth century. The dissertation concludes with a meta-analysis of all of this material. It is hoped that this study can shed light not only on the process of binary form formation, but also highlight some composers that deserve greater recognition for their contributions than hitherto acknowledged.

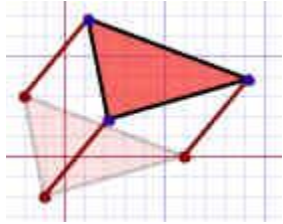
Chapter 2: Types of Symmetry found in Eighteenth-Century Binary Forms

The cohesion that characterizes music written in the 1700s can be attributed to what eighteenth-century music theorist Joseph Riepel would describe as “similarity between the parts.”¹ By this he means repetitions, either of small thematic units, or large wholesale repetitions of phrases, or even entire sections of music. This chapter codifies the various degrees of similarity between binary halves of eighteenth century pieces into seven types of binary symmetry.

A. *Translational Symmetry in Geometry and Music*

In geometry, the term “translational symmetry” are given to those operations that involve moving all the points of a figure the same distance in the same direction. Such operations result in images have been shifted, or translated, on the two-dimensional plane (Figure 2).

Figure 2. Translation (t)



Such translational symmetries are familiar from the patterns seen on wallpaper or wrapping paper, in which an image is repeated, rubber stamp-like, to make a large

¹ Eighteenth-century theorist Joseph Riepel, see Joseph Riepel's Theory of Metric and Tonal Order: Phrase and Form; a Translation of his *Anfangsgründe Zur Musicalischen Setzkunst*, Chapters 1 and 2 (1752/54, 1755) (Hillside, NY: Pendragon, 2014).

composite image.² The process of producing translational patterns is sometimes called “slide symmetry.” Figure 3 shows an example of translational symmetry in two dimensions.

Figure 3. Two-Dimensional Translational Symmetry

Example Example Example
Example Example Example
Example Example Example

Here, the word “example” is displaced both horizontally and vertically by a fixed distance (dv and dh), creating a phalanx of words that descends the page. These kinds of patterns reward the viewer twice. First there is the pleasure of recognizing that a pattern exists – an instinctive response in humans – then there is the second, more cerebral, pleasure, of “working out” the pattern. In this case, three lines of three iterations of the word “example,” each new line being displaced five spaces to the right. Both of these pleasures are present in eighteenth-century music.

In music, translational symmetries are both more constrained and looser than those found in geometry. They are more constrained because they occur along one axis at a time.³ They are looser because the repetitions are seldom exact. This dissertation is

² Wallpaper was particularly popular in the eighteenth century. Clare Taylor, *The Design, Production and Reception of Eighteenth-century Wallpaper in Britain* (London; New York: Routledge, 2018).

³ As opposed to geometry which needs two or more axes. This dissertation is concerned with large scale formal symmetries in time, not those more local symmetries involving the manipulation of thematic material: retrogrades, inversions, changes of pitch level and so on. Such operations could be said to exist in two dimensions.

primarily concerned with translational symmetries between the two halves of binary form pieces.

B. Binary Form and Degrees of Symmetry

“Binary form” refers to those pieces that consist of two complimentary, mutually-dependent halves, commonly labeled A and B.⁴ For the purposes of this dissertation, the A section will be called the presentation. By the eighteenth century, it was normal practice to repeat each half of a binary form, producing the basic form found in Figure 4.

Figure 4. Fundamental Eighteenth-Century Binary Form

||: A (Presentation) :||: B :||

In this study, presentations and B sections are said to be symmetrical if they possess phrase-level correspondences between the binary halves. The greater the scale of repetitions the greater the degree of symmetry. In short, “symmetry” refers to the degree to which the B section of a binary form resembles, or does not resemble, its presentation.

⁴ There is some difficulty in what to call the A section, as existing terminology tends to change depending of the length and type of the piece being discussed. In the shortest pieces, this section could be called the “first phrase” or first half, in slightly longer ones, the “A section,” and in longer pieces—especially those perceived as being in sonata form—the “exposition. This abundance of terminology speaks to an underlying trend in theoretical discourse that I will address in the final chapter: a need to imply differences between extended art music and simpler functional music by using different technical language for each. For the purposes of this dissertation I have chosen to call all A sections “presentations.”

Although absolute symmetry and absolute asymmetry between binary halves is absent there is much variety between those two extremes.⁵ B sections that duplicate the material of the presentation almost exactly – what may be colloquially referred to as “cut-and-paste B sections” – are said to be “parallel.” Other, less literal, repetitions may have zones that parallel their presentations. Those B sections that open with similar material exhibit “incipit parallelism”; those that close with similar material have “cadential parallelism.”

What follows is a description of the various types of symmetry common in mid-eighteenth-century binary forms – from the least to the most symmetrical. Each type is illustrated by a piece from Leopold Mozart’s *Nannerl-Notenbuch* of 1759 (henceforth referred to as the Nannerl Notebook or NN), a collection of 41 brief binary forms by Leopold Mozart and other composers that acts in this dissertation as a compendium of mid-century binary procedures. These pieces were formative influences on the young Wolfgang Mozart. Many have marginalia indicating the time and date that Wolfgang first played them, along with his age: “This minuet and trio little Wolfgang learnt in half an hour on 26th January 1761, one day before his fifth birthday, at half-past nine at night.”⁶

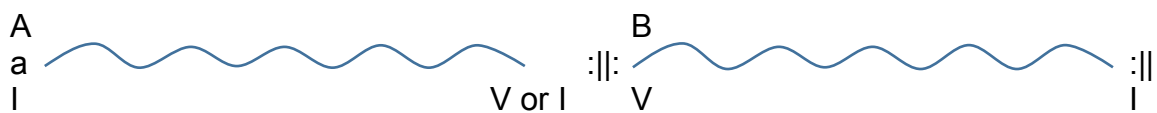
⁵ Leaving aside the oxymoronic aspect labelling a literal repeat B – it would be another A – the harmonic trajectory of most eighteenth century renders a literal repeat between binary halves impossible. The move from the tonic to the dominant in most A sections precludes a literal repeat, as the piece would end in the wrong key. In those cases where the A section ends in the tonic, *verietas* demands that that the B section be varied by other means. Conversely, pieces in which the B section had no reference to the A section, common enough in the 17th century, were rare by the 1800s.

⁶ Leopold Mozart and Hans Kann, *Notebook for Nannerl* (Vienna: Universal Edition, 1980).

C. *Simple Binary*

The simple binary is the least symmetrical type (Figure 5). Although there may be repetitions on the motivic level between A and B sections, large-scale repetitions on the phrase level do not occur. In W. Dean Sutcliffe's trenchant phrase, simple binaries have "a broad continuity of manner, with much freedom of detail".⁷

Figure 5. Simple Binary Form⁸



NN #6 (Example 2) provides an admirably brief model of a simple binary form. Although there is a high degree of thematic coherence in the piece, and even a feeling of incipient cadential parallelism between the two halves, there are no literal repetitions.⁹ Nor is there a feeling harmonic symmetry between halves.¹⁰ Instead, we are presented with an asymmetric but balanced juxtaposition. To paraphrase Douglas Adams, each half is "almost, but not quite, entirely dissimilar."¹¹

⁷ W. Dean Sutcliffe and Michael Tilmouth. "Binary Form." *Grove Music Online*. Oxford University Press. Web. 8. Dec. 2016.

⁸ The squiggly line here merely indicates musical activity. It shows that the cadence is a terminal one.

⁹ Each half divides into an incipit phase of six measures, followed by a two-measure cadential phase, each derived from similar thematic material.

¹⁰ The harmonic aspect of this piece will be discussed in a later chapter.

¹¹ Douglas Adams, *The Hitchhikers: Guide to the Galaxy* (New York: Ballantine Books, 2005), 114.

Example 2. Simple Binary: Minuet #6 from NN.

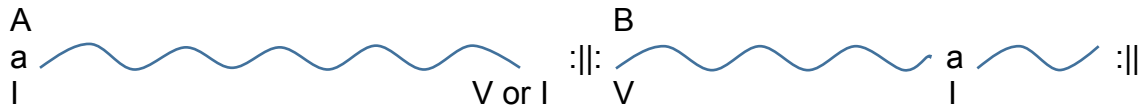
The image displays three systems of musical notation for a minuet in 3/4 time with a key signature of one flat. The first system (measures 1-5) shows a simple binary structure with a treble staff containing eighth-note patterns and a bass staff with quarter notes. The second system (measures 6-11) includes a trill (T) in the treble staff and a fermata (v) in the bass staff. The third system (measures 12-15) concludes with a triplet in the treble staff.

D. Rounded Binary

Rounded Binaries are those binaries that end as they began, with a repetition of the Presentation’s opening material at the conclusion of the B section (Figure 6). By the mid-eighteenth century, rounded binaries are not as common as other types. Where they do occur, rounded endings are usually appended as codas to type-2 binaries or type-2 sonatas a procedure can result in apparent “reversed recapitulations.”¹²

¹² James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-eighteenth-century Sonata* (New York: Oxford University Press, 2011).

Figure 6. Rounded Binary Form



The examples of this rounded procedure found the NN are of this “reversed recapitulation” type. So that although, #27 should more properly be described as a type-2 binary, it is also rounded (Example. 3).¹³ Measure 24 initiates a recapitulation of the second key area of the Presentation with the cadence at m.33 effectively concluding the tonal trajectory of the piece. What follows is a rounded repetition of the opening, a four-measure coda that acts as a species of what is referred to in this thesis as a “post cadential extension” or PCE.¹⁴

¹³ See below. P.

¹⁴ More on post cadential extensions will be found in chapter x.

Example 3. Rounded Binary Form: NN #27

Scherzo

27. *f*

5 **P** *p*

9

12 *tr* **T**

f 3 *p* 3

Example 3. Continued

Musical score for measures 20-23. The piece is in 3/4 time with a key signature of one flat. Measure 20 starts with a treble clef and a bass clef. The treble staff contains a half note G4, followed by a triplet of eighth notes (A4, B4, C5), a half note D5, and a triplet of eighth notes (E5, F5, G5). The bass staff contains a half note G3, followed by a half note F3, and a half note E3. Measure 21 has a treble staff with a half note G4, a triplet of eighth notes (A4, B4, C5), and a half note D5. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 22 has a treble staff with a half note G4, a half note A4, a half note B4, and a half note C5. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 23 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Dynamics include *f* and *tr*.

Musical score for measures 24-27, labeled "Recap". The piece is in 3/4 time with a key signature of one flat. Measure 24 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 25 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 26 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 27 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3.

Musical score for measures 28-32. The piece is in 3/4 time with a key signature of one flat. Measure 28 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 29 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 30 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 31 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 32 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Dynamics include *tr*.

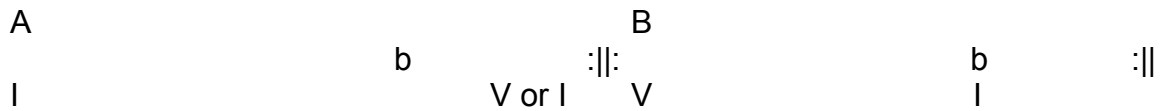
Musical score for measures 33-36, labeled "Coda". The piece is in 3/4 time with a key signature of one flat. Measure 33 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 34 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 35 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Measure 36 has a treble staff with a half note G4, a half note A4, and a half note B4. The bass staff has a half note G3, a half note F3, and a half note E3. Dynamics include *p*.

E. Balanced Binary

Balanced binaries those binaries in with both the Presentation and B section end with like material. They are “end rhymed” binaries that exhibit cadential parallelism. In balanced binaries in which the A section concludes in or on the dominant, the B section

will include a harmonic adjustment in order to return the movement to its tonic (Figure 7).¹⁵

Figure 7. Balanced Binary Form



Both halves of the Minuet #18 from NN (Example 4) subdivide into two eight-measure phrases, while the cadential sections In both the A and B sections exhibit parallelism, the openings do not.¹⁶

¹⁵ What Koch would call a V ending. Heinrich Christoph Koch, *Introductory Essay on Composition* (London: Yale University Press, 1984).

¹⁶ There may be some justification in calling this a type-2 binary, this will be discussed below.

Example 4. Balanced Binary: NN#18

F. Incipit Binary

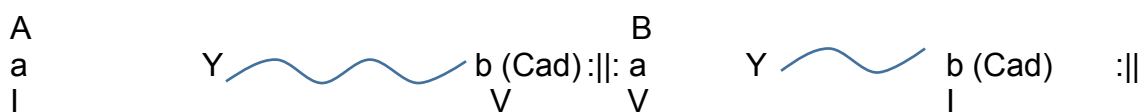
The reverse of a balanced binary is an “incipit binary,” a “front-rhymed” binary form in which both halves begin with like material. Purely incipit binaries are quite rare in the eighteenth century – there are none in NN. In practice, a piece that begins with an incipit parallelism almost always ends with a cadential parallelism as well.¹⁷ However, there are a few examples from earlier in the century.

¹⁷ It is because of the rarity of the incipit binary that it does not get its own category.

G. Top and Tails Binary

I will call a piece that is both front and end rhymed a “Top and Tails” binary (Figure 8.) What distinguishes a top-and-tails binary from another, more symmetrical piece is the material that comes in between the incipit and the cadence – what I call the “Y” material. Y material tends towards anonymity. It is not usually derived from the opening material, and in the opening third of the eighteenth century consists largely of sequential *fortspinnung*. Usually, there is no correspondence between the Y material in the Presentation and the Y material in the B section. The Y section may be similar to an episode in a fugue or a ritornello form or can resemble an extended transition.

Figure 8. Top and Tails Binary



Leopold Mozart’s Minuet #32 from the NN is a top and tails binary (Example 5). The opening and closing four measures of each half are cut from the same motivic cloth, providing harmonically-adjusted thematic and cadential sections. Although the Y sections of both halves begin with like material, both quickly trail off into sequential material whose main function is transitional: to arrive in their tonally appropriate regions, V in the Presentation, I in the B section.

Example 5. Top and Tails Binary: NN #32

Allegro Moderato
"TOP"

32. R.H.

4 "y" L.H.

7 L.H. "TAILS"

2

11 R.H.

14 "y" L.H.

17 L.H.

21

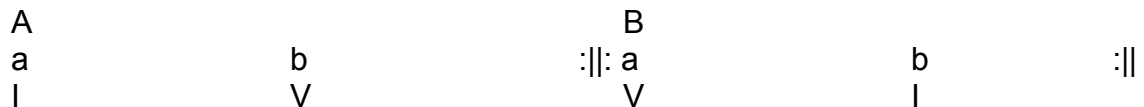
25

29

H. Type-2 Binary

The term “type-2 binary” is derived from Hepokoski and Darcy’s type-2 sonata.¹⁸ A type-2 sonata is distinguished by its modified recapitulation (Figure 9). Rather than recapitulating the entire Presentation in the tonic, a type-2 repeats only the second key area in the home key. If the opening material is repeated after the double bar it comes immediately, sounded at the dominant level in the space usually associated with the development section – though it is also possible for this section to be in a freer, more developmental vein.¹⁹ In terms of symmetry, type-2 binaries are similar to type-2 sonatas, but they lack the well-defined key areas of those larger pieces. Thematically, type-2s are translationally symmetrical; harmonically they, are bi-laterally symmetrical.²⁰ They begin with a statement in the tonic then dominant (I-V) balanced by the same material over a reversed harmonic trajectory (V-I):²¹

Figure 9. Type-2 Binary



¹⁸ Ibid.

¹⁹ Sometimes the opening material is only partially stated at the dominant yielding to a more developmental section, on the other hand, the material the double bar may occur in some other key, especially the dominant, such as in K.545.

²⁰ A mirror symmetry, in which what happens before the double bar is reflected about a central axis, in this case a double bar: ||: I V :||: V I :||.

²¹ Leonard G. Ratner, *Classic Music: Expression, Form and Style* (New York: Schirmer Books, 1995).

Minuet #4 from the Nannerl Notebook shows illustrates a type-2 binary at its most elemental (Example 6). The opening four measures in the tonic are answered by a direct modulation to the dominant. The B consists of a literal repeat of the first half, albeit in modulated form: what was in the tonic is now in the dominant and vice versa. The compositional ploy of building pieces out of wholesale transpositions of large sections of music is one of the central concerns of this study. The efficacy of writing these “cut and paste” binary forms, which effectively produces two measures for the price of one, proved to be increasingly popular compositional practice across the eighteenth century.

A compositional challenge produced by the type-2 trajectory is managing the register change that is produced between sections when entire phrases are literally transposed. In Minuet #4, the register change results in an ungainly downward leap of an octave in measure 12. As we shall see, various methods for managing the register change emerged throughout the century.²²

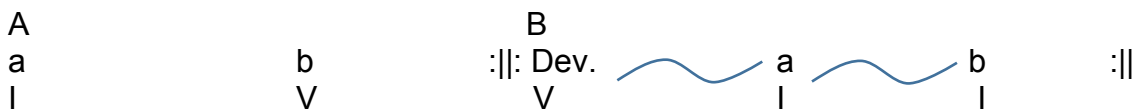
²² See the next example for a more elegant solution.

Example 6. Type-2 Binary: NN #4, a “cut and paste” binary.

I. Type-3 Binary

A type-3 sonata is the exposition-development-recapitulation sonata familiar from music appreciation textbooks. Both type-3 sonatas and binaries are distinguished by the insertion of a digressive developmental section before an all-tonic recapitulation of the expositional material, as shown in Figure 9.

Figure 10. Type-3 Binary



In terms of their symmetry, type-3 binaries are similar to type-3 sonatas, but they lack the well-defined second-key area of the sonata design. As shall become apparent, type-3s can

occur in the shortest pieces. Minuet #10 from the Nannerl Notebook is typical (Example 7.)

Example 7. Type-3 Binary: NN #10

10. *mf* **M**

5 **T** Development

10 Recap

15 register change

Like Minuet #4, this piece has a presentation built of two phases, the second of which is a direct modulation to the dominant. It also features a cut-and-paste

recapitulation, though here only the second key area is transposed. The added developmental section begins with a type-2-like repetition of the opening material in the dominant, but rather than segueing directly to a tonic restatement of the second key group material, Mozart restates the entire exposition in the tonic. The developmental section delays the return to the tonic while the all-tonic recapitulation makes the tonic return more emphatic. Even more fecund than the type-2 binary, Mozart produced 20 measures of music from 8 measures of invention. The recapitulatory register change in this piece is handled more elegantly than in the previous example. Here, the move to the second key area in the exposition is a melodic third, D-F#. In the recap, the downward transposition produces a third down.

The development mitigates the potential weakness of pieces built from large-scale repetitions of tonally stable music: harmonic stagnation. A piece such as the one in Figure 10 would be 75% tonic. The development section delays the return and lends much needed harmonic variety to a binary form.

Figure 11. Potential harmonic stagnation in recapitulatory binary forms

A	B	: :	A	B	:
I	V		I	I	

J. Conclusion

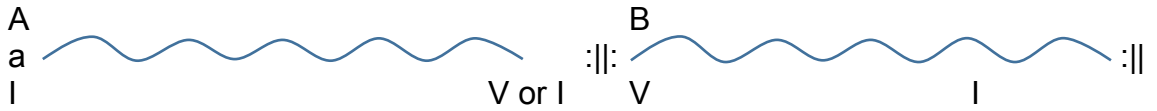
Of these seven types of symmetry (Figure 11), six represent the common types found in the mid-eighteenth century. They represent different approaches to the ongoing compositional preoccupation of eighteenth-century composers: the challenge of balancing

thematic unity with tonal variety. A simple binary achieves variety by means of motivic ingenuity. As we shall see, earlier decades of the 18th century matched this motivic ingenuity with a more fluid harmonic trajectory that established the second key area only at the very end of the exposition – if at all. By the mid-century, the trend toward two-key expositions, hinted at in Minuet 4 and 10, rendered the motivic fluidity of those earlier binaries ineffective. Instead, these pieces contained large-scale, often literal, repetitions. The literal repetitions of the new era resulted in new strategies of tonal deployment.

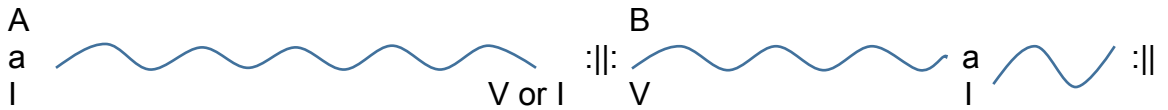
Type-2 symmetries create a large-scale repetition over a reversal of the tonal trajectory. Without a development, an all-tonic type-3 binary recapitulation would result in a piece that is 75% tonic: Tonic, Dominant, Tonic, Tonic. The insertion of a development represents a beneficial expansion of the dominant plateau—a prolongation that delays the return of the tonic. These harmonic considerations belong to the second of our two dimensions, harmonic trajectory, the subject of the next chapter.

Figure 12. Summary of Eighteenth-Century Binary Symmetries

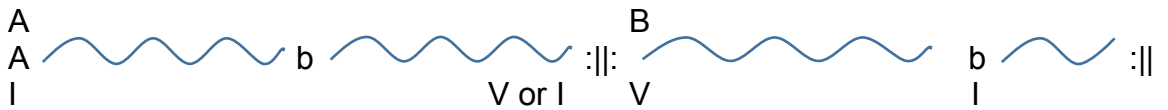
SIMPLE BINARY



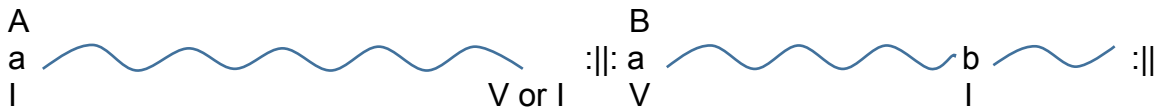
ROUNDED BINARY



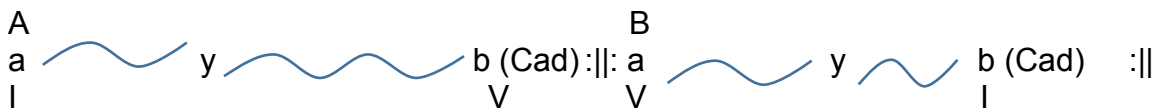
BALANCED BINARY



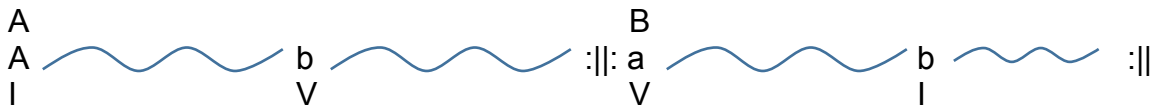
INCIPIT BINARY



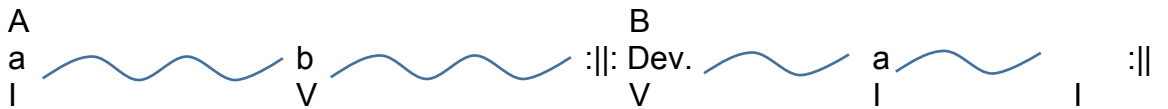
TOP AND TAILS



TYPE 2 BINARY



TYPE 3 BINARY



III. Cadential Patterns and Action Spaces in Early Eighteenth-Century Binary Presentations

A. *Action Spaces vs. Threshold Cadences*

A fundamental difference between the music produced in Corelli's generation and that produced by Mozart's is the significance given to cadences. By the 1780's, cadences had become rhetorically salient events. They were boundaries that articulated one compositional idea from another. It was cadential punctuation that defined that action spaces and made the musical syllogisms of Beethoven possible.

Earlier in the century musical boundaries between action spaces were more fluid. There were action spaces, certainly – a space for introducing a theme, a transitional space – but cadential articulations between them were optional. For every boundary marked by a clear PAC there was another marked by a weaker IAC, or, quite frequently, no cadence at all. A section's function was determined by character of melodic, rhythmic, and harmonic material. Cadences were there to define the endings of entire sections only.¹

This difference in compositional rhetoric makes comparing compositions from the 1720s to those of the 1780s difficult. To mediate the gap between these differences in musical rhetoric his chapter proposes two methods of looking at eighteenth-century presentations, one that looks backward, from the perspective of the late eighteenth century compositional practice, and another that looks forward, from the perspective of the early 1700s. The first method borrows from the work of Hepokoski and Darcy and views presentations in terms of "threshold cadences." The second borrows from Wilhelm

¹ Theorist that have discussed threshold cadences include Wilhelm Fischer, William E. Caplin, Hepokoski & Darcy.

Fisher's *Fortspinnungsthema* archetype. It looks at musical presentations in terms of the function of the prevailing section's musical character. Both methods describe compositional memes: ideas, that, like any other idea, behavior, style, or usage, can spread from person to person within a culture.² These memes are not necessarily tied to later compositional rhetoric, but they could, and would be adapted to and by that rhetoric as the century progressed. It could be argued that these memes spurred later sonata rhetoric by defining spaces that allowed, and even suggested, dialectic opposition to later composers.

B. Analysis by Cadential Definition

The greatest determinant of the scale and character of type-2 and type-3 binaries – the recapitulatory binary forms – is the number and disposition of threshold cadence events found in their presentations. A threshold cadence delineates a functional boundary event between neighboring functional areas in a presentation: a transition, the onset of the second key area, the conclusion of the presentation, etc. The number of these cadences is an important in determining the character of a presentation. A one-cadence presentation cannot support a second key area whereas a four-cadence presentation is likely to stagnate if it does not modulate.

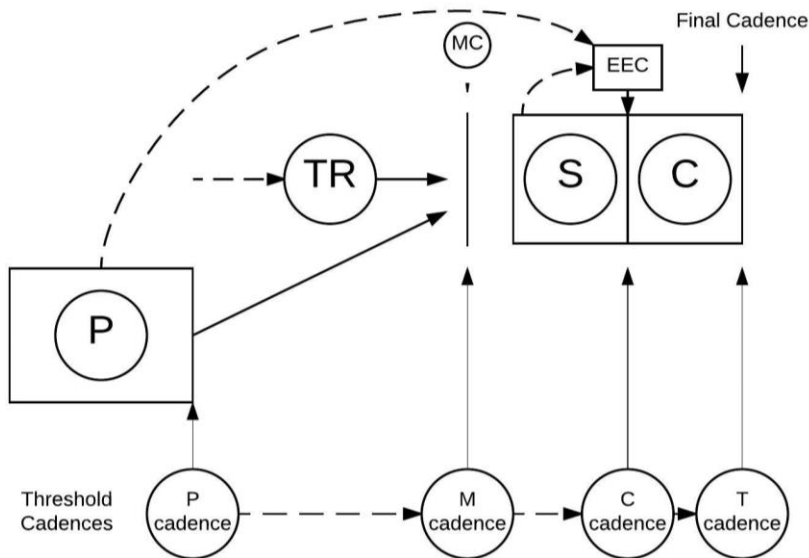
This section outlines the various cadential trajectories found in eighteenth-century presentations. These trajectories will be categorized by the number of threshold cadences found in the presentation, ranging from one cadence to four. Since these cadences are

² Richard Dawkins, *The Selfish Gene* (Oxford: Oxford University Press, 2016).

analogous to those described in Hepokoski and Darcy's *Elements of Sonata Form*, it would be beneficial to briefly review their terminology before addressing the cadential trajectories themselves.³

Hepokoski and Darcy see a sonata exposition as being divided into four action spaces, P, Tr, S, and C, each defined with cadences. In this study these are indicated in scores and figures by the use of large circled capital letters such as in the in the following diagram (Figure. 15). ⊕ is the cadence that establishes the tonic key, and marks the boundary between P space and the transition. P space is the easiest to define. Within early eighteenth century style the tonic key is not ambiguous; any cadence can define the conclusion of P space, usually it is an IAC, though PACS are not unusual.

Figure 13. Hepokoski and Darcy's sonata exposition, with threshold cadences indicated.



³ This review is not meant to be exhaustive, Hepokoski and Darcy's work contains many nuances that describe the many variants found in late eighteenth-century sonata expositions. My intent with this review is provide a basic outline Hepokoski and Darcy's ideas that inform the current work.

The Tr space is a transition; its function is to move to and tentatively establish a second key area. It does this by means of a cadence, usually a HC in the tonic or dominant.⁴ I term this cadence the Ⓜ cadence, for medial cadence. In the late eighteenth-century repertoire to which Hepokoski and Darcy's work applies, the move to the dominant area is usually heightened by a "dominant lock," a section of music that is on dominant or provisionally *in* the dominant, strengthened by an emphatic pause in the music – a medial caesura or MC – which Hepokoski and Darcy see as an essential element of the compositional rhetoric of the sonata era. Earlier in the century this feature is notable more in the breach than in the observance. The Ⓜ cadence marks the boundary between the transition and the second key area. The second key consists of two action spaces: S, and C. In S space, it was customary to present new thematic material – what earlier theorists called a second theme – before making a cadence. This cadence, the essential expositional closure, or EEC, ratifies and stabilizes the new key area, and initiates the next area. I call this cadence the Ⓢ cadence as it initiates the closing area or C. The closing section brings the exposition to a close by terminating with an emphatic cadence – often several emphatic cadences – in the second key the last of these, the terminal cadence I designate the Ⓣ cadence.

The danger of systems such as Hepokoski and Darcy's is they can give the impression that the four cadence design is "irreducibly complex."⁵ An examination of

⁴ Hepokoski and Darcy list several levels of default cadences for the MC ending with a PAC in the tonic for very short pieces. This will not work with the cadential scheme used in this dissertation.

⁵ Irreducibly complex is a term borrowed from so-called "creation scientists" to describe complex organs, such as eyes, the components of which, they mistakenly believe to be

early eighteenth-century music shows that each of the threshold cadences existed individually before the sonata era, producing one, two, and three-cadence presentations, as we shall see below.

C. One-Cadence Presentations

One-cadence binary presentations are rare and necessarily short. The one-cadence presentation may be diagrammed as in Figure 16.

Figure 14. One-Cadence Binary Presentation

||: ⊕ :||

The cadence that defines the one-cadence binary is the terminal cadence, or “⊕” cadence; its function is to conclude the presentation. ⊕ can be a tonic or dominant cadence. ⊕ cadences will be seen in all other cadential trajectories. In presentation types with more cadences, as the number of cadences mount, so does the likelihood the ⊕ cadence is to be in the dominant. One-cadence presentations fall in to three basic types: all-tonic, half-cadence, and direct-modulation.

Minuet #2 from the NN is an example of an all-tonic, one-cadence, balanced binary form: that is, a one-cadence balanced binary in which the ⊕ is in the tonic (Example 8.)

too interdependent to have evolved individually. Michael J. Behe, "Evidence for Intelligent Design from Biochemistry From a Speech Delivered at Discovery Institute's God & Culture Conference," *What Is Intelligent Design?* Accessed November 11, 2018, http://www.arn.org/docs/behe/mb_idfrombiochemistry.htm.

Example 8. NN #2: A One-Cadence Presentation with an All-Tonic Presentation.

The musical score consists of three systems of piano accompaniment in 3/4 time. The first system (measures 1-5) is marked *p* and features a melodic line in the right hand and chords in the left hand. The second system (measures 6-11) starts with a trill (*tr*) and a circled 'T' above the treble clef, followed by a repeat sign and a dynamic change to *f*. The third system (measures 12-15) is marked *p* and ends with a trill (*tr*).

The A section consists of one phrase: three pairs of measures over a I-IV-I progression spun from a single melodic idea, concluding with a two-measure cadence in the tonic. This all-tonic opening has consequences for the larger structure of the piece. If we look at the overall symmetry of the piece, we can see that the final four measures of the B section produce a balanced ending: a literal repetition of the final four measures of the presentation. This places great responsibility on the first four measures of the B section, which must wholly shoulder the burden of the piece's harmonic and thematic

contrast.⁶ Mozart achieves this with four measures of melodic material derived, but not literally repeated, from the presentation. All sounded over a standing-on-the-dominant drum bass.

A variety of symmetries can be applied to all-tonic presentations. Minuet #3 has an all-tonic, one-cadence presentation – this time applied over a simple binary frame (Example 9.) This procedure sacrifices Riepel’s “similarity between the parts” for an increase in thematic variety.⁷

Example 9. All Tonic, One-Cadence, Simple Binary Form: NN #3.

The musical score for Example 9, Minuet #3, is presented in three systems. The first system (measures 1-5) is marked *mf* and shows a piano introduction with a standing-on-the-dominant bass line. The second system (measures 6-11) begins the main theme, marked with a circled 'T' above measure 8 and a circled 'I' below measure 9. The third system (measures 12-17) concludes the piece with a repeat sign at the end.

⁶ And, indeed, Dynamic contrast.

Minuet #6 demonstrates the half-cadence variety of one-cadence presentation: a half-cadence, one-cadence, simple binary form (Example 10).

Example 10. A One-Cadence Simple Binary Presentation Ending in a Half-Cadence: NN

#6

The musical score for Minuet #6 is presented in three systems. The first system (measures 1-5) shows a simple binary form with a half-cadence. The second system (measures 6-11) shows a one-cadence presentation ending in a half-cadence, with a circled 'T' above the final note of the first phrase and a 'V' below the first note of the second phrase. The third system (measures 12-15) shows the continuation of the piece, ending with a double bar line.

This presentation opens over a I-IV-I-cadence pattern similar to that seen in minuet #2, but in this case the \textcircled{T} turns toward the dominant, ending in a half-cadence.

This last-minute move to the dominant was quite common mid-century, but earlier one-cadence pieces of the half-cadence type tended to spend less time establishing the tonic before transitioning to V.

We have already seen an example of the direct modulation type in the previous chapter, in minuet #4. Here is another example, Minuet #9, which moves directly to the dominant in the fifth measure (Example 11). The recapitulation begins with the opening material sounded at the dominant, then, through deft manipulation of the m. 3 material in m. 11 the piece returns directly to the tonic using a similar type of cut-and-paste procedure seen in Minuet #4.

Example 11. One-Cadence Presentation with Direct Modulation, NN. #9

The musical score for Minuet #9 is presented in three systems. The first system (measures 1-5) shows the initial presentation of the theme. The second system (measures 6-11) illustrates the direct modulation to the dominant (V) in measure 6, followed by a return to the tonic (T) in measure 11. The third system (measures 12-15) shows the recapitulation of the opening material in the tonic key.

Before going on to the two-cadence presentation it is necessary to acknowledge a class of presentation that represents a half-way house between the one-cadence and the two-cadence types: those presentations that have two phrases marked by weakly defined cadential boundaries. Returning to Minuet #9, measure 4 can be heard as a weakly defined cadential boundary between two three measure phrases. From a contemporary standpoint, a weak cadence in a tiny piece such as this does not seem remarkable, but as we shall see, these kinds of weak transitions were frequent earlier in the century – even in longer pieces. The difficulty presented by these less cadentially defined sections is why a second methodology required for this and earlier music. Tracking the gradual adoption of the strong threshold cadence meme between 1700 and 1770 will be a recurring theme in forthcoming chapters.

The ⊕ cadence has not received a great deal of theoretical attention. There is no special name for this cadence among the terms in Hepokoski and Darcy’s *Elements of Sonata Form*.⁸ This is presumably because, the final cadence is because in some senses it is the “extra” one. viewed from this standpoint, the terminal cadence at the end of a closing section is a relatively trivial event, the function of which is shared by the double bar. For the purposes of the present study, however, it could be argued that the ⊕ may be the most fundamental of all of the cadences – the cadence common to all binary types that provides the essential threshold event defining a piece as binary.

⁸ When it is mentioned, it is called the “final cadence.”

D. Two-Cadence Presentations

Most two-cadence binary presentations exhibit the typical two-phrase dance-form binary procedure familiar from the majority of small classical minuets. Since this added cadence comes midway through the presentation, I have adapted Hepokoski and Darcy's medial caesura terminology, it is the medial or \textcircled{M} cadence (Figure 17).⁹

Figure 15. The two-cadence presentation

||: \textcircled{M} \textcircled{T} :||

In most two-cadence presentations the medial cadence is in the tonic, such as in Minuet #5, a 2-cadence simple binary (Example 12).¹⁰¹¹

⁹ Though, as mentioned previously, the “caesura” part of a medial caesura was only gradually adopted throughout the century.

¹⁰ In larger pieces the MC is usually an HC either in the tonic or dominant, however some medium sized pieces, especially those with direct modulations to the dominant, have tonic PAC \textcircled{P} cadences.

¹¹ Although there is a cadential parallelism between the two halves of this piece, it does not project far enough into the movement to be considered balanced; the material that precedes the \textcircled{T} is similar to, not a repetition of, the second phrase of the exposition. On the other hand, both halves begin with an incipit parallelism, akin to a type-2, a reading that is not fulfilled by what follows. The cadential parallelism could also prompt a top and tails reading. Ambiguities such as these become less common in larger piece.

Example 12. A typical two-cadence presentation: NN #5

Here is another two-cadence presentation, this time in a type-2 symmetry: NN #14. In this piece, the medial cadence is a half cadence in I. Here, the ① cadence, in V, produces a second key area in the dominant. The music after the double bar begins with an ascending progression that Riepel would call a “monte,” before restating the second key area, a literal repeat in the tonic (Example 13).

Example 13. Two-Cadence, Type-2 Binary: NN #14

14. (M)

5 (T)

9

13

E. Three-Cadence (and Four-Cadence) Presentations

Three-cadence presentations were the most common type between 1720-1760. There are many varieties of three-cadence binary presentations. The simplest way of

conceptualizing them is to think of them as a four-cadence binary in which cadences are conflated.¹²

As discussed at the beginning of this chapter, the outline for the four-cadence presentation is familiar to us from sonata presentations. However, a four-cadence presentation does not necessarily guarantee that what follows will be a sonata. The four cadence design is laid out in Figure 18.

Figure 16. The four-cadence presentation

||: (P) (M) (C) (T) :||

In a four cadence trajectory, the P cadence defines the tonic key, with a PAC or HC in the tonic. The M cadence defines the onset of the second key area with a PAC in in V, an HC in V, or an HC in I. Later in the century, the M cadence becomes synonymous with Hepokoski and Darcy's medial caesura. The C cadence ratifies the second key area and initiates closing material, this is equivalent to H&D's EEC. The T cadence closes the presentation. There is only one four-cadence presentations in NN, #23. It is typical of earlier eighteenth century four-cadence designs in that it does not adhere to later sonata-form rhetoric (Example 14). In this piece all the material after M sounds like closing material. However, in spite of the lack of conventionally melodic material after M, the space is tonally stable and more distinctive than the *fortspinnung* that would have occupied its space earlier in the century. As we shall see, four-cadence designs have been a possibility as early as the 1720s.

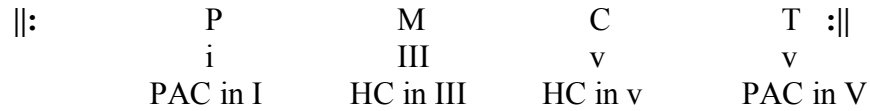
¹² This is an anachronistic method, as I have found no evidence that eighteenth-century composers thinking this way.

Example 14. Four-Cadence Presentation NN. 23

F. Three-Pole, Four Cadence Designs.

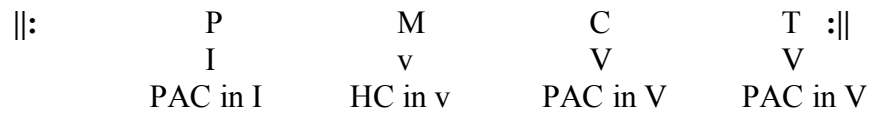
A design peculiar to the early eighteenth century was found in those presentations that added an additional threshold before the onset of T. In minor presentations that conclude in v, the additional cadence was in III as shown in Figure 19.

Figure 17. Three-pole presentation, additional cadence in III



In major the additional cadence defines a “minor feint” in v before the onset of the dominant proper (Figure 20).

Figure 18. Three-pole presentation, minor feint in v



Both major and minor varieties could come in three-cadence form with the removal of the C cadence. Since there are no 4-pole presentations in NN, I will withhold examples until chapter seven.

G. Three-Cadence Presentations.

An easy way of conceptualizing three-cadence presentations is to think of one of the cadences as a conflation of two adjacent cadences in a four cadence presentation.

Conflated cadences combine on the characteristics and function of both the cadences from which they are drawn. Since there are four cadences available to be conflated, it

would seem at first glance that there three potential combinations: P/M, M/C, and C/T. In

fact, there are only two; since The C cadence initiates a closing section and the T cadence ends it, the C/T cadence is an impossibility.

P/M Cadences

A P/M cadence combines the key-defining function of the P cadence with the transitional function that initiates the second key area. A P/M cadence is always a HC in I. It often is the concluding cadence in a *fortspinnungsthemata* (Figure 21).¹³

Figure 19. Three-Cadence P/M Presentation



NN, 30 (Example 15) opens with a seven-measure *fortspinnungsthemata* which ends in an elided HC in m. 8. What follows highlights a typical compositional problem of the three cadence P/M design: nondescript second sections. Since the transitional function is already completed, and *fortspinnung* passages are inherently anonymous, the section between the P/M and C cadences can easily become mere padding. NN 30 alleviates this shortcoming by inserting a moment of tonal stability and thematic interest (in mm.12-15) between two *fortspinnung* passages.

¹³ A *Fortspinnungsthemata* could potentially end in a PAC in I. Since such a cadence has to be followed by a transition, it could only be a P cadence.

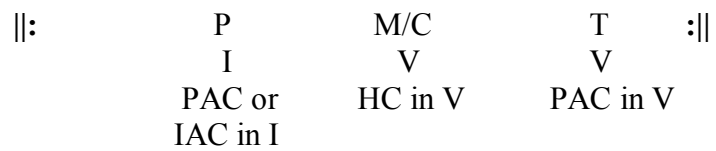
Example 15. Three-Cadence P/M design: NN. 30

M/C cadences

An M/C cadence follows a P cadence. It concludes a transitional passage to the dominant, but the music that follows has the character of a closing passage. Rhetorically, M/C cadences come too late in the presentation to be truly medial. M/C cadences transfer

the role of stabilizing the second key area to the T cadence. Thus, the T and EEC functions become synonymous in this design (Figure 22).

Figure 20. Three-Cadence M/C Presentation



There is only one example in the NN, #. 24, and even this is a marginal example as the M/C cadence, clear as it is, is not a PAC (Example 16.)

Example 16. Three-Cadence M/C Presentation: NN24

24. **P**

4 **M?**

7

10 **M/C**

12 **T**

Although Hepokoski and Darcy's model describes late eighteenth-century presentations well, it runs into difficulty when describing pieces written earlier in the century, as we have seen. This is because the theory assumes an *a priori* compositional rhetoric that only gradually evolved throughout the century. The challenge of adapting Hepokoski and Darcy's work to earlier music involves jettisoning some of the theory's fundamental features and assumptions. This modification is essential if one is to avoid the trap of cramming earlier music into an anachronistic structure, an approach that necessarily casts such pieces as "failed sonatas." To avoid this hazard, it is necessary to develop a second way of looking at eighteenth century pieces: a way of discussing music in terms of the musical character of a particular section of music, or action space more appropriate for earlier eighteenth-century pieces. That is the purpose of the next chapter.

Figure 21. Overview of Mid-Eighteenth-Century Presentations

ONE-CADENCE (NN #6)

||: Ⓣ :||
PAC in I
or HC in I

TWO-CADENCE (NN #12)

||: Ⓜ
PAC in I
or HC in I Ⓣ :||
HC in I or PAC in I
PAC in V

THREE-CADENCE: P/M-TYPE

||: P/M
PAC in I Ⓢ
HC in I Ⓣ :||
PAC in V

THREE-CADENCE: M/C-TYPE

||: M/C
HC in I Ⓢ
PAC in V Ⓣ :||
PAC in V

FOUR-CADENCE

||: Ⓟ
PAC in I
HC in V Ⓜ
HC in I
PAC in V Ⓢ
PAC in V
PAC in V Ⓣ :||
PAC in V
PAC in V

IV. *Fortspinnungsthem*en and their use in Binary Presentations

The music written between the 1690s and the 1730s is characterized by flourishing of a particular musical meme: the *Fortspinnungsthem*a. The *Fortspinnungsthem*a quickly established itself as the syntactical device of the early eighteenth century. Like all musical memes, *Fortspinnungsthem*en simplified the compositional process by making certain decisions automatic but it also had a genericizing effect: what was so fruitful for Vivaldi, Bach, and Handel, also led compositional procedure to a point of crisis by the 1730s. This chapter describes the characteristics of *Fortspinnungsthem*en, and how they are distinct from, and similar to, later musical structures. The historical trajectory will be left until part 2.

A. *Action Spaces Without Cadential Gateposts*

As mentioned in the previous chapter, earlier in the century, musical boundaries were more fluid and often concealed through unremitting rhythmic action. There were plenty of action spaces – a space for introducing a theme, a transitional space, a developmental space – but cadential articulations between them were often inconspicuous. For every boundary marked by a clear PAC there were others marked by weaker IACs, or, quite frequently, no cadence at all. Examine the presentation from the second movement from Alberti's sonata in F major, Op. 1 (Example 17). Action spaces are discernable: a thematic presentation (mm. 1-4), a transition to the dominant level (mm. 5-9), new material at the dominant level (mm. 10-24), and closing material (25-35). But these spaces are created more by the character of the musical material than by decisive

cadences. Other than the very weak half cadence at m. 9 and the PAC that concludes the presentation, there is no cadential punctuation.

Example 17. Presentation from Alberti Sonata in F, II, Op. 1 Allegro Assai

II. *Allegro Assai*

The musical score consists of five systems of two staves each (treble and bass clef). The key signature is one flat (Bb) and the time signature is 3/8. The tempo marking is *Allegro Assai*. The score includes several trills (tr) and slurs. The first system starts with a treble clef and a bass clef. The second system begins with a measure rest and a trill. The third system has a measure rest and a trill. The fourth system has a measure rest and a trill. The fifth system has a measure rest and a trill.

Example 17. Continued

Musical notation for measures 18-20. Measure 18 features a treble clef with a trill [tr] on the first note and a bass clef with a steady eighth-note accompaniment. Measure 19 continues the accompaniment. Measure 20 has a trill (tr) on the first note of the treble staff.

Musical notation for measures 21-23. Measure 21 has a trill (tr) on the first note of the treble staff. Measure 22 continues the accompaniment. Measure 23 features a trill [tr] on the second note of the treble staff.

Musical notation for measures 24-27. Measure 24 has a fermata over the first note of the treble staff and a fermata over the first note of the bass staff. Measure 25 has a fermata over the first note of the treble staff. Measure 26 has a fermata over the first note of the treble staff. Measure 27 has a fermata over the first note of the treble staff.

Musical notation for measures 28-31. Measure 28 has a fermata over the first note of the treble staff. Measure 29 has a fermata over the first note of the treble staff. Measure 30 has a fermata over the first note of the treble staff. Measure 31 has a fermata over the first note of the treble staff.

Musical notation for measures 32-35. Measure 32 has a fermata over the first note of the treble staff. Measure 33 has a fermata over the first note of the treble staff. Measure 34 has a fermata over the first note of the treble staff. Measure 35 has a fermata over the first note of the treble staff.

This difference in musical syntax makes comparing the compositions written in the early 1700s with those written later in century difficult.

In this chapter I will apply the terms first coined by Wilhelm Fischer in 1915 to describe action spaces in eighteenth-century music, to create a framework upon which to base comparisons between early eighteenth century music and later music.¹ This framework will show action spaces that can be correlated with the kinds of spaces that characterize later music. When cadential thresholds are added, resemblances to later music emerge clearly .

B. Fortspinnungsthema Defined

Fischer’s formulation of the spaces within sentences, or *Fortspinnungsthemen*, describes the principal *Gestalt* of eighteenth-century compositional practice . A *Fortspinnungsthema* is divided into three parts: the thematic/antecedent *Vordersatz*, the transitional *Fortspinnung*, and the cadential *Epilog* (Figure 22).

Figure 22. Fischer’s Spaces in a *Fortspinnungsthema*.



These spaces are easily discernable in the Sarabanda from Vivaldi’s Sonata in F major

¹ W. Fischer. *Zur Entwicklungsgeschichte Des Wiener Klassischen Stils: Versuch Einer Vergleichenden Charakteristik Des Altklassischen Und Wiener Klassischen Instrumentalstils*. (Oesterreich: Publisher Not Identified, 1915).

(Example 18).²

Example 18. A *Fortspinnung*thema in Vivaldi *Sarabanda*

Vordersatz

The *Vordersatz* is an antecedent unit of music – a *Themenkopf*, an opening motive – analogous to a “theme” in rhetoric. *Vordersätze* come in several guises. They may be as short as a single statement of a motive, such as from Molter’s sonata in B minor

(Example 19).³

Example 19. Molter Trio Sonata in B minor. II. Allegro.

² Vivaldi, Antonio. *Sonate a Violino E Basso per Il Cembalo ... Opera Seconda*. Amsterdam: E. Roger, 1710.

³ Johann Melchior Molter. *Sonata á 3*. Manuscript Score. From *Digitale Sammlung der Badischen Landesbibliothek Karlsruhe*. <https://digital.blb-karlsruhe.de/blbihd/content/titleinfo/211513> (accessed May 27, 2019)

They could be an antecedent/consequent phrase as seen in Platti's Sonata in D (Example 20.)⁴

Example 20. Platti: Sonata #1 in D. II Allegro.⁵



Or an imitative opening, such as in Marcello's Cello Sonata in D (Example 21).⁶

Example 21. Marcello Cello Sonata in D.



The *Vordersatz* provides the material that will be expanded upon throughout the phrase, and potentially the entire piece.

⁴ These antecedent/consequent openings resemble the openings to sentences. They are distinguished by what follows: extended *Fortspinnung* passages rather than the more compact sequences based on fragmentation that typify sentences.

⁵ Giovanni Benedetto Platti, *Sonatas, Harpsichord: Zwölf Sonaten Für Cembalo Oder Klavier*. Leipzig: Breitkopf und Haertel, 1957.

⁶ Benedetto Marcello. *Six Sonatas For Violoncello and Continuo*. Boca Raton: Masters Music, n.d.

Fortspinnung

The *Vordersatz* is followed by a *Fortspinnung*, a “spinning out” of material over a linear intervallic pattern, or several linear intervallic patterns, in a sequential manner. In later music the *Fortspinnung* was often drawn from the *Vordersatz*, and underwent fragmentation as the sequence progressed, a structure now familiar as a sentence. However, most music written earlier in the century is not as thematically integrated as this.⁷ The *Fortspinnung*, from our Vivaldi *Sarabanda*, for example, is thematically generic. This piece also demonstrates a common characteristic of *Fortspinnung*, passages: it is in two phases, each with its own linear progression, direction and thematic content. The *Fortspinnungsthema* concludes with a cadential phrase, the *Epilog*. It concludes this basic structure, as shown in Example 22.

Example 22. Vivaldi *Sarabanda* from sonata in F.

The image shows a musical score for a Sarabanda in 3/4 time, marked Andante. The score is written for a single melodic line on a grand staff. It is divided into four sections: 1. *Vordersatz*: The first measure, starting with a treble clef and a key signature of one flat. 2. *Fortspinnung (phase 1)*: The next two measures, continuing the melodic line. 3. *(phase 2)*: The next two measures, continuing the melodic line. 4. *Epilog*: The final measure, ending with a cadential phrase. A circled 'P' is located below the final measure of the *Epilog* section.

Cadential ambiguity

The *Epilog* is the only cadence mandated by the *Fortspinnungsthema*. Very often, the *Fortspinnung* spins out from the *Vordersatz* with no cadential articulation, making it

⁷ Schoenberg preferred to reserve the term sentence for this type of structure a definition has been adopted and adapted by William Caplin and others. Arnold Schoenberg, Gerald Strang, and Leonard Stein, *Fundamentals of Musical Composition* (London: Faber and Faber, 1999).

difficult to pinpoint where the *Vordersatz* ends and the *Fortspinnung* begins. Similarly, it can be difficult to determine the *Fortspinnung/Epilog* boundary. Example 23, from Vivaldi's Op. 2 Violin Sonatas, clearly exemplifies the *Fortspinnungsthema*.⁸

Example 23. Cadential ambiguity in Vivaldi's Sonata in B minor

The image shows a musical score for a violin sonata in B minor, 3/4 time. The score is divided into three sections: *Vordersatz*, *Fortspinnung*, and *Epilog*. The *Vordersatz* section consists of four measures, ending with a half cadence on A# in the upper voice. The *Fortspinnung* section consists of two measures, starting with a half note A# in the upper voice, which is marked with a 'P?' below it. The *Epilog* section consists of four measures, starting with a half note A# in the upper voice, which is marked with a '#' below it. The score is written for a single melodic line with a basso continuo line below it.

Here, the *Vordersatz* is thematically distinctive. It begins in tonal stability but concludes on a half cadence with A# in the upper voice in measure 4. This opening initiates the brief one-phase *Fortspinnung* that transfers the A# up an octave. This register change highlights the A#'s function as the leading tone that, two measures later, establishes the tonality in the appropriate register.

Form

Although a single *Fortspinnungsthema* can function as the entire opening for a brief binary dance movement, eighteenth-century composers were not usually this short-winded. In most early eighteenth century pieces the first *Epilog* marks the mid-point of the exposition. Rather than giving us a new *Vordersatz*, or restatement of the opening

⁸ Ibid.

Vordersatz. Vivaldi typically initiates a new *Fortspinnung* passage, or, more commonly, as in the Corrente Allegro from Sonata in B minor, a two-phase *Fortspinnung* (Example 24). In this piece, the first phase, in sixteenth-note arpeggios, transverses the circle of fifths from iv to III (mm 11-15), and the next phase (mm. 16-20), in eighth-note arpeggios, prolongs the iv chord and forestalls the Epilog, which begins on and ends in D. The exposition concludes with a *petite reprise* which begins and ends with a cadence on III, creating a stable second key area.⁹

⁹ Ibid.

Example 24. Vivaldi: Corrente Allegro from Sonata in B minor

The musical score is presented in five systems, each with a grand staff (treble and bass clefs). The key signature is B minor (two sharps) and the time signature is 3/4. The sections are labeled as follows:

- System 1:** Labeled *Vordersatz* and *Fortspinnung*. It begins with a repeat sign. The first measure of the *Fortspinnung* section contains a dynamic marking *P?*.
- System 2:** Labeled *Epilog* and *Fortspinnung 2*. The first measure of the *Fortspinnung 2* section contains a dynamic marking *P* enclosed in a circle.
- System 3:** Continues the *Fortspinnung 2* section with a complex, fast-moving texture.
- System 4:** Continues the *Fortspinnung 2* section.
- System 5:** Labeled *Epilog*. It concludes the piece with a final cadence. The first measure contains a circled *C*, and the final measure contains a circled *T*.

C. Fortspinnung Presentations

The conceptual strength of the *Fortspinnungsthema* is the obverse of cadentially-

oriented schemas such as the Hepokoski-Darcy model. It provides a means to describe action spaces in terms of their musical content rather than their boundary events—a distinction analogous to the difference between a painter defining the form of a subject by its color and a charcoal artist defining it by its outline. This approach allows us to characterize early eighteenth-century binary presentations that dispense with strong cadential punctuations. There are two common presentation types: short openings and extended openings. Short openings are those that conclude after the first *Fortspinnungsthema*, extended openings those that append an additional *Fortspinnung* and *Epilog* section after the first *Fortspinnungsthema*.

Short openings

Short openings consist of a single *Fortspinnungsthema*. There are three opportunities for cadences in a short opening. The more explicit these cadences, the more they will resemble the cadential schema presented in the Chapter X. In the following examples, cadences will be indicated using threshold-cadence terminology described earlier. A one-cadence short opening contains only the ontologically-obligatory cadence at the end of the *Epilog*. That cadence is almost always a half cadence in the tonic.¹⁰ In Marcello's Cello Sonata in F major from Op.2, there is little doubt about the boundary of *Vordersatz/Fortspinnung*, it is m. 3. But it is marked by a weak, elided, mid-measure IAC on the I chord. The PAC is withheld for the close of the exposition (Example 25).

¹⁰ Although a PAC in the tonic is not inconceivable, this type is rare.

Example 25. Marcello: Sonata in F¹¹

Allegro

Vordersatz *Fortspinnung*

Fortspinnung 2

Epilog

It is difficult to imagine a one-cadence *Fortspinnungsthemen* much longer than this example. Here, its length is extended by the relatively slow harmonic rhythm of the *Vordersatz*, which is further protracted by repetition.

Other *Fortspinnungsthemen* are more cadentially delineated. The Op. 5 Sonata in G

¹¹ Ibid.

minor by Vivaldi has two cadences (Example 26).¹² The *Vordersatz* includes a half-cadence in measure 2, which, in another, shorter, piece, could have concluded the *Vordersatz*. Here, it marks the conclusion of a pair of sub-phrases. The *Vordersatz* concludes on a PAC at measure 4. The *Fortspinnung* that follows is in two phases, concluding at an *Epilog* at mm. 10 that tonicizes v.

Example 26. Vivaldi *Preludio* in g minor

The musical score for Vivaldi's *Preludio* in G minor is presented in three systems. The first system, labeled 'Andante' and 'Vordersatz', spans measures 1 to 4. It features a half-cadence in measure 2 and a perfect authentic cadence (PAC) in measure 4. The second system, labeled 'Fortspinnung', spans measures 4 to 7 and includes a piano (P) dynamic marking in measure 5. The third system, labeled 'Fortspinnung 2' and 'Epilog', spans measures 7 to 10. It concludes with a tonicization (T) in measure 10. The score is written for piano in G minor with a common time signature.

The three-cadence short opening adds a cadence at the end of the *Fortspinnung*. The second movement from Marcello's G-major sonata is a good example (Example 27).

¹² Ibid.

Example 27. Marcello: Allegro in G major.

The image displays a musical score for Marcello's Allegro in G major, consisting of four systems of music. Each system is written for a grand staff (treble and bass clefs) in G major (one sharp) and 2/4 time. The first system is labeled "Allegro" and "Vordersatz". The second system is labeled "Fortspinnung" and "Fortspinnung 2", with a circled "P" (Piano) dynamic marking. The third system is labeled "Epilog" and has a circled "C" (Crescendo) dynamic marking. The fourth system starts at measure 14 and ends with a circled "T" (Tutti) dynamic marking. The score includes various musical notations such as notes, rests, and dynamic markings.

Extended Fortspinnungsthema Openings.

These are those openings that contain additional action spaces after the first *Epilog*. In the Gigue from Vivaldi's Violin Sonata in F major (Ex. 28), the *Epilog* that concludes the opening *Fortspinnung* is medial.¹³ Instead, the bass initiates a new point of imitation that is extended for an additional ten measures by *Fortspinnung* to

¹³ Ibid.

accommodate harmonic shifts from the relative major to the dominant minor, followed by a brief petite reprise. These additional measures create a three pole opening that pushes beyond the relative major and moves to dominant minor, a common trajectory in this era. If the piece were to stay in the relative minor, this extension would not be needed.

Example 28. Gigue from Vivaldi Sonata in F

The musical score for Example 28, Gigue from Vivaldi Sonata in F, is presented in five systems. The first system, labeled *Vordersatz*, covers measures 1 through 17. The second system, labeled *Fortspinnung (phase 1)* and *Fortspinnung (phase 2)*, covers measures 18 through 23 and includes a dynamic marking of *P* (piano) in measure 20. The third system, labeled *Epilog*, covers measures 24 through 28. The fourth system, labeled *Fortspinnung*, covers measures 29 through 33 and includes a dynamic marking of *M* (mezzo-forte) in measure 29. The fifth system, labeled *Epilog* and *Petite Reprise*, covers measures 34 through 38 and includes dynamic markings of *C* (crescendo) in measure 35 and *T* (tutti) in measure 37.

In terms of measure count, extended openings are not necessarily longer than their

short-opening cousins. Short openings can be quite long. In the *Prelude* from Vivaldi's sonata in C, Op. 2, (Ex. 29) the *Fortspinnung* is quasi-canonic. It takes fourteen measures to state the subject in the treble, then in the bass, and then to cadence satisfactorily in the tonic. In canonic pieces such as these, the *Fortspinnung* extension that follows is familiar from similar passages in episodes in fugues and inventions.

Example 29. Vivaldi Sonata VII in C Major *Preludio*

The musical score is presented in five systems, each with a treble and bass staff. The first system is labeled *Vordersatz*. The second system is divided into *Fortspinnung* (measures 7-14) and *Epilog* (measures 15-18), with a circled 'P' at the end. The third system is divided into *Fortspinnung (phase 1)* (measures 19-24) and *Fortspinnung (phase 2)* (measures 25-30). The fourth system (measures 31-36) includes a circled 'C?' below the bass staff. The fifth system (measures 37-42) is labeled *Epilog* and ends with a circled 'T'.

This Vivaldi example contains two threshold cadences: the @cadence at m. 14 and the T cadences at m. 30. The PAC at 23 could on first listening be interpreted as a C cadence, but the material that follows continues the transitional feeling of the previous measures. It is only when cadential definition analysis is combined with analysis of the thematic character of a presentation can be categorized.

Used alongside the cadential patterns described in the previous chapter, Fischer's terminology provides us a means to mediate the gap between early and late binary procedures. But before going on to discuss eighteenth-century music it is worthwhile to consider what binary procedures were already in play before 1701, this brings us to the next chapter.

V. Binary Procedures Before 1701

Few of the developments in eighteenth-century binary forms were wholly novel – most can be seen as modifications of earlier prototypical procedures, some dating back to the earliest notated instrumental music. This brief chapter acknowledges those aspects of symmetry and cadential trajectory that were already in play before 1700. These include binary form itself, incipit parallelisms, cadential parallelisms, tonally/modally adjusted repetitions, closing sections, and developmental digressions. This chapter is not concerned with geneses; I leave it to others to locate the exact birth of these procedures. Nor is it intended to be comprehensive. Rather, my aim is to observe which procedures existed as compositional possibilities before the eighteenth century and to provide appropriate examples. I shall also point out those procedures that were novel at the beginning of the eighteenth century. The chapter will conclude with a more in-depth look at Corelli's Violin Sonatas, Op. 5, part 2 of 1700. These analyses will initiate the format of subsequent analyses, and point out differences between Corelli and later composers' binary procedures.

A. *Estampies*

Many of the fundamental procedures of 18th century binary forms were already in use in the earliest noted instrumental music. For example, *La quinte estampie real*, from the thirteenth-century *Manuscrit du Roi*, is made up of a string of binary modules, called “versicles.”¹ The first of which is shown in Example 30.

¹ F-Pn fr.844, f.104 Charles et al., *Le Manuscrit Du Roi, Fonds Français N 844 De La Bibliothèque Nationale* (New York: Broude, 1970).

piece has made a definitive return to the tonic and made a cadence there. This material can give weight and drama to a final chord, as well as provide a sense of tonal stability. The longer the piece, the greater the likelihood of a PCE. By the 16th century PCEs could be managed in a number of ways: reiterations of the final chord, linear embellishments of the final chord, melodic embellishments of the final chord, additional cadences after returning to the tonic, or combinations of these. Example 31 shows examples of all of these options derived from Elizabethan keyboard repertory, though similar passages can be found throughout Europe by the 1500s.

Example 31. Varieties of PCE in Elizabethan Keyboard Literature⁴

A) No PCE
Orlando Gibbons, Fantasia 13

B) PCE by tonic chord reiteration
Orlando Gibbons: Alman "The Kings Juell"

C) PCE by linear embellishment of final chord
Orlando Gibbons, "The Wood soe Wilde"

D) PCE by melodic embellishment of tonic chord.
John Bull, "Fantastic Pavan"

E) PCE by cadential reiteration (also melodic embellishment and tonic chord reiteration)

⁴ Orlando Gibbons, and Margaret H. Glyn. *Complete Keyboard Works in Five Volumes*. London: Stainer and Bell, 1925. John Bull. Anthony Lewis, Thurston Dart, Francis Cameron, and John Steele. *Keyboard Music*. London: Published for the Royal Musical Association by Steiner and Bell, 1960.

C. PCE's contribution to binary symmetry

PCEs in this era were usually closing flourishes; they were rarely present in both binary halves of a composition, though there are occasional examples where this does happen. Where repeated PCEs do occur there is a corresponding increase in the degree of symmetry. *La bella Franceschina* (Example 32), a keyboard arrangement of an anonymous Madrigal, is an early example of cadential parallelism arising from a repeated PCE. The first half ends with what might anachronistically be called, a “half-cadence”; the second half ends with a repetition of the same material moved to the “tonic” mode. More elaborate cadential parallelisms became increasingly common in 17th-century dance music in the guise of the *petite reprise*.

Example 32. *La bella Franceschina*⁵

The image displays three systems of musical notation for the piece 'La bella Franceschina'. Each system consists of a grand staff with a treble clef and a bass clef. The first system is marked with a 'PCE' annotation above the treble staff. The second system begins with a measure rest in the treble staff and a measure rest in the bass staff. The third system is marked with a 'PCE (modally aqusted)' annotation above the treble staff. The notation includes various note values, rests, and chordal structures.

D. *Petite Reprises*

In 17th and 18th century dance music, “*Reprise*” refers to a repeated section of music – the return to top of the B section in a binary form or the return to the A section of a *Rondeau* – often indicated by a *dal segno* indication or repeat brackets. A *petite reprise*, on the other hand, is a small-scale repetition of the closing measures of a piece. *Petite Reprises*, can be indicated in a number of ways. In this Gavotte by Johann Theodore Herold (Example 33) the *petite reprise* is shown by the use of *dal segno* indications.⁶

⁵ Christopher Hogwood, ed., *Balli per Cembalo: 90 Keyboard Pieces from Early Italian Manuscripts*. (Lauton, Oxfordshire: Edition HH, 2007).

⁶ The *reprise* in this piece (as opposed to *petite reprise*) is indicated by the repeat bracket.

Example 33. Herold, Gavotte in G minor⁷

The image displays a musical score for the Gavotte in G minor by Johann Theodor Herold. The score is written in G minor (one flat) and 2/4 time. It consists of three systems of music, each with a treble and bass staff. The first system contains measures 1 through 5. The second system starts at measure 6 and includes a repeat sign at the end of the first phrase. The third system starts at measure 12 and includes a section marked with a double bar line and a repeat sign, indicating the end of the piece.

Alternatively, they could also be written-out, or not indicated at all and simply taken as a matter of performance practice. *Petite reprises* have a modern analog in the “tag ending” common in jazz combo head arrangements⁸ Like tag endings, *petite reprises* signal the end of the piece to the listener/dancer. They are also harmonically transformative, adding

⁷ Johann Theodor Herold. *Harmonia Quadripartita* (Erscheinungsort Nicht Ermitteltbar, 1702).

⁸ A head arrangement is a form improvised from a lead sheet by a jazz combo. Often times this consists of an improvised introduction, the playing of the tune (or head), solos over the chord progression provided on the lead sheet, a return to the head, ending with an improvised tag ending of the last phrase, *a la le petite reprise*.

cadences that stabilize the tonic and contribute a section of harmonic stability to the end of the movement.

In this piece by Cerambault (Example 34), the *petite reprise* transforms the last phrase from one that withholds resolution until the final measure to one that has a stable tonic phrase. The final T cadence now has a dual function. When it is first heard it is a C cadence, creating a cadential threshold that leads to a closing area. The second time it is heard it is the culminating T cadence.

Example 34. *A Petite Reprise*, Clerambault, *Pieces de Clavecin*, Suite in C major, Gavotte⁹

The image shows a musical score for a piece titled 'A Petite Reprise' by Clerambault. The score is in C major, 3/4 time, and consists of two systems. The first system, labeled 'reprise', starts at measure 5 and ends with a C cadence. The second system, labeled 'petite reprise', starts at measure 9 and ends with a T cadence. The notation includes treble and bass staves with various musical symbols such as notes, rests, and ornaments.

Petite reprises were not only written by the French; by the late 17th century they

⁹ Louis-Nicolas Clérambault, Paul Brunold, and Thurston Dart. *Pièces de clavecin*. Les Remparts, Monaco: Éditions de l'Oiseau Lyre, 2004.

were a pan-European phenomenon. Here is a German example by Krieger¹⁰ (Ex. 35):

Example 35. Krieger: Gavotte from “*Sechs Musicalisdie Portien*” 1697

The first decades of the 18th century saw a good deal of experimentation in the use of *petite reprises*. There was increased use of written-out *petite reprises* often with octave transpositions or other variations between the repeats. Occasionally, compound *petite reprises* were seen – *petite reprises* appended to *petite reprises* – these further stabilize and expanding the second key area. There was also an increase in the use of *petite reprises* in both halves of binary compositions. In this way, the *petite reprise* influenced not only the cadential trajectory of a piece but also its symmetry.

¹⁰ Johann Krieger, *Johann Kriegers Sechs Musicalische Partien, Bestehende in Allemanden, Courenten, Sarabanden, Doublen Und Giquen, Nebst Eingemischten Bouréen, Minuetten Und Gavotten, Allen Liebhabern Des Claviers Auf Einem Spinet Oder Clavichordio Zu Spielen Nach Einer Arieusen Manier Aufgesetzt* (Nuernberg: In Verlegung Wolfgang Moritz Endters, 1697).

E. Fortspinnungsthemem

For Fisher, the use of sentence structure was the *sine qua non* of eighteenth-century style. But the *Fortspinnungsthemem*, was in fact common in seventeenth-century opera such as this 1649 example from *Il Giasone* by Francesco Cavalli (Example 36).

Example 36. A Seventeenth-Century *Fortspinnung*: *Il Giasone* by Francesco Cavalli¹¹



Fortspinnungsthemem were common in instrumental music at least as far back as the concertos of *Schola Bolognes*.¹² This sonata by Giuseppe Aldrovandini (1671-1707) provides a typical example (Ex. 37). Unlike most eighteenth-century *Fortspinnungsthemem*, here the *Vordersatz* is more like a *Fortspinnung*, consisting of a linear intervallic pattern in syncopated thirds over a walking bass. But the overall *Vordersatz-Fortspinnung-Epilog*, structure is clearly present. *Fortspinnung* was a well-established procedure before the eighteenth-century.

¹¹ Francesco Cavalli, Giacinto Andrea Cicognini, and Alessandro Stradella. *Il novello Giasone*. Milano: Ricordi, 2013.

¹² Maurizio Cazzati, Giuseppe Colombi, Giovanni Battista Vitali, Giovanni Maria Bononcini, Marco Uccellini, Giuseppe Jacchini and Giuseppe Torelli.

Example 37. Sonata in G minor by Aldrovandini.¹³

Grave
Vordersatz/Fortspinnung

Violin I

Violin II

Cello

5 *Fortspinnung I*

Vln. I

Vln. II

Vc.

9 *Epilog*

Vln. I

Vln. II

Vc.

¹³ Giuseppe Antonio Vincenzo Aldrovandini and Estienne Roger. *Sonate à Tre Due Violini Violoncello Obligato col Basso per il Organo ; Opera Quinta*. Amsterdam: Roger, 1710.

F. Harmonic Trajectory

By the eighteenth century there were effectively only three harmonic trajectories available to the composer: (1) from tonic to dominant and back in a major key; (2) from tonic to dominant and back in a minor key; (3) from tonic minor to relative major.¹⁴ The assumption that music should unfold along these paths accounts for the unity and diversity in musical forms in the classical era. In Stravinskian terms, these poles provided the “narrow frame” that gave classical composers “creative freedom.”¹⁵ This tonic-dominant assumption changes a central compositional question from “should I go to the dominant?,” to “when should I go to the dominant?” By the end of the 18th century there were well-proscribed answers to this question. At the beginning of the century, the question was not as clear-cut. We can see the available options in the music of Corelli.

Corelli Op. 5

Corelli’s Op. 5, his set of twelve *Sonate Violino e violone o cimbalo*, is probably the single most influential instrumental opus of the 18th century. It is certainly the longest lived. First published in Rome in 1700, it remained in print throughout the century and had been published over fifty times in eleven cities by 1800.¹⁶ There were many reasons

¹⁴ There were occasional experiments with alternative schemes. François Martins, Symphony in F major, Op. 4, No 2, begins in F and moves to the relative minor as the second pole. These are the exceptions that prove the rule. Jean Baptiste Cupis et al., *The Symphony in France, 1730-1790* (New York: Garland Pub., 1984).

¹⁵ My freedom thus consists in my moving about within the narrow frame that I have assigned myself for each one of my undertakings. Igor Stravinski, Ingolf Dahl, and Arthur Knodel, *Poetics of Music: in the form of six lectures*. (New York: Random House, 1956), 127.

¹⁶ Amsterdam, Bologna, Florence, London, Madrid, Milan, Naples, Paris, Rome, Rouen and Venice. H. J. Marx, *Die Oberlieferung der Werke Arcangelo Corellis. Catalogue raisonné [hereafter Die iberlieferung] = Arcangelo Corelli: Historisch-kritische*

for this popularity. Already a versatile work – “for violin and violone *or* cello” – publishers also produced arrangements for other instruments, widening its influence further. Its technical simplicity, which made it attractive to amateur performers, also appealed to more advanced players as its simplicity supplied ample opportunities for *fioriture*. This interest in ornamentation spurred publishers to produce still more fully-ornamented editions that continue to intrigue performers and scholars alike.¹⁷ Dozens of pieces in the manner of Op. 5 appeared in the first decades of the eighteenth century. Sometimes this imitation was explicit. English composers such as Valentine, Ravenscroft, and Avison went as far as mentioning the Corelli work by name in their titles. More often the influence was tacit but it was particularly prevalent in the Italian composers of Vivaldi’s generation.¹⁸ For these reasons, Op. 5 represents the starting point for this study.

Op. 5 is divided into two parts; it is a Janus-faced work. Part one is more backward looking, similar to Corelli’s earlier *da Chiesa* pieces, while some movements can be heard as a late-blooming of *Ricercar* technique. These latter types consist mainly of one-part movements, many of which feature *ricecare*-like expressive changes in tempo. Part one is primarily contrapuntal, with multipart writing both in the continuo and violin

Gesamtausgabe der musikalischen Werke, Supplementband (Cologne, 1980), pp.165-84, 314-22; RISM, Serie A, supplement, CC3841b

¹⁷ Peter Walls, "Performing Corellis Violin Sonatas, Op.5," *Early Music* XXIV, no. 1 (1996): doi:10.1093/earlyj/xxiv.1.133.

¹⁸ Neal Zaslaw Source, *Ornaments for Corelli's Violin Sonatas, op.5* *Early Music*, Vol. 24, No. 1, Music in Purcell's London II (Feb., 1996), pp. 95-116 Published by: Oxford University Press. Published by: Oxford University Press Some of these imitations were so sophisticated that they could be plausibly published as Corelli’s.¹⁸

parts. There is a feeling of parity of musical interest throughout the ensemble. Although later composers produced works in this vein well into the eighteenth century, they were eventually supplanted by opuses based on binary, dance like movements—in other words, pieces more like those found in Part Two of Op. 5. These are more like Corelli's earlier *da camera* works. Most movements are dances; Sonatas VII-XI in particular resemble later dance suites.¹⁹ In most movements, the violin has the principal interest; the continuo is mainly accompanimental. Where imitation occurs, it tends to be initiated by the violin. Most crucially for our purposes, Part 2 is primarily made up of binary pieces.²⁰

G. Cadential Trajectory.

Most movements in Part 2 of Op. 5 are broadly similar to later *Fortspinnungsthemata* pieces. In this regard, Corelli remained influential through the mid-1700s. But other features of Op. 5 *Fortspinnungsthemata* procedures were shorter lived.

Unlike later composers, Corelli's *Fortspinnung* sections were open-ended. While later composers preferred to limit the number of *Fortspinnung* passages to two before a cadence, Corelli could pile up *Fortspinnung* passages, one after the other, for an extended period of time. In the Giga from Sonata No. 9, for example, there is a series of four *Fortspinnung* phases before the cadence (Example 38).²¹ This proliferation of

¹⁹ XII is a set of variations on a Follia bass.

²⁰ Op. 1 has two binary movements, both in Sonata VIII. Op. 2 has more, one in II, two in VI, one in VII, one in IX, One in X, one in XI, usually the final movement. The Op. 3 and 4 Trio sonatas are similar to Op.5 in terms of for. As such, they provided as good compositional models as Op. 5, and they undoubtedly did perform this office. My reason for concentrating on Op. 5 over these earlier pieces more due to Op. 5's ubiquity in the coming century rather than any deficiencies in Op. 2 or 4.

²¹ Ibid.

Fortspinnung passages, combined with Corelli's approach to cadential articulation of phrases, could make for aimless-sounding music.

Example 38. Corelli: Giga Allegro from the sonata in A

The image shows a musical score for Corelli's Giga Allegro, consisting of five systems of music. The first system is labeled 'Giga Allegro' and 'Vordersatz'. The second system is labeled 'Fortspinnung 1' and includes the annotation 'Transitional movement from I?...'. The third system is labeled 'Fortspinnung 2' and 'Epilog'. The fourth system is labeled 'Fortspinnung 3' and 'Fortspinnung 4', with the annotation 'No! Elided PAC in I'. The fifth system is labeled 'Epilog' and includes circled letters 'C' and 'T' at the end. The score is in G major and 12/8 time, with a key signature of one sharp (F#) and a common time signature of 12/8.

Corelli's phrases seldom end on the same chord as they began. Instead they transition – either from one harmonic pole to another within a key (I-V or V-I), or toward a new tonal area, (i-III). This hinders establishing a stable key area as the easiest method of key definition – ending a phrase *epilog* with a PAC in the key in which it started – is not

available. For Corelli, HCs function equally well for defining sections as PACs. While later composers reserved the use HCs to define the first move toward the dominant – either at a $\text{\textcircled{P}}$ or v – all subsequent boundaries would be marked by PACs or IACs. Op. 5, however, contains many presentations that conclude on half-cadences, such as the *Preludio* from Sonata VII (Example 39).²²

Example 39. Corelli: *Preludio* from Sonata VII in D minor

Preludio

(T)
Phry HC

This *Preludio* exhibits another characteristic of Corelli’s minor movements in minor: a three-stage movement toward the dominant. These presentations visit three poles – Tonic, Mediant, Dominant – but all within the confines of the Tonic key. For example,

²² Ibid.

the three-cadence opening from the first part Prelude from Sonata VII (the opening piece of Part 2), begins conventionally. With a *Vordersatz* that terminates with an HC in I (m. 3), followed by a Fortspinnung and a PAC on III, which functions as both *epilog* and $\textcircled{\text{M}}$ cadence. But instead of continuing to a cadence in III that would stabilize a second key area, the first binary half concludes on a phrygian half-cadence in tonic (Ex. 40).²³ From a Schenkerian perspective, his opening progression can be read as a *Bassbrechung* of the tonic chord, D-F-A.

Example 40. Corelli: Preludio from Sonata VII

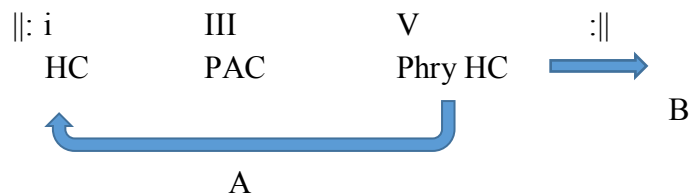
The image displays a musical score for Corelli's Preludio from Sonata VII, consisting of three systems of music. Each system contains a treble and bass staff. The first system (measures 1-4) features a circled 'P' above the treble staff and an 'HC' below the bass staff at measure 3. The second system (measures 5-8) has a circled 'M' above the treble staff and 'III' below the bass staff at measure 7. The third system (measures 9-12) includes a circled 'T' above the treble staff and 'Phry HC' below the bass staff at measure 12. The score concludes with a double bar line and repeat dots.

One can see the compositional logic in this arrangement (Figure 22.) The final chord of the exposition has two functions: to lead back to the beginning (arrow A), and to continue

²³ Ibid.

to the next section (arrow B). From this perspective, ending on an active chord that demands resolution, like a V chord, is a perfectly sensible choice.

Figure 22. Harmonic trajectory of Corelli: Prelude from Sonata VII



But from a later - more late eighteenth-century - perspective, this trajectory is weak. It fails to set up and define a second key area. Indeed, it undermines the feeling of tonal progression as the listener recontextualizes the previous cadence in III in light of the terminal half cadence.

In some cases, this possibility of ending on active chords can present some intriguing possibilities of performance practice as can be seen in the Preludio to the next suite, VIII in E minor (Ex. 35).

\

Example 41. Corelli: Preludio from Suite VIII

Largo

This 4-cadence opening uses the same selection cadences as Figure 23, but in a different order (Fig 23):

Figure 23. Corelli: *Preludio* from Suite VIII



Like the previous movements the phrases progress away from where they began, each one with its own thematic material. The section ends on an unfigured five chord.²⁴ Some performers choose to end this section with a V the first time, and a v chord the second time. The V chord provides a Picardy effect that also functions as a dominant major

²⁴ Figures are omitted in these examples.

chord that leads the ear back to the beginning of the piece.²⁵ The v provides a more conclusive tonally-integrated ending to the section in the minor v. These kinds of trajectories possess a forward momentum and a degree of tonal ambiguity—a feeling of tonal unease. The lack of book-ended phrases creates a permanent sense of transition, a feeling that is amplified by the constantly-changing thematic material. In movements with fewer cadential thresholds Corelli's constant transitions make for tonal *varietas*—if a short piece is to progress tonally, it is essential that they move immediately to other tonal poles. In longer pieces, however, the constant move away from the most recently established harmony engenders a sense of aimlessness.

For all of Corelli's short-span harmonic activity, his long-term harmonic trajectory was more varied than later composers. All-tonic expositions, while in the minority, are not uncommon. The *Tempo di Gavotta* from Sonata IX in A, for example, combines an all-tonic exposition with type-three symmetry—which brings us to the next section.

H. Symmetry

Corelli's large-scale formal procedures in Op. 5, Part 2 are diverse, featuring 11 different types. However, four of these are one-part forms and thus fall outside the boundaries of the current study.²⁶ The majority of the remaining pieces are simple binaries (15) with, 1, 2, and 3-cadence expositions. These need not be discussed in any

²⁵ This option is taken in Arcangelo Corelli, *Opera V, sonate per flauto dolce*, with Maria Giovanna Fiortino, on Tactus TC.650309, 1999, compact disc.

²⁶ These one-part movements are of two types, preludes and brief 4-8 measure slow movements that provide a brief respite between fast movements, much in the manner of opera sinfonia slow movements.

detail as they are typical of their type (Example 42). The rest are type-3s (3), and a solitary Top-and-Tails.²⁷

Example 42. Simple Binary Gavotta from Sonata X in F major

I. All-Tonic Type-3 Binaries

We return now to the all-tonic presentation from the *Tempo di Gavotta*, Sonata IX in A (Example 43).²⁸ The presentation is not based on a *Fortspinnungsthemata*. Rather, it is more like the Aldrovandini example seen earlier in this chapter. It is a series of three *Fortspinnung* segments based on similar quarter-note passages that outline intervallic patterns. The first ends in a PAC in I (m. 4), the second in an HC in I (m. 8), the third end in a PAC in I (m. 14), which is repeated as a *petite reprise* (m. 20). After 14 measures of

²⁸ Ibid.

developmental material that cadences in iii, the presentation is repeated in its entirety. The lack of tonal differentiation between the exposition and recapitulation produces an effect that is more ternary than binary. Pieces such as these problematize the hoary debate of the essential nature of the sonata as binary or ternary. The explanation that it depends on the harmonic trajectory of the exposition may be correct. But as much as that explanation may delight Schenkerians, it would seem unsatisfactory to those theorists who place harmonic trajectory over symmetry as a defining characteristic of the form.²⁹ Such are the dangers of applying theoretical concepts anachronistically. We cannot fault Corelli for eschewing a harmonic syntax that did not yet exist. But we *can* use these pieces to highlight some differences between Corelli's and later pieces, and look for those changes as the century unfolds.

²⁹ If the Schenkerian approach to sonata form as being synonymous with the interrupted *urline* is correct, then is it possible to take a 3-line exposition, append to it the development and recapitulation of any other 3-line piece in the same key, and end up with a satisfactory sonata form?

Example 43. Corelli: *Tempo di Gavotta*

Gavotta Allegro

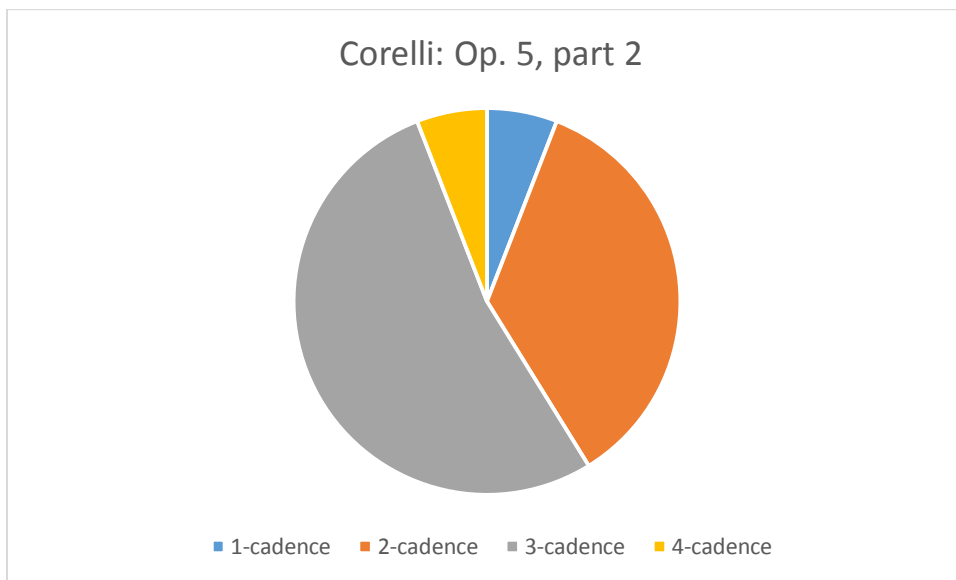
The musical score is presented in two systems per page, each with a treble and bass clef. The key signature is two sharps (F# and C#), and the time signature is common time (C). The score is divided into several sections:

- Measures 1-6:** The first system. Measure 6 contains a circled 'T' marking.
- Measures 7-13:** The second system. Measure 10 contains a circled 'M' marking.
- Measures 14-20:** The third system. Measure 14 contains a circled 'C' marking. Measure 20 contains a circled 'T' marking.
- Measures 21-27:** The fourth system, labeled "Development".
- Measures 28-33:** The fifth system.
- Measures 34-40:** The sixth system, labeled "Recap".
- Measures 41-47:** The seventh system.
- Measures 48-54:** The eighth system, ending with a double bar line.

J. Conclusion

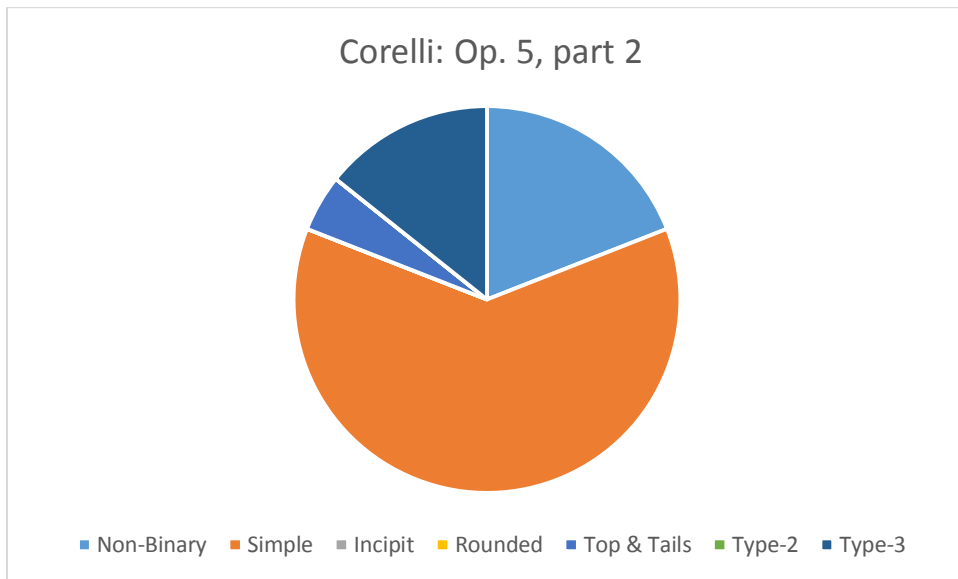
Corelli's Op. 5, Part 2 provides the baseline for the current study. It consists mainly of simple binary *Fortspinnungsthemata*-based pieces. Most are 3 cadence pieces though 1, 2, 3, and 4 all appear. Where 4-cadence trajectories do appear they are of the minor 3-key type (Figure 24.)

Figure 25. Breakdown of Harmonic trajectories in Corelli Op. 5



At this stage, half cadences could function as well as PACs to define boundaries. Many presentations end with half cadences in the tonic or dominant. Corelli's boundaries are seldom marked by emphatic breaks in rhythm except at double bars. Boundaries within presentations tend to be filled in with rhythmic activity in typical Baroque fashion—often with bass fills. These fills camouflage the gaps of the form and obscure points of articulation between sections. Where stable second-key areas exist, they are provided by *petite reprises*. All-tonic presentations are a possibility.

Figure 25. Breakdown of Symmetries in Corelli's Op. 5



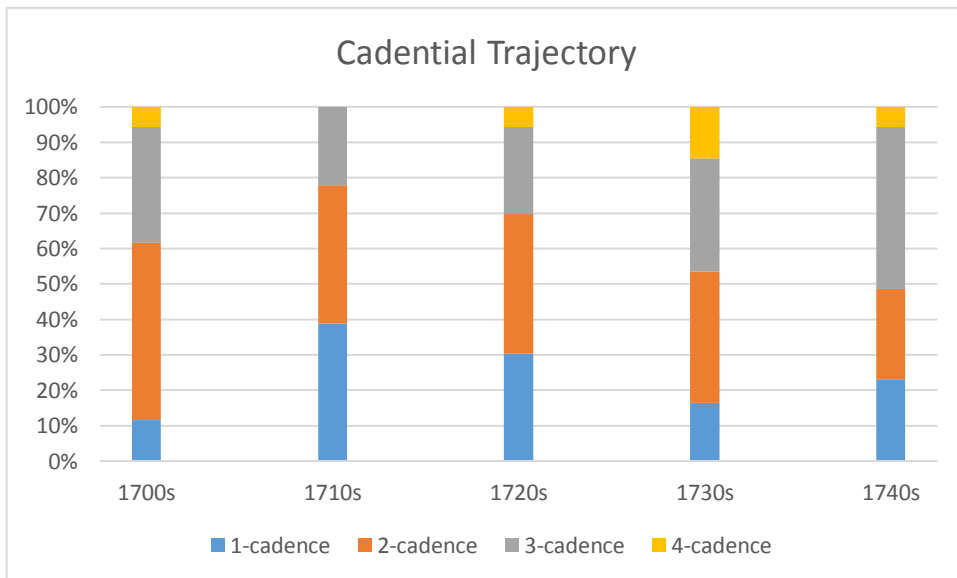
Most of Corelli's pieces are Simple binaries, though top & tails and type-3 pieces are seen (fig. 25) As we shall see in the next chapter, Corelli's example persisted well into the eighteenth-century.

VI: Cadential Trajectory 1700-1750

Introduction

The development of cadential trajectories of eighteenth-century presentations is not as straightforwardly linear as might be wished (Figure 26). A simple sketch of the development might be as follows. 1, 2, and 3-cadence designs were available from the outset and remained viable options for the entire period. 4-cadence trajectories were only available in the minor three-key type at the beginning of the century; two-key four cadence design began to be seen occasionally in the 1730s. The most obvious trend is in those trajectories that were becoming less common: particularly the reduction of 2-cadence designs which mirrors the increase in 3-cadence presentations.

Figure 28. Breakdown of Cadential Trajectories by Decade: 1700-1749



This chapter will trace these developments decade-by-decade. Each section will begin with an introduction of the composers and their works to be discussed. Then, each trajectory will be examined in order – from the most common to the least. Attention will be given not only to innovative morphological features but also to developments in the rhetorical function of existing structures: Asking “what is this space *for*?” might be as important, and more interesting, than asking “what is this space?”.

A. 1700s

Corelli’s influence was titanic. His trio sonatas, which had been in circulation for nineteen years, were about to be joined in 1700 by the most influential work of the 18th century, his 12 Sonatas, op. 12. These works influenced later composers both tacitly and explicitly for decades to come. Geminiani and Avinson created arrangements and expansions of his works. Veracini, Tartini, J.S. Bach, and others created works based on Corelli’s themes. Still other composers borrowed aspects of the structure of Corelli’s opuses.¹ Is not an exaggeration to say that all instrumental music written in the first two decades of the eighteenth century was an imitation of Corelli. One work that is strongly influenced with Corelli but also contains influential features of its own is the subject of

1. The Foilia variations at the end of op. 5 were borrowed by dall’ Abaco, Vitali, Alibicastro, Reali, and Tibaldi. Still others wrote works explicitly in the style of Corelli: Bellinzani’s trio sonatas ‘ad imitazione d’Arcangelo Corelli’, Galuppi’s concerto ‘sul gusto del Corelli’ and Telemann’s *Sonates corellisantes*¹ <https://doi-org.proxy.library.ucsb.edu:9443/10.1093/gmo/9781561592630.article.06478>

this chapter: The Sonatas for Violin and Harpsichord, Op.2 by Antonio Vivaldi.² Among the more obvious Corelli influences found in Op.2 is the opening of the 4th sonata, which borrows the opening to Corelli's Follia from Op.5. But unlike many composers of the period, Vivaldi's far from a slavish copy.³

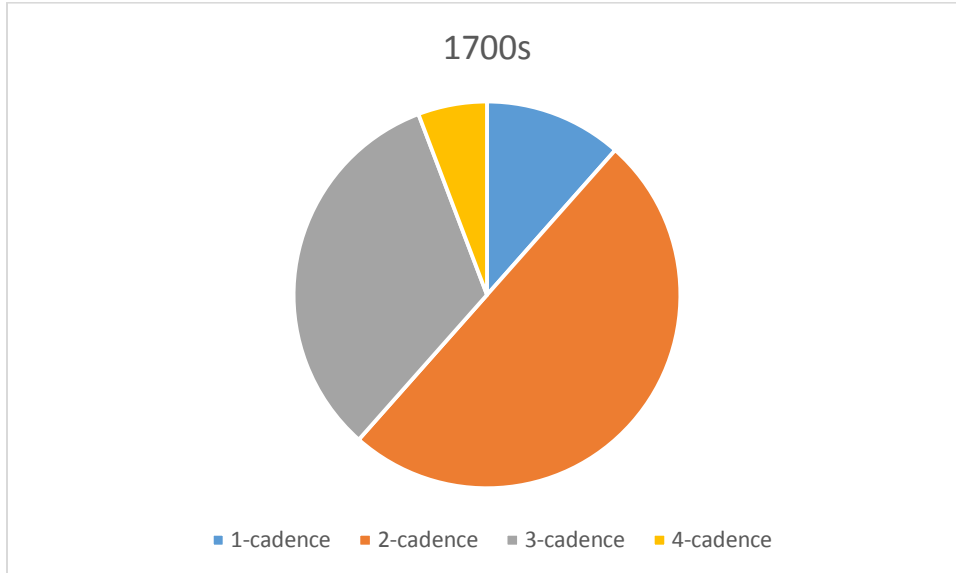
Figure 27 shows the distribution of cadential trajectories in the 1700s. As can be seen all cadential trajectories were in play at the beginning of the century. 2-cadence presentations were by far the most common – though 3-cadence presentations were not uncommon.

² Michael Talbot. "Vivaldi, Antonio." *Grove Music Online*. 15 May. 2018.
<http://www.oxfordmusiconline.com.proxy.library.ucsb.edu:2048/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000040120>.

The Vivaldi Sonatas were first published in Venice in 1709 then published to wider distribution as Op. 2 in Amsterdam in 1716,

³ Marc Pincherle, *Vivaldi: Genius of the Baroque* (New York: Norton, 1962).
. P. 57

Figure 28. Cadential Trajectories the first decade of the eighteenth century



The Most Common Cadential Trajectory of the 1700s: 2-cadence Presentations

Most movements in the opening decade of the 1700s have 2-cadence *Fortspinnungsthemata* presentations. These are always of the first cadence in the tonic cadence, second cadence in the dominant type. The *Preludio* from Vivadi's Sonata V, provides a compact example (Ex. 44). Here, the presentation consists of an extended *Fortspinnungsthemata*. The opening complex – an all-tonic *Vordersatz/Fortspinnung* (one-phase)/*Epilog* – constitutes first section; the extension – *Fortspinnung* (one-phase)/*Epilog* (in v) - constitutes the second section.

Example 44. Two-Cadence P/T presentation, Vivaldi *Preludio*

Although the antecedent/consequent period constriction was long established by the 18th century (*Greensleaves* is a well-known 16th-century example), openings based upon periods are conspicuous by their scarcity in the 1710s. A few pieces exhibit a type of *Fortspinnung*thema/period form hybrid.⁴ The presentation from the *Allemanda* from Vivaldi's 4th Suite, consists of two parallel *Fortspinnung*themen that share motivically-equivalent *Vordersätze*, *Fortspinnungen*, and *Epiloge* (Ex. 45), which, from a contemporary viewpoint, combine to make a period-like pair.

⁴ In addition to the *Allemeda* discussed above see the Vivaldi's *Corrente* from Suite IV.

Example 45. *Fortspinnungsthemata*/period from Vivaldi's *Allemanda* from Suite #4.

The 2nd Most Common Cadential Trajectory of the 1700s: 3-cadence Presentations

Fortspinnungsthemata map quite naturally onto 3-cadence binaries. The extended *Fortspinnungsthemata* presentation of Vivaldi's *Giga Allegro* from *Sonata #2* (Example 46), for example has three threshold cadences: P, M/C, and T.⁵ The P cadence coincides with the conclusion of the opening *Fortspinnungsthemata*. The *Fortspinnungen* and *Epilog* that follows constitutes the transition to, and the onset of, the dominant at the M/C. The final three measures make up the entirety of the second key area. But there is little differentiation in thematic style between these thresholds. Even though the *Fortspinnung*

⁵ Ibid.

areas are distinct in terms of melodic content, the homogenizing effect of their sequential harmonic context renders them similar. This makes the distinctions made by labeling cadences P, M/C, and T anachronistic. In this piece, for example, the closing section does not have a particularly strong closing section effect, as its melody and harmony are not strongly differentiated from what preceded it – it is “just another *Fortspinnung*.” The increase in the use of threshold cadences – allied with larger areas of harmonic stability and the use of distinct thematic material to designate sectional functions – is an ongoing trend in the next few decades. As this trend continues, the suitability of the cadential designations (Ⓟ, Ⓜ, Ⓢ and Ⓣ) will increase.

Example 46. 3-Cadence Presentation, Giga Allegro from Vivaldi’s Sonata #2, Op. 2

The musical score is presented in three systems, each with a treble and bass clef staff. The key signature is three sharps (F#, C#, G#) and the time signature is 12/8. The first system is labeled "Giga Allegro" and "Vordersatz" above the first measure, and "Fortspinnung" above the fourth measure. The second system is labeled "Epilog" above the first measure, "Fortspinnung" above the second measure, and "Fortspinnung 2" above the fifth measure. The third system is labeled "Epilog" above the first measure, "Fortspinnung" above the second measure, and "Epilog" above the fifth measure. Cadence markers are placed below the bass staff: a circled 'P' under the second measure of the second system, a circled 'M/C' under the second measure of the third system, and a circled 'T' under the fifth measure of the third system.

The 3rd Most Common Cadential Trajectory of the 1700s: 1-Cadence Presentation

The *Allemanda Allegro* from Sonata #10 is a study in how far you stretch a single idea without cadential support (Example 47).⁶ It is, essentially, one extended *Fortspinnung* passage that begins in tonic and ends in the dominant minor. But there are three discernable harmonic regions in this piece. Each region separated by weak cadence-like progressions: The tonic region (mm. 1-2) defined by the weak IAC that resolves into the third measure. A transitional area (mm. 3-4) that moves toward the tonicization of v – the IAC that resolves into the fifth measure. A dominant region (mm. 5-7) the last two measures of which sound like a closing cadential unit despite the lack of a strong © cadence going into m. 6.

⁶ Ibid.

Example 47. Extended I-cadence presentation, Vivaldi *Allemanda Allegro*

Allemanda Allegro

i *V* *i* *ii°* *V7*

³ *i* *iv7* *V* *vii°* *i* *V/v* *vii°/v*

⁵ *c:i* *ii°* *V* *i* *iv* *V* *i* *V* *i* ^(T)

The 4th Most Common Cadential Trajectory of the 1700s: 4-Cadence Presentations

Where 4-cadence presentations occur at the beginning of the century, they are of the “three-pole” type. Three-pole presentations add one tonicizing cadence in the \textcircled{M} position before continuing to the second key area proper. Three-pole presentations exist in two varieties, major and minor. The minor three-pole exposition is seen in those presentations that terminate in *v*. The added cadence is a tonicization of III in the \textcircled{M} position before continuing to *v* (Figure 28.) In Vivaldi’s time there is seldom a second cadence in III that would stabilize it as a tonality. The only stabilizing cadence in these

pieces is the ① cadence that creates the closing section in v. Minor three-pole presentations create a Schenkerian *bassbrechung* progression: i-III-v.

Figure 29. The three-pole, four-cadence presentation in minor



The three-pole presentation in major introduces “minor feint” in the M position with a cadence on v before introducing the eventual cadence in V (Figure 29). Sometimes the minor feint comes before ③, in some it occurs within ③. The larger the piece, the greater the likelihood that the minor feint will occur earlier.

Figure 30. The three-pole, four-cadence presentation in major



In the first decade of the 1700s, only the minor variety is seen. The *Giga Allegro* from Vivaldi’s second sonata, Op. 2, provides not only an example of the three-pole presentation, but also of incipient sectionality (Example 48).⁷

⁷ Ibid.

Example 48. Three-Pole, Four-Cadence presentation, *Giga Allegro* from Vivaldi, Op. 2

The musical score is presented in four systems, each with a treble and bass clef staff. The first system is labeled 'Allegro Vordersatz' and 'Fortspinnung'. The second system is labeled 'Fortspinnung 2'. The third system is labeled 'Epilog' and 'Fortspinnung'. The fourth system is labeled 'Fortspinnung 2', 'Epilog', and 'Epilog 2'. Cadence markers are placed at the end of the first system (P HC in i), the third system (M PAC in III), and the fourth system (C PAC in v and T PAC in v).

The onset of each section marks a change in melodic figuration, texture, and harmonic rhythm. The \textcircled{M} cadence at 17 introduces break in the violin part while the continuo contributes a new motif as a point of imitation. Although it would be a mistake to attribute the kind of dialectic interplay seen in later pieces to this piece, the resource of separating sections with distinct material was in play from the beginning of the century.

Style

Vivaldi's compositional grammar is more typical of the 18th century than is Corelli's. This can be seen in terms of thematic cohesion, cadential trajectory, and

increased sense of sectionality. On the whole, Vivaldi presentations are more thematically consistent than Corelli's. While some of Vivaldi's *Fortspinnungen* from Op.2 echo Corelli's free-flowing anonymity, on the whole his material is more cross-referentially integrated with material constantly refers back to the opening material. This can be seen in the *Preludio* from Sonata VII. Although not as closely motivic as later composers, this *Preludio* constantly juxtaposes dotted-eighth/sixteenth note movement against sixteenth-note motion drawn from the *Vordersatz*, in melodic contours that echo the opening.

The sectionality carefully constructed in such works as the *Preludio*, is often undermined by the restless quality of the harmonic progressions that populate most sections (Ex. 49). In the first decade of the 1700s, most melodic material in this piece is spun out over active linear-intervallic progressions (LIPs) that repeat sequentially.⁸ In Vivaldi's LIPs can be used both as a means of transition (see mm. 15-22 in the *Preludio* example) and as a means of defining a stable key area, (m. 23 on).⁹ LIPs are found in both thematic sections and *Fortspinnung* passages. This gives the sense of permanent harmonic movement even in areas of tonal stability. This method conveying tonal

⁸ Linear intervallic patterns (LIPs) are the series of intervals that govern what are commonly called "sequences" (= repeated melodic passages that, at each instance, move up or down a step, and usually described according to the underlying harmonic progression, e.g. falling-fifth sequence). A LIP is the subsurface pairs of intervals that guide such melodic passages. The subsurface LIP may remain constant while the surface melodic patterning may change. Allen Forte, and Steven E. Gilbert. 1982. *Introduction to Schenkerian Analysis*. (New York: Norton, 1982) 83-102. See also Lee Rothfarb, "Linear Intervallic Patterns (LIPs)," *Fugue: Brief Historical Background*, accessed November 11, 2018, <http://www.music.ucsb.edu/faculty/rothfarb/courses/103/lips.html>.

⁹ Ibid.

stability by using active harmonic progressions is a defining characteristic of Vivaldi's style, and remained the standard until the 1730s.

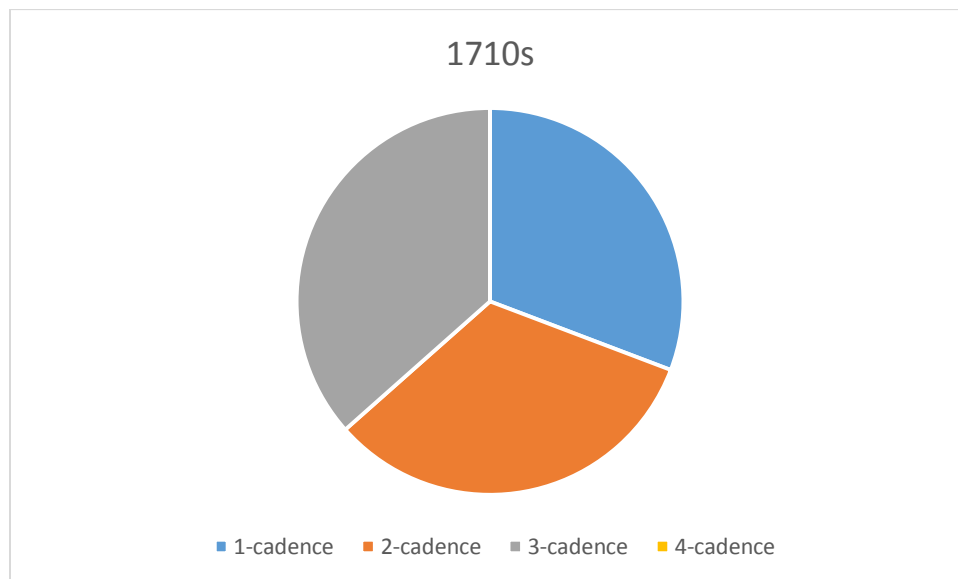
Example 49. Integration in Vivaldi's Compositional Style: *Preludio* from Sonata VII.

The image displays a musical score for a prelude in 3/4 time, divided into five systems. The first system is labeled "Vordersatz" and contains measures 1 through 6. The second system starts at measure 7 and includes a flat (b) above the first measure. The third system is labeled "Fortspinnung" and begins at measure 14, featuring a circled "P" (piano) marking below the first measure. The fourth system starts at measure 20 and includes a circled "M/C" (mezzo-crescendo) marking below the first measure. The fifth system begins at measure 25 and concludes with a circled "T" (tutti) marking below the first measure. The score is written for a grand piano with a treble and bass clef.

B.1710s

The 1710s was, for the purposes of this study, a slow decade. Comparatively few Instrumental sonatas were published, and most that were looked back to Corelli and before with many pieces based upon *da Chiesa* and *Ricercar* models. Two notable exceptions were Telemann's (1681–1767) *6 Sonates a Violon seul, acc. Par le Clavecin* published engraved and published by the author in Frankfurt in 1715, and Evaristo Felice dall'Abaco's (1675–1742). *Sonate da Camera* Op.4 of 1716. Both have more diversity in their harmonic material and a more integrated thematic sense than earlier composers. Cadential trajectories in these sets were more or less evenly distributed between 1, 2, and 3-cadence types, with a slight majority being 2-cadence (Figure 30.)

Figure 31. Frequency of cadential trajectories in the 1710s



The Most Common Cadential Trajectory of the 1710s: 2-Cadence Presentation

Most 2-cadence forms were similar to those already seen in Vivaldi. A few numbers from Telemann's *Sechs Sonaten für Violine und Basso Continuo*¹⁰ followed Corelli's example of having *Vortdesätze* that were themselves *Fortspinnungen*. In the *Corrente Allegro* from the sonata in A (Example 50.), almost everything except the cadential material is quasi-canonic *Fortspinnung*. The opening *Vordersatz/Forstpinnung/Epilog*, which moves to and establishes the second key area, is quasi-canonical until the epilog. A second *Vordersatz*, another canon, this time displaced by a measure instead of the beat as in the first section, contributes new thematic material. The *Fortspinnung* that follows continues the canon until the *Epilog*. Sectionality in this piece is achieved almost exclusively by thematic means. Because Telemann presents a new theme at the *Vordersatz*, *Fortspinnung*, and *Epilog*, the new theme at second key area becomes an undistinguished event.

¹⁰ Georg Philipp Telemann. *Musikalische Werke*. Kassel: Barenreiter, 2009.

Example 50. Telemann 2-cadence Presentation

The 2nd Most Common Cadential Trajectory of the 1710s: 1-Cadence Presentation

The 1710s is the last decade that Phrygian half cadences were regularly in currency. This *Sarabanda Allegro* from Dall’abaca’s sonata in D minor is Corellian in its harmonic progression (Example 51).¹¹

Example 51. Dall’abaca: *Sarabanda Allegro*, 1-Cadence presentation

¹¹ Evaristo Felice Dall’Abaco. *Zwölf Solosonaten für Violine, Violoncell und Begleitung, aus Op. 1, aus Op. 4*. Leipzig: Breitkopf & Härtel, 1950.

But on the whole, most 1-cadence pieces are of the evaded 2-cadence type. This longer 1-cadence piece by Telemann also ends with a Phrygian half cadence but in this case what comes before the cadence is more modern (Example 52).¹² *Fortspinnung* dissolve after three iterations of the sequence and there is greater variety of rhythmic activity between the parts.

Example 52. Telemann 1-cadence Presentation

Despite these examples, Phrygian half cadences in the \oplus position had become by rare 1710s. Instead, post cadential closing sections terminating with a PAC in a new key area had become the standard procedure.

¹² Ibid.

The 3rd Most Common Cadential Trajectory of the 1710s: 3-Cadence Presentation

The *Allegro* from Telemann's Sonata in G displays some progressive characteristics that were only gradually to become more common over the next few decades (Example 53).¹³

Example 53. Telemann 3-Cadence Allegro from Sonata #4

The musical score for Example 53 is presented in three systems, each with a treble and bass staff. The first system is labeled "Vordersatz? Tonic Area:" and "Fortspinnung?". The second system is labeled "Fortspinnung 1". The third system is labeled "Direct modulation Dominant Area:". Circled letters P, M, C, and T are placed below the bass staff at various points. P is under the first measure of the second system, M is under the first measure of the third system, C is under the first measure of the fourth system, and T is under the first measure of the fifth system.

What initially seems to be a *Fortspinnungsthema*, turns out to be period-like construction similar to that seen in Vivaldi's *Allemanda* in the previous section. It consists of a *Vordersatz/Fortspinnung* in I (mm. 1-3) juxtaposed with an identical *Vordersatz/Fortspinnung* pair at the dominant (mm. 4-6). The *Fortspinnung* that follows moves to the dominant, which begins with a minor feint at m.9 that moves directly to the

¹³ Ibid.

closing section at m.9. The weakness of the onset of the closing section reminds us that we are still early in the century –in most later pieces the strength of the © cadence was second only to ① in its forcefulness.

Dall’Abaco’s *Allemanda Allegro* is very similar to Vivaldi’s *Giga Allegro* (Example 54). Both are extended *Fortspinnunthema* constructions with tonic IAC ⑥ cadences and their closing sections are similar. The *Fortspinnungen* in between, however, are different. Vivaldi’s is obviously sequential in nature, dall’Abaco’s is also sequential but feels more static with its slower-moving harmonic rhythm. A gradual slowing of the average rate of harmonic rhythm is to be a trend over the next few decades.

Example 54. 3-cadence presentation, dall’Abaco’s *Allemanda Allegro* from Sonata VII.

Allemanda Allegro

The directionality that was to categorize the harmonic trajectories of later compositions was not, as yet a given. This *Aria Cantabile* by dall'Abaca (Example 55) is similar earlier examples we have seen by Corelli and Vivaldi.¹⁴ The IAC in m.3. is strong enough to register as a P/M cadence which makes the return to a tonic at the $\textcircled{\text{P}}$ cadence in m. 12 – after a proportionally long *Fortspinnung* passage – disappointing.

Example 55. 3-cadence “misfire” dall’abaca

Aria Cantabile

The image shows a musical score for 'Aria Cantabile' by dall'Abaca, consisting of three systems of music. Each system has a treble and bass clef staff. The first system ends with a circled 'P?' annotation. The second system ends with a circled 'P' annotation. The third system ends with a circled 'T' annotation. The music is in a 3/4 time signature and features a mix of eighth and sixteenth notes, with some rests and accidentals.

¹⁴ Ibid.

Conclusion

The instrumental music 1700-1719 can be seen as laboring under the shadow of Corelli. The vast majority of instrumental music is *Forspinnungsthemata*-based with harmonic progressions dominated by linear intervallic patterns.

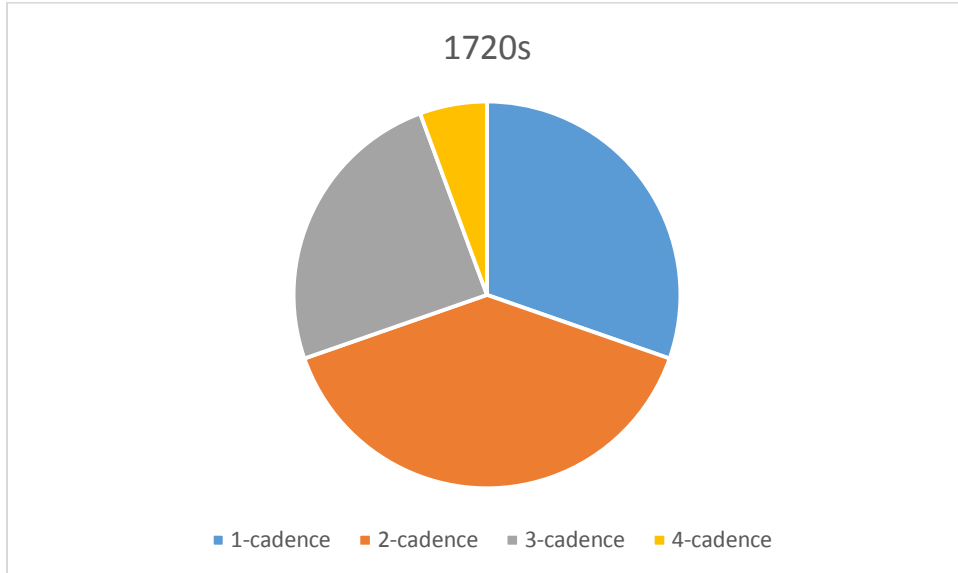
C. 1720s

Although Corelli's music remained in publication throughout the century, the music written in 1720s can begin to be characterized as post Corellian. For even though much of the music written in the 1720s was composed by Corelli's disciples and pupils, the trend that led away from *Fortspinnungsthemata*-based presentations began in this decade. This section uses examples from three composers, Giovanni Battista Somis (1686-1763), Fortunato Chelleri (1690-1757), and Johan Helmich Roman (1694-1758). Corelli's pupil, Somis's *Sonate da' Camera Violino Solo e Violoncello e Cembalo* of 1723 remains closest to the older music. Roman's *Sonate a Flauto Transverso, Violone e Cembalo* of 1727 are sometimes described as Handeleian, but they contain many moments of individuality in form.¹⁵ Fortunato Chelleri's *Fug[h]e per l'organo et sonate per il cembalo* of 1729 contains the first six published Chelleri Sonatas which include many novel features.¹⁶ Although 2-cadence forms remained in the majority, other forms were on the ascendency, particularly the 3-cadence and 4-cadence varieties (Figure 29).

15 Johan Helmich. Roman, *Sonate a Flauto Traverso, Violone E Cembalo* (Bandhagen, Sweden: Autographus Musicus, 1977).

16 Vassilis Vavoulis and Fortunato Chelleri. *Keyboard Music. Recent Researches in the Music of the Baroque Era* ; v. 101. Madison, WI: A-R Editions, 2000.

Figure 32. Cadential trajectories of the 1720s.



The 1st Most Common Cadential Trajectory of the 1720s: 2-Cadence Presentation

By the 1720's the short 2-phrase cadentially-defined antecedent/consequent opening, such as this by Roman (Example 56.) were common and would remain so throughout the century.¹⁷ But a trend toward longer 2-cadence pieces was ongoing.

Example 56. Roman Two-Cadence Binary Form

¹⁷ Johan Helmich Roman. *Sonate a Flauto Traverso, Violone E Cembalo*: Bandhagen, Sweden: Autographus Musicus, 1977.

Somis's Allegro from the first Sonata from Op.1 is a truly transitional piece (Ex. 57).¹⁸ Although aspects of early and late eighteenth-century compositional procedures are present, it contains many novel features that strain both *Fortspinnungsthemata* and cadential analysis.

The first novelty is the opening, an eight-measure period-like construction, the second phrase of which is based on a voice-exchange inversion of the first. Although we have seen *Vordersätze* based on periods before, this example, with its emphatic IAC in m. 8, renders the opening a discrete unit, separating it from what follows and undermining the unity that characterizes earlier *Fortspinnungsthemata* openings. The next section (beginning at m.8) is functionally ambiguous. It is certainly more static than any *Fortspinnung* we have heard up to this point. It has the melodic and rhythmic qualities of a *Fortspinnung*, but its harmonic underpinning, a progression in 10ths, acts as a prolongation of I—a prolongation that occurs where convention would demand a transition. It is, in effect, a sort of closing section to the tonic area. The weak HC at m. 18 provides a more-or-less direct modulation to the dominant which, with a more emphatic cadence, could function as a closing section. This analysis sounds critical—but it is not. Somis avoids sequential material, a device that was beginning to pall by the 1720s. Instead he incorporates an innovative device that was shortly to become vital – static harmony – in a way that was not to be picked up by later composers.

18

Example 57. Allegro from Somis's Sonata #1 Op.1

Chelleri's Sonata #4 explores a similar 2-cadence strategy to Somis but in a manner more typical of later composers (Example 58). It begins with a true innovation, an opening phrase that closes with a half cadence.¹⁹ This earlier movement to the dominant level creates a greater opportunity for expanding the second key area. It also removes the need for a transitional *Fortspinnung*. Instead what follows is more conformational. After the HC in I at m.8, he moves quickly to a prolongation of V/V at m. 12. The eventual cadence to V happens ten measures later in the final measure of the presentation. This ten-measure prolongation creates a degree of tension that gives the ① cadence a weightiness not present in Somis's 2-cadence design.

¹⁹ This movement to the dominant in opening material is pointed out by Talbot as formative.

Example 58. Chelleri: Sonata #4 in D

Affetuso
Vordersatz?

5

11

17

HC

P

prolongation of V/V

V/V

Epilog?

T

PAC

Another approach that was to be common in the coming decades was to have weakly defined, but perceptible, threshold events. Roman's *A tempo giusto* from his sonata in D has four moments of articulation (Example 59). The first is the IAC that is the Ⓣ cadence, in m.4. The second is the “m” moment that marks the end of the transition to the dominant, a weak HC in 1 complete with caesura. The third is a weak IAC that confirms the second key area and initiates the closing material, the “c” moment at m.21. The final cadence is a true Ⓣ cadence at m. 24. Pieces such as this have few of the rhetorical features of later true 4-cadence designs, but the spaces are perceptible.

Example 59. Roman's *A tempo giusto* from his sonata in D

A tempo giusto

P

8

M

16

C

T

The 2nd Most Common Cadential Trajectory of the 1720s: 1-Cadence Presentation

By the 1720s one-cadence presentations were solely the preserve of short dance movements. The Corellian Phrygian half cadences that typified earlier decades were gone, from the 1720s on they were invariably half cadences. Chelleri's, 1-cadence minuet is a typical example (Ex. 60.)

Example 60. Chelleri 1-cadence

T

The 3rd Most Common Cadential Trajectory of the 1720s: 3-Cadence Presentations

The Allegro from Chelleri's Sonata in F is radical in several ways (Example 56). First, it contains another opening section that moves toward the dominant rather than coming to cadence in the tonic. This typical opening gambit of Chelleri's was a radical innovation of the 1720s – a gambit that Talbot credits Chelleri as inventing.²⁰ But what follows is more unusual still. Chelleri composes a second *Vordersatz* (mm. 9-12) in the dominant followed by another *Fortspinnung* that continues in the new key. This concludes on two PACs at the dominant forming a very brief closing area. This is the earliest incidence I have found of a region of distinctive thematic material in the dominant. Although it lacks the cadential definition and rhetorical structure of later 4-cadence designs, one can perceive that, with expansions, it would not be far from a sonata opening.

²⁰ Michael Talbot, The Harpsichord Sonatas of Fortunato Chelleri: Some observations on Form and Thematic content, *Realzione musicali tra Italia e Germania nell'età barocca*. A.M.I.S., 1997, pp 305-322.

Example 61. 3- Cadence Chelleri Allegro from Sonata in F²¹

The image shows a musical score for an Allegro movement in 2/4 time, in the key of F major. The score is divided into three systems. The first system (measures 1-8) is labeled 'Allegro' and contains 'Vordersatz' (measures 1-4) and 'Fortspinnung' (measures 5-8). The second system (measures 9-15) contains 'Vordersatz' (measures 9-10) and 'Fortspinnung 2' (measures 11-15). The third system (measures 16-18) is labeled 'Epilog' and contains 'Epilog' (measures 16-18). Performance markings include a circled 'P' at measure 8, a circled 'M' at measure 15, a circled 'C' at measure 17, and a circled 'T' at measure 18. The score uses treble and bass clefs and includes various rhythmic and melodic notations.

Somis's Allegro from his Sonata in A has an intriguing 3-cadence variant on the Major 3-pole presentation (Example 62). Like the previous Somis example, this Allegro stays in tonic rather longer than might be expected. It opens with a conventional *Fortspinnungsatz* (mm. 1-10), and ends with a conventional closing section in the tonic (mm. 15-18). The material in between (mm. 10-14) does not easily fit any category. It does affect a transition to the V-V by means of a minor feint in m. 14. But it does not do this by any conventional means. This movement stands in contrast to the next piece, which represents the convention.

²¹ Chelleri, Fortunato, and Vassilis Vavoulis. *Keyboard Music*. Madison: A-R Editions, 2000.

Example 62. Somis: Sonata in A, Allegro

Chelleri's Allegro in A from Sonata #1, begins with a *Vordersatz* consisting of a literal repeat of a two-measure canonic motive that ends in a half cadence P/M (Example 57.). What follows is a transitional *Fortspinnung* that moves to and confirms the second key area at m. 9 with a ©cadence in the dominant. The next two measures provide a satisfactory closing passage to the presentation. As we shall see, this type opening was typical in the 1720s and 30s. It sowed the seed for a type of Type-3 symmetry I term the binary ritornello. I will return to this piece when discussing symmetry in the 1720s.

Example 63. Somis: Sonata in A, Allegro Chelleri 3-cadence Sonata #1

Allegro
Ritornello
Vordersatz

HC (P/M) HC

Episode
Fortspinnung

5

Epilog

8

C T

The 4th Most Common Cadential Trajectory of the 1720s: 4-Cadence Presentations

The first experiments in the 2-pole, 4-cadence design began in the 1720s. Somis's *Allegro ona poco* from his sonata in G has four well-defined action spaces, albeit action spaces that do not match up to later rhetoric, nor, for that matter, earlier rhetoric (Example 58). It opens with a seven-measure would-be *Vordersatz/Fortspinnung* but rather than ending on a typical cadential *Epilog*, the music elides into an extended section whose function is more stabilizing than transitional: like the earlier Chelleri example, it consists of a long prolongation of V/V ending in a HC in V on the second beat of m. 17. The material that follows is a proportionally long 10-measure C section (mm. 18-27). The effect of this presentation is clearly sectional: it yields better to cadential analysis than

Fortspinnungsthema analysis. But although the cadences demarcate clear regions of activity, it is, as yet, unclear what the function of the material after \textcircled{M} is. The rhetorical function of each cadence was to develop only slowly over the next 40 years.

Example 64. Somis: Sonata in G *Allegro ona poco*. A 4-cadence, 2-pole presentation

Allegro ona poco

The musical score is presented in four systems, each with a treble and bass clef. The first system (measures 1-7) concludes with a cadence marked by a circled 'P'. The second system (measures 8-13) begins with a circled 'M' and ends with a cadence. The third system (measures 14-20) concludes with a circled 'C'. The fourth system (measures 21-26) concludes with a circled 'T'.

Conclusion

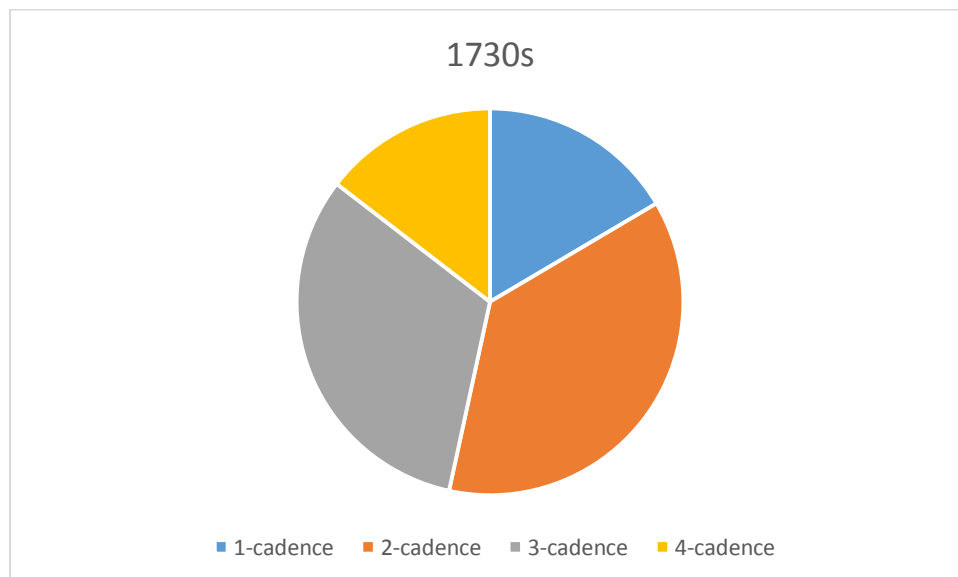
The two most significant compositional trend 1720s was the burgeoning use of harmonic prolongations, as opposed to LIPs to designate areas of tonal stability, and the innovation of ending opening sections on half cadence, attributed by Talbot to Chelleri.

Although the use of prolongations could in seem eccentric or misplaced according to later models, the availability of areas of stable harmonic inactivity was to become crucial in the rhetoric of later composers.

D. 1730s

The 1730s saw some radical experiments in the construction of binary presentations many of which were not picked up in later decades. In terms of cadential trajectories, 3 and 4-cadence openings were increasing in frequency. The 1730s were the last decade where 2-cadence forms played a prominent role (Figure 32).

Figure 33. Cadential trajectories in the 1730s.



This section examines works by Domenico Alberti (c1710-1746), Lodovico Giustini (1685-1743), and Benedetto Marcello (1686-1739). Alberti's Sonatas were

published posthumously as his Op.1 in 1748 after one of his students, Giuseppi Jozzi, published them as his own work in 1745. The scandal that accompanied this chicanery publicized the set rather more widely than otherwise would have been the case. Today, Alberti is known almost exclusively for his “Alberti Bass” pattern, which although not invented by him, is a frequent feature of his work. Op. 1 is, in some ways, an eccentric work. As experiments in enlarging the scope and size binary forms through the enrichment harmonic materials, the exploration new symmetries, and the avoidance of *Fortspinnung* it is modern. But in terms of harmonic rhythm and meandering cadential trajectory – in spite of all his harmonic intricacies – it is closer to Corelli. Giustini’s *12 Sonate da cimbalo di piano e forte detto volgarmente di martelletti* op.1 (Florence, 1732) were the first music published for the pianoforte and remained so for some decades. Both Alberti’s and Giustini’s opuses display an interest in vocal-like melody that was to be taken up by later composers.

The 1st Most Common Cadential Trajectory of the 1730s: 2-Cadence Presentations

Alberti

In the 1730s, short 2-cadence presentations remained common. Many consisted of period-like constructions such as this by Alberti (Example 65.) But one of the ongoing trends of the 1730s was toward the expansion of binary forms.

Example 65. Alberti: Minuet in C. A 2-cadence presentation

The image shows a musical score for Alberti's Minuet in C, presented in two systems. The first system consists of four measures. The second system starts at measure 5 and also consists of four measures. The score is written in treble and bass clefs with a 3/4 time signature. The first system ends with a circled 'M' and the second system ends with a circled 'C'.

Most 4/4 and 3/4 presentations before the 1730s were 12-18 measures long. Many of Alberti's are 20-24 measures long. But rather than creating expansions by composing cadentially-delineated, harmonically-stable regions – as was common in later music – Alberti often prefers the opposite route: cadential evasion. An extreme example of this is his two-cadence presentation in the opening Allegro from Sonata #2 in F (Example 67.)

In this piece the only region of harmonic stability is the opening four measures in the tonic. The remainder of the presentation continues in increasing degrees of harmonic instability, evading all cadences until ① cadence, a PAC in V. The material in between m. 5 and the ① cadence is remarkable for two reasons, complete lack of *Fortspinnung*, and the diversity of means devoted to evading the cadence.

Alberti seems to abhor *Fortspinnung*. This *Allegro Moderato* unfolds like a single, open-ended, rhapsodic utterance. Melodic gestures are presented then, either elaborated, repeated or abandoned for new melodic gestures. Each new melodic gesture coincides with the next step in the harmonic journey between Tonic and Dominant. The first melodic gesture, repeated thrice, defined the tonic (mm. 1-3). The next gesture, repeated twice, defines a region that exist in the orbit of V but still in I (mm. 4-7). The

next gesture, repeated once, moves toward the V/V, but instead of resolving directly, the music veers off into a region of cadential evasion (mm. 8-90). This region begins with a two-measure sequence – the closest thing to *Fortspinnung* in this movement – describing a move around the circle from V/ii to V.²² The entirety of the music from m. 12-21 is taken up with linear embellishments, chromaticizations, and tonicizations of the V of the new tonic. Including a minor feint at mm. 16-17 consisting of 6/4 elaborations of the V/v.

²² Since 85% of this presentation is taken up by a gradual drift toward the dominant, almost any chord after M.4 could act as the pivot.

The 2nd Most Common Cadential Trajectory of the 1730s: 3-Cadence Presentations

Not all of Alberti's presentations in Op. 1 are as eccentric as the previous example. Oftentimes the second movement was more conventional. The *Allegro assai* from the same sonata in F is a case in point. This movement has two regions of stability, the opening five measures in the tonic – which constitute the *Vordersatz* – and the closing 11 measures in the dominant – the closing section.

The opening section is novel. The *Vordersatz*, consists of 5 measures of static embellishments of the I chord, followed by a very direct *Fortspinnung* leading, unusually, to a cadence on V. The material after this, but before the ©cadence, could be read in expanded *Fortspinnungsthemata* terms as *Fortspinnung* 1 and 2. But the nature of the material is beginning to strain this terminology. In “*Fortspinnung* 1,” The material undergoing the sequence is three measures long and is transposed once only in what Reipel would call a Monte. In “*Fortspinnung* 2,” the material undergoing the sequence is two measures long and is transposed in its entirety only once, the third repeat segues into a cadence. The closing material is more modern; it contains a four-measures of tonic prolongation (mm. 25-28) before the cadence. This moment of tonic prolongation was to become a common feature of later closing sections. The entire closing section is repeated *petite-reprise* style. The closing section of this piece represents 31% of the presentation, a proportion that was only to become common in later decades.

Example 67. Alberti 3-cadence presentation

Allegro Assai
Vordersatz

6 *Fortspinnung* *Epilog*

11 *Fortspinnung 1*

16 *Fortspinnung 2* *tr* *tr*

21 *tr* *Epilog*

26 (Petite Reprise)

31

Chord symbols: V_4^4 , I^4 , V_6/V , V_4^4/V , V_7 , V_4^4 , V_4^4 , V_7 , V_2^4/V , V_4^4 , V_2^4/V , V_6 , $\overset{7}{V}_6^6$, ii^6 , V_4^4 , $\overset{3}{V}_4^4$, \textcircled{C} , \textcircled{T}

Alberti was not alone in minimizing the use of *Fortspinnung*. Giustini's *Tempo di gavotte* has many similarities with Alberti's *Allegro Assai*, above (Ex 68). The opening five measures, though not quite as static as Alberti's define the tonic and the closing section is proportionally long. The intervening 11 measures are divided into two sections. The first section (mm. 7-11) introduces a new motive and moves from the tonic to a half cadence on V/V. The second section consists of the similar material in dominant minor; a minor feint that subsequently resolves to the dominant proper. Although both halves of intervening, transitional section have sequential content, especially measures 12-15, the more tuneful melodic content combined with the slower harmonic rhythm prevent the feeling of *Fortspinnung*.

Example 68. Giustini 3-cadence

Tempo di Gavotta

7

12 minor feint

18

P

M

C

T

The 3rd Most Common Cadential Trajectory of the 1730s: 1-Cadence Presentations

Most 1-cadence presentations are similar to ones in previous sections. This Minuet by Giustini incorporates a rustic, folk-like quality, quite unlike the typical mannered Minuet (Ex. 69).

Example 69. Giustini: Minuet

Minuet

tr

The 4th Most Common Cadential Trajectory of the 1730s: 4-Cadence Presentations

The *Gigue Allegro*, from the sonata in Bb begins with a period that ends with a half-cadence in I (m. 4), the \textcircled{M} cadence.²³ What follows is 4-measures of distinctive material in the second key area that cadences in the dominant at m. 8. The closing material that follows is the longest section of the piece. It includes a minor feint (m.10-12) and a conventional cadential passage (mm.14-16). Here the elements of the sonata presentations are present, albeit in proportions not seen in later pieces and without the more extreme contrast in mood seen in later music.

Example 70. Giustini: Gigue Allegro

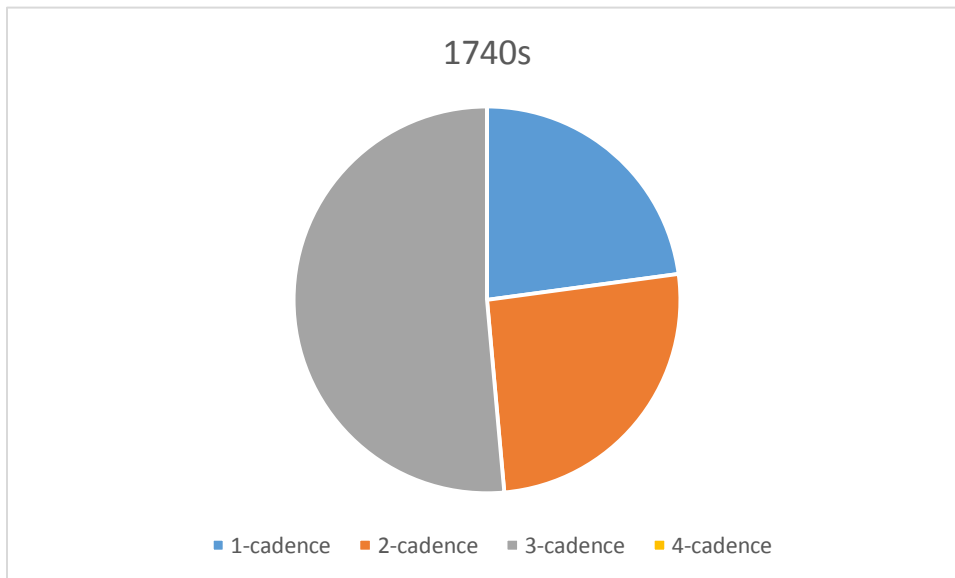
The image displays a musical score for Giustini's *Gigue Allegro*. The score is written in 12/8 time and B-flat major. It consists of four systems of music, each with a treble and bass staff. The first system is marked 'Allegro' and ends with a half-cadence in I (m. 4), indicated by a circled 'M' (\textcircled{M}). The second system begins with a key signature change to D minor and ends with a cadence in the dominant (m. 8), indicated by a circled 'P' (\textcircled{P}). The third system continues in D minor and ends with a cadence in the dominant (m. 12), indicated by a circled 'C' (\textcircled{C}). The fourth system concludes the piece with a final cadence in the dominant (m. 16), indicated by a circled 'T' (\textcircled{T}).

²³ The P cadence is subsumed into the first phrase of the period, this will become a common procedure in short binary pieces.

E. 1740s

As can be seen in Figure 33, the 1740s shows a definite swing towards the 3-cadence design. But this trend may be better explained as a large shrink in 2-cadence forms and somewhat more perplexingly the complete absence of 4-cadence forms.

Figure 34. Cadential Trajectories in the 1740s.



Composers and works discussed in this chapter are *6 sonates pour le clavessin sur le goût italien*, op.1 (Nuremberg, 1742) by Giovanni Benedetto Platti (1692-1763), *6 Clavier-Partien* (Nürnberg, 1748) by Johann Anton Koberich (1714-1791) and *6 brevi sonate da cembalo massime all'uso delle dame* (1745) by Christoph Nichelmann (1717-1762)

The 1st Most Common Cadential Trajectory of the 1740s: 3-Cadence Presentations

The 3-cadence structure written in the 1740s were not fundamentally different from earlier specimens. But the proportions between the sections were changing and the types of thematic materials used to populate those structure was undergoing a qualitative shift. There was a greater tendency for *Vordersätze* to be longer, harmonically static, and discrete - periods were not uncommon. The *Fortspinnungen* that followed were usually proportionally shorter and more directional than seen in, say, Alberti. There was also a trend toward longer closing sections, with moments of tonal stability added before the cadential material. All of these trends can be seen in the Allegro form Platti's Sonata in G (Ex. 71).

Example 71. Platti, Allegro from Sonata in D

The musical score for Platti's Allegro from Sonata in D is presented in four systems. The first system, labeled "Allegro Vordersatz", spans measures 1-4 and ends with a circled 'P' (Piano) dynamic marking. The second system, labeled "Fortspinnung 1" and "Fortspinnung 2", spans measures 5-8. The third system, labeled "Epilog Moment of Dominant stability" and "Cadence", spans measures 9-12 and includes a trill (tr) and a mezzo-forte (M/C) dynamic marking. The fourth system, labeled "Epilog 2 (petite reprise)", spans measures 13-16 and includes trills (tr) and circled 'C' and 'T' (Crescendo and Trill) dynamic markings. The score is in G major and 3/4 time.

The opening is Mozartian: an arresting, direct, balanced period. The *Fortspinnungen* that follow are short and achieve the goal establishing the second key area with quickly and directly. *Fortspinnung* 1 is directional, a circle-of-fifths progression that segues into *Fortspinnung* 2. *Fortspinnung* 2 is prolongation of the V/V. Although there is no strong \textcircled{M} cadence, the *petite reprise* that follows is clearly closing material. Rather than moving directly to cadential material, however, Platti introduces a moment of dominant stability before the cadence at m. 14, the \textcircled{C} cadence proper.

An even more compact, German example of the three-cadence design is provided by Johann Anton Kobrich (1714-1791) whose 6 *Clavier-Partien* of 1749, as set of pieces that represent something of a standardization of the 3-cadence design. They are decidedly modern pieces, in that many movements defy *Fortspinnungsthemata* analysis. The allegro from the first *Partien* is a particularly elegant example (Example 66).

Example 66. Kobrich: *Partien* in G, *Allegro un poco*, A Compact 3-cadence presentation

A Haydneque opening six measures is extremely static, from a Schenkerian perspective they represent a transference of the *Kopftone*, E in m. 1, down the octave via

an elaborated arpeggiation of the tonic chord to m. 6. Although this opening could have functioned as a *Vordersatz*, what follows is more *avant garde*: a direct modulation to the dominant.²⁴ This second key-area material is as harmonically static as the opening. In Schenkerian terms it represents a prolongation of $\hat{2}$ via neighbor note action. The PAC in V at m. 12 initiates the closing section in which the dominant triad is unfolded.

Structurally, this presentation is quite unlike anything seen in this survey up to this point. There is no sequential material; the entire piece is made of the juxtaposition of two tonally-distinct blocks of contrasting material. All 6 of Kobrich's *Partien* have movements with similar procedures.

The 2nd Most Common Cadential Trajectory of the 1740s: 2-Cadence Presentations

Platti and Kobrich represent the *avant garde*. Most composers in the 1730s were producing pieces more like those we have seen in previous sections. Nichelmann's 2-cadence presentation from his sonata in G, is typical in that it combines traits from earlier and later styles (Example 73.). The opening three measures are modern in its tunefulness stable harmonic context. The material at m. 6-7, which attempt to stabilize a weak half cadence in I by repetition, is notionally modern. But the brief *Fortspinnung* passage to V in m. 4 and weak half cadence that follows is not emphatic enough to produce a true P/M cadence. The *Fortspinnung* that follows in m. 8, is similar from pieces much earlier in the century that did not have a strong feeling of direction. While this section begins on a

²⁴ The IAC in m.6 would be what Hepokoski and Darcy would term a 3rd level default, a tonic cadence that functions as the onset of the dominant. The current study prefers to label these P cadences rather than P/M cadences. P cadences conclude all-tonic openings by ending in the tonic. M cadences initiate the second key area by being in or on the tonic key area. P/M cadences combine both by being dominant endings in I, i.e. half cadences.

clear V/V am m.8, and concludes on a cadence to V in m. 13. The harmonic perambulations in between, which include a return to the tonic at m. 12, renders the whole passage impotent, so that the voguishly-static material on the dominant between mm. 14-18 still feels provisional. The closing material, on the other hand, is more modern; being as long and emphatic as Platti's.

Example 73. Nichelmann 2-cadence second theme

Vivace

5

10

14

19

P

IAC in I

m H/C in V

C IAC in V

T

The 3rd Most Common Cadential Trajectory of the 1740s: 1-Cadence Presentations

1-cadence movements were on the decline in the 1740s, where they do occur they are usually in short, slow movements such as this Sarabanda Adagio by Platti (Example 74).

Example 74. Platti: Sarabanda Adagio. An Extended 1-Cadence form

The image shows a musical score for "Sarabanda Adagio" by Platti. The score is in 3/4 time and consists of two systems of music. The first system has four measures, and the second system has four measures. The key signature has one flat (B-flat). The score includes various musical notations such as trills (tr), slurs, and a circled 'T' at the end of the piece. A label "evaded M" is placed below the first measure of the second system, and a circled 'T' is placed below the final measure of the second system.

This piece is lengthened by means of the evaded cadence in m.6 in which the bass stays static, creating a 6/4 chord which is elaborated in the next measure by chromatic inflection before moving to the cadential material proper in the final measures. But these kinds of prolongations were becoming less common. There is a sense that if composers were going to write short dance forms, they would make a virtue out of brevity.

What Happened to 4-Cadence Presentations in the 1740s?

The absence of 4-cadence designs in the 1740s is remarkable. It is not merely absent from the sample of opuses selected for this study but from the entire corpus of music from the 1740s. No piece from the 1740s currently listed on IMSLP or in any of

the pieces I have collected from the British Library, Library of Congress, or

Bibliothèque nationale de France, is a four cadence

Design – with one exception: *Giga Allegro* from *Sonates Pour le Clavecin avec un Accompagnement de Violon* by Corrette (Example 69). But this piece is so unusual in so many ways, it is difficult to parse is as anything other than a unique experiment. What can explain the absence of 4-cadence presentations in the 1740s?

First, it must be acknowledged that the number of 4-cadence presentations in this study has always been low, never more than 13% in any decade (1730s). Second, the opuses I have selected for inclusion in this dissertation are precisely those that possess *avant garde* qualities, so the presence of 4-cadence presentations in previous decades has been overstated in relation to the entire corpus of instrumental music. But most importantly, the 3-cadence presentation suited the goals of mid-eighteenth century composers. Both in terms of the length of the music they wished to produce and the aesthetic goals of that music.

Instrumental numbers in the 1740s were expected to be brief. Consider Quantz's thoughts to the length of concertos:

"A timepiece may be consulted to ensure suitable length for a concerto. If the first movement takes five minutes, the Adagio five to six minutes, the last movement three to four minutes, the entire concerto will have the requisite length."²⁵

²⁵ Johann Joachim Quantz, *Johann Joachim Quantz on the Musical Practices of His Time: A Translation, from the Original German, of Those Chapters and Paragraphs of ... "Versuch Einer Anweisung Die Flöte Traversiere Zu Spielen," Which Are of Practical Value in Performing and Understanding the Music of the Early Eighteenth Century...* (New York, 1950).p.315

If a concerto is to be fifteen minutes long, expansive movements are out.

Quantz's also considered the second movement, the Adagio, to be the most important movement in instrumental works. His first piece of advice on how an instrumental solo is to be judged is aimed at the second movement, "the Adagio must be expressive and singing in its own right."²⁶ This piece of advice is followed by five more numbered items the last of which is, "the adagio should not be too long."

The next section, on the "the first *Allegro*," is a good barometer of how one of the preeminent court musicians of his age saw opening movements:

"The first *Allegro* requires: (1) a melody that is flowing, coherent and rather serious; (2) a good association of ideas; (3) brilliant passage-work well joined to the melody; (4) good order in the repetition of ideas; (5) some beautiful and well-chosen phrases at the end of the first part that are so adjusted that in transposed form they may again conclude the second part [!]; (6) a first part that is a little shorter than the last; (7) the introduction of the most brilliant passage-work in the last part; (8) a bass that is set naturally and with progressions of a kind that sustain a consistent vivacity."²⁷

From these quotes we glean the following: opening *Allegros* should be coherent, repetitive, well ordered, vivacious, and under five minutes.²⁸ In terms of cadential trajectory all that is required of a second key area is some "well-chosen" closing phrases. An expansive contrasting second key of the sort seen later in the century could only serve to weaken the coherence of the movement, make it unbearably long, and, worst of all, undermine the effectiveness of the *Adagio* to follow.

²⁶ Ibid. p. 319

²⁷ Ibid. p.319

²⁸ The implications of this passage on the symmetry of opening *Allegros* will be considered in the next chapter.

Example 75. Corrette: Giga Allegro. An eccentric 4-Cadence design

Giga Allegro

8

16

24

32

M

C

T

F. Conclusion: The ascendancy of the three-cadence exposition

Between 1700 and 1749, composers' preference for the various types of cadential trajectory was constantly shifting (Table 1). The influence of Corelli in the opening two decades of century was pervasive. The overwhelming majority of music was based on trajectories that conformed to the *Fortspinnungsthemata* archetype: of thematic *Vordersatz*, transitional *Fortspinnung*, and cadential *Epilog*. If this movement was an extended one, the *Epilog* invariably cadenced in the tonic, and was followed by additional *Fortspinnungen* (after Vivaldi, usually two) that transitioned to another *Epilog* in the dominant. Oftentimes the *Epilog* was repeated, *a la petite reprise*, which gave extra stability to the closing section by adding another cadence in the second key area.

Cadential articulation between sections was optional, where cadences are added they more closely resemble later music. 1, 2, and 3 cadence openings are seen, 4-cadence presentations only occur in the minor-key 3-pole variety which progress *bassbrechung*-style with tonicizations of i-III-v-v. The harmonic style is largely based on active chord progressions based on linear intervallic progressions even in areas that are tonally stable.

The 1720s, sees the first post Corellian innovations. In many pieces, the harmonic rhythm slows. The period construction of Antecedent/Consequent phrase pairs comes a common opening gambit. Prolongations that use static harmony rather than linear intervallic progressions are more prevalent. Corelli experiments with open-ended opening phrases that terminate on V. This procedure moves the \textcircled{M} closer to the beginning of the movement and raises the possibility of larger stable second-key areas. Occasional 2-pole, 4-cadence presentations are seen, by they remain rare.

The 1730s is an era of experimentation into means for expanding the length of presentations. It is characterized by a continued interest in slower harmonic rhythms and experiments that replace *Fortspinnung* with more vocal, song-like means of transition. Some composers, like Alberti, experiment with cadential evasion as a means of expansion. In major keys, the insertion of a minor feint at the dominant level as a means of delaying the onset of V became common, resulting in the major variety of 3-pole, 4-cadence presentation.

The 1740s represents something of a standardization of the 3-cadence procedure, which seems ideally suited for the construction brief, affectively coherent, movements. Although *Fortspinnungsthemata* principals inform these movements, they are not as formally compact. Opening *Vordersätze* are often periods that end at the dominant level. They are usually detached from the *Fortspinnungen* that follow which, since they are already at the dominant level, often adopt a more conformational than transitional function. Second key areas are brief but usually more than mere cadences. They are more akin to the “beautiful and well-chosen phrases at the end of the first part” described by Quantz.

Table 1. Frequency of Presentation Types 1700-1749

	1700s	1710s	1720s	1730s	1740s
1 st	2-cadence	1-cadence, 2-cadence	2-cadence	2-cadence	3-cadence
2 nd	3-cadence	3-cadence	1-cadence	3-cadence	2-cadence
3 rd	1-cadence		3-cadence	1-cadence	1-cadence
4 th	4 th : 4-cadence (three key minor)		4-cadence (three-key minor)	4-cadence	

VII: TRANSLATIONAL SYMMETRIES 1701-1750

The central tenet of this study is that musical structure is an emergent property of decisions made at the local and global level. The previous chapter was concerned with local decisions: ones made at the phrase level within the presentation of a binary form. This chapter is concerned with the outcome of larger decisions, specifically what the formal ramifications are of large-scale, sectional repetitions. The way in which large-scale repeats operate within the tonal paradigm precludes literal repeats. The structure of the eighteenth-century tonal paradigm is analogous to a simple tent. As a tent is formed about a single pole about which fabric trails to the ground, so the central double bar in a binary form acts as central strut at the dominant around which music must travel—from the tonic and back again. The corollary of this is that if a piece is to be translationally symmetrical, what was at the tonic must now be at the dominant, and vice-verse. These tonal adjustments necessarily deform any music repeated after the dominant. The ways composers handled these demands of tonality account for many of the differences between presentations and recapitulations. Often the differences are most obvious in the transitional moments of the form.

In this chapter, we will be concerned with two types of large-scale repetitions: type-2 designs, where only the second key area need reappear in the tonic and where the opening material is often presented after the double bar in the dominant; and type-3 designs, where an all-tonic recapitulation of both key areas occurs after a discursive middle section commonly called the development.

For each cadential trajectory there are four central questions:

1. What are the translational symmetries produced?

2. What tonal adjustments need to be made?
3. Where do these adjustments occur?
4. What are the differences between type-2 and type-3 symmetries?

A. Symmetries in 2-Cadence, Type-3 pieces

Corellian 2-Cadence, Type-3 pieces

The presentation of Vivaldi's *Sarabanda Andante* in F is a 2-cadence extended *Fortspinnungsthema* (Ex. 76). The first cadence coincides with the first *Epilog* (m. 7-8). The second cadence, after the second *Fortspinnung*, coincides with the second *Epilog* (m. 14-15). The subsequent sections, the Development and Recapitulation, are also extended *Fortspinnungsthemen*, with harmonic adjustments to accommodate their position in the harmonic trajectory (Figure 34.) The recapitulation up to the first *Epilog* is identical to the presentation. Since there is no need to move toward a new tonality, the *Fortspinnung* that follows is shorter than in the presentation, and cadences in I. The development, which begins at the dominant pole and must return to the tonic, opens with a restatement of the *Vordersatz* at the dominant level. Then, using *Fortspinnungen* similar to those of the presentation, the music transitions, first to the relative minor (m. 27), then to a half cadence in the tonic (m. 33), which effects the necessary return to the tonic.

Example 76. Vivaldi: *Sarabanda Andante* from Sonata in F

Sarabanda Andante
PRESENTATION

Vordersatz *Fortspinnung* (phase 1) (phase 2) *Epilog*

8 *Fortspinnung 2* *Epilog*

DEVELOPMENT

16 *Vordersatz* *Fortspinnung* (phase 1) (phase 2)

22 *Epilog* *Fortspinnung 2*

28 *Epilog*

HC in I

Example 76. Continued

It is slightly unusual that the development ends on V. Most Corellian developments end on iii or vi; V is the least common option. Oftentimes, the return to the tonic from a mediant or sub-mediant ended development is bridged by short scale-wise bass figures such as we see below (Example 77.)

Example 77. Scale-wise Bass Connections to Tonic

Despite the development of *Sarabanda Andante*, ending on the dominant, Vivaldi uses a similar scale-wise passage device in m. 33. This causes a first-inversion return to the tonic (m. 34). That, too, is unusual. But in most respects, this *Sarabanda Andante*, is typical of Corellian 2- cadence presentations. In these pieces the harmonic adjustments are small and come late in the form, usually affecting only *Epilog* sections.

Corellian 2-cadence presentations were common for several decades, especially in pieces with short presentations. The *Andante* in Example 72 by Roman from the 1720s is similar to Vivaldi's in that the moment of harmonic adjustment is at the end of the piece, at the final *Epilog*.¹ Both developments end on the dominant but Roman's is more typical of later pieces, with a passage that stands on the dominant (mm. 12-15), providing a more emphatic close to the development than Vivaldi's (Ex. 78).

Example 78. Type-3 Symmetry in Roman's Sonata in E minor

The musical score for Example 78 is presented in three systems, each with a treble and bass clef staff. The key signature is one sharp (F#) and the time signature is 3/4. The first system, labeled 'Presentation', is further divided into 'antecedent' and 'consequent' phrases. The second system, labeled 'Development', concludes with a section marked 'standing on V....' (dominant), indicated by a circled 'P' above the staff. The third system, labeled 'Recapitulation', begins at measure 16 and features a 'point of harmonic adjustment' marked above the staff.

These pieces are more translationally symmetric than later 3-cadence designs, as the only transposition required comes at the very end of the development. The addition of another cadence changes the nature of the symmetry in larger pieces.

¹ Ibid.

B. Symmetries in Post-Corellian 2-Cadence, Type-3 Pieces

Chelleri's presentation from the first movement his sonata in D is not a *Fortspinnungsthema* – it has no *Fortspinnung* – but it does perform the basic functions of an expanded *Fortspinnungsthema*: presenting a theme, moving to the second key area and achieving a cadence there (Example 73, m. 8). However, the Cherellian opening compresses many functions into a shorter span compared to *Fortspinnungsthema* pieces (Ex. 79).

Example 79. Chelleri: Sonata in D

EXPOSITION
Affetuso
Vordersatz?

1

5

11

17

DEVELOPMENT

27

V/V

V/vi

iii

vi

P/M

HC

prolongation of V/V

Epilog?

T

PAC

W

Example 79. Continued

33
V/iii iii V/iii iii

38
V/vi V/ii V/V V

42 **RECAP**

47

54 **ESC**

60

Detailed description: This musical score is for piano accompaniment in D major. It consists of six systems of two staves each. The first system (measures 33-37) features chords V/iii, iii, V/iii, and iii. The second system (measures 38-41) features chords V/vi, V/ii, V/V, and V. The third system (measures 42-46) is marked 'RECAP' and contains triplets in both hands. The fourth system (measures 47-53) features a complex melodic line in the right hand and a steady eighth-note accompaniment in the left hand. The fifth system (measures 54-59) is marked 'ESC' and features a melodic line in the right hand and a steady eighth-note accompaniment in the left hand. The sixth system (measures 60-64) concludes the piece with a final melodic flourish in the right hand and a steady eighth-note accompaniment in the left hand.

Figure 35. Extended *Fortspinnungsthema* presentation vs. Chelleri's Presentation

Extended *Fortspinnungsthema* presentation

<i>Vordersatz</i> in V	<i>Fortspinnung</i>	<i>Epilog</i> in I	<i>Fortspinnung</i>	<i>Epilog</i>
I		I		V

Chelleri's Presentation

Theme	Cadence	Prolongation	Cadence
I	HC in I	V/V	V

Chelleri's presentation begins with a four-measure theme followed by a half cadence cadence that is then repeated, echo-like (mm. 5-6). This entire gesture is immediately repeated down the octave (mm. 7-8), bringing the piece to the dominant level. This opening combines all the functions of an extended *Fortspinnungsthema* into one compact phrase. Where a Corellian piece might go through *Vordersatz/Fortspinnung/Epilog/Fortspinnung* to *V/Epilog in V* to reach the dominant, this piece arrives at the dominant immediately after the theme. This early move to the dominant opens up a space in the dominant that needs to be filled before the $\text{\textcircled{T}}$ cadence. Chelleri avoids the *Fortspinnung/Epilog* schema in this piece; his transitional material is wholly melodic in conception, but it is functionally analogous to the earlier practice. It is divided into two parts: the *Epilog*-like cadential material (mm.15-22), and more generic material that is functionally analogous to, but phenomenologically distinct from, *Fortspinnung* (mm. 9-12). Harmonically, the space between the move to the dominant and the T cadence prolongs a V/V function (mm. 12-20). This option, of prolonging V/V, remained common for some time and, as we shall see, was occasionally used by W.A. Mozart.

As seen in Vivaldi example above (Example 34), the development and recapitulation in Cherelli's *Affetuso* echoes the construction of their presentation, albeit with differing harmonic trajectories (Figure 36).

Figure 36. Symmetry in Chelleri's Sonata in G.

EXPOSITION

Theme	Cadence	Prolongation	Cadence
I	HC in I	V/V	V

DEVELOPMENT

Theme	Cadence	Prolongation	Cadence
V	HC in V	iii - circle of 5ths progression to	V

RECAPITULATION

Theme	Cadence	Prolongation	Cadence
I	HC in I	I	I

Each section begins with a restatement of the theme at the appropriate harmonic level along with a subsequent half cadence. What follows the opening in each section differs. In the development, Chelleri introduces a prolongation of iii (mm. 29-33) with new melodic material drawn from the opening theme. These events are followed by a transitional passage that, although it follows a *Fortspinnung*-like harmonic trajectory, avoids Corellian connotations by limiting sequential material to two reiterations and introducing material from the closing section (m. 34).

The arrival of recapitulation is a surprise. It returns without fanfare, seemingly midstream, after a brief sequential passage (mm. 38-41). The recapitulation begins with a restatement of the opening six measures. The next 6 measures, whose function it is to provide material that will cadence in the tonic (mm. 47-54)—Hepokoski and Darcy's ESC—are

drawn from the sequential material in the development (38-41). The close is a restatement of the last ten measures of the presentation transposed to the tonic.

Chelleri's solution to the 2-cadence design is elegant. The degree of symmetry between sections is high, but not so high that there is no sense of development between the sections. Although there is no stable second key area, the breadth of the closing material, coupled with its distinct thematic content, gives a strong impression of a second theme area.

Contrast this piece with another 2-cadence *Affetuso* in the same key, but from ten years later: Guistini's *Affetuso*, from his Sonata in D (Example 80).² The presentation is similar. Another opening theme that repeats and ends on a half cadence. Another region that prolongs V/V (mm. 11-19), this time with a minor feint (mm. 18-19). Another proportionally-long closing section (mm. 20-27). Where this piece differs from Chelleri's is in the degree of symmetry between the presentation and recapitulation: in Guistini's *Affetuso*, it is nearly exact. If one were to transcribe the presentation of this piece into notation software, cut and paste it, then transpose all the material after the pickup to m. 9 down a perfect 5th, one would be only a few minor adjustments away from what Guistini wrote. His development, perhaps to make up for the extreme symmetry of its presentation and recapitulation, is less literal. It begins with a statement of the theme in inversion, followed by sequential material that bring the development to a close on iii – complete with a step-wise linking bassline. By the 1730s the 2-cadence type-3 design had become a familiar meme; One that would be reproduced, with modifications, for decades to come.

² Lodovico Giustini. *Sonate da cimballo di piano, e forte ... Opera prima*. Florence: [publisher not identified], 1732.

Ex. 80. Giustini's Type-3 Presentation from the first Movement of his Sonata in D

Presentation
Affetuoso

11

minor feint *tr*

M/C

20

tr *tr* *tr* *tr* 3 1.

T

29

Development

37

tr

45

Recapitulation

Example 80 Continued.

The image displays two systems of musical notation for piano. The first system, starting at measure 55, is in E major (one sharp) and 3/4 time. It features a treble clef with a melody of eighth and sixteenth notes, and a bass clef with a bass line of eighth and sixteenth notes. Trills are marked above several notes. The second system, starting at measure 64, continues the piece with similar rhythmic patterns and trills. A first ending bracket is present at the end of the second system, leading to a final cadence.

C. Symmetries in 3-Cadence, Type-3 pieces

3-Cadence, Type-3 pieces are not seen in the Corellian era.³ The first three-cadence type-3 design that was to be picked up by later composers is of the type used by Chelleri in his Sonata in E major (Ex. 81).

³ There are occasional pieces from the 1720s that exhibit a kind of three-cadence presentation not picked up by later composers, these will be discussed below.

Example 81. Cherelli: Sonata in E major, I. Allegro

PRESENTATION

theme

1

6 transition new key

M

V

12 close

C

T

DEVELOPMENT

theme transition

V

25

v/vi vi V/V V V/IV IV V/viii

32 new key

iii

Example 81. Continued

The image displays three systems of musical notation for piano. Each system consists of a treble clef staff and a bass clef staff. The key signature is three sharps (F#, C#, G#). The first system starts at measure 38 and ends at measure 42. The second system starts at measure 43 and ends at measure 48. The third system starts at measure 49 and ends at measure 54, concluding with a double bar line and repeat dots. The music features a mix of eighth and sixteenth notes, with some rests and dynamic markings.

Like the 2-cadence designs seen in the previous section, presentation, development and recapitulation traverse the same trajectory. This trajectory consists of four regions – theme, transition, new key, close—divided by three cadences: ①, ②, and ③ (Figure 37.). In this design, the onset of the second key receives minimal proclamation. Caesuras are rare and cadential markers are weak IACs. In Cherelli’s sonata, the region between mm. 9 and 13 is in the dominant, but confirmation must wait until the PAC at m. 13. It is difficult to label what this section is without being anachronistic. Although it presents new thematic material, it is not broad enough to be a new theme, nor is it contrasting enough in impact to be a new material. On the other hand, it does reappear in transposed form before the close of every section and thus fills the space that in later pieces would be occupied by a second theme. Perhaps it is best characterized as some kind of thematic prefix to the closing material.

Figure 37. Cherelli Four-Region Presentation

PRESENTATION

Theme	Transition	New Key	Close
I	Ⓟ	V	Ⓞ V Ⓟ

DEVELOPMENT

Theme	Transition	New Key	Close
I		iii	

RECAPITULATION

Theme	Transition	New key	Close
I		I	I

A later piece that has the same basic structure as Cherelli's is Platti's sonata in D – already discussed (Figure 38, Ex. 82). By the 1740s, *Fortspinnung*, having been eschewed by composers like Chelleri and Alberti, had made something of a limited comeback in transitional passages. Such a comeback appears in Platti's *Allegro*, which can once again be understood in *Fortspinnungsthemata* terms. But this is a more modern view of the the *Fortspinnungsthemata* model. Unlike earlier pieces, the opening *Vordersatz/Fortspinnung/Epilog* complex ends at the dominant level in m. 6. The M moment is marked by the IAC midway through m. 6. Some “new-key” material ensues at the dominant level and ends with a PAC at m. 14. The PAC ushers in the closing material--a *petite reprise* of the new-key material, this time with strong cadential delineation at the beginning and end. This feeling of strength is bolstered by a metric shift that places the beginning of the closing material on the down-beat of m. 14—rather than as an anacrusis, as in m. 6. These changes in cadential and metric emphasis help the section register as a true closing section rather than as a mere *petite reprise*.

Figure 38. Platti's Four-Region Presentation

PRESENTATION

Theme	Transition		Second Key	Close	
<i>Vordersatz</i>	<i>Forts. 1</i>	<i>Forts. 2</i>	<i>Epilog 1</i>	<i>Epilog 2</i>	
I	Ⓟ		M V	Ⓢ V	Ⓣ

DEVELOPMENT

Theme	Transition	Second Key	Close
<i>Vordersatz</i>	<i>Forts. 2</i>	<i>Epilog 1</i>	<i>Epilog 2</i>
I	Ⓟ	M iii	Ⓢ iii

RECAPITULATION

Theme	Transition		Second Key	Close	
<i>Vordersatz</i>	<i>Forts. 1</i>	<i>Forts. 2</i>	<i>Epilog 1</i>	<i>Epilog 2</i>	
I	Ⓟ		ESC I	Ⓢ I	Ⓣ

Example 82. Platti: Sonata in D, Allegro

Allegro
Vordersatz

5 *Fortspinnung 1* *Fortspinnung 2*

9 *Epilog*
Moment of Dominant stability ----- Cadence
M/C

13 *Epilog 2 (petite reprise)*
C T

4 *Vordersatz*
P

8 *Fortspinnung 2* *Epilog*

Example 82. Continued

The musical score is presented in five systems, each with a grand staff (treble and bass clefs). The key signature is D major (two sharps). The systems are labeled as follows:

- System 1:** Measures 12-15. Features a trill (*tr*) in measure 12, a triplet of eighth notes in measure 13, another trill (*tr*) in measure 14, and the section title *Vordersatz* in measure 15.
- System 2:** Measures 16-19. Features a piano (*P*) marking in measure 18 and the section title *Fortspinnung 1* in measure 19.
- System 3:** Measures 20-23. Features the section title *Fortspinnung 2* in measure 23.
- System 4:** Measures 24-27. Features a mezzo-crescendo (*M/C*) marking in measure 25, a trill (*tr*) in measure 26, and the section title *Cadence* in measure 27.
- System 5:** Measures 28-31. Features a trill (*tr*) in measure 28, a *C* (Crescendo) marking in measure 29, the section title *Epilog 2 (petite reprise)* in measure 30, and a *T* (Tutti) marking in measure 31.

D. Other Symmetries

During the period between the gradual rejection of the Corellian model of presentation and symmetry and the onset of the Cherellian model there were many experiments in binary designs. One of them, the binary ritornello design, gained some traction for a time; others were unique experiments. This section briefly acknowledges those experiments.

Binary Ritornello Form

The default design for early eighteenth-century concertos was the *Ritornello* form, instigated by Gabrielli but made familiar by Vivaldi concertos.⁴ The form was named for the short thematic statement that returns to introduce a new section of the concerto, known as the *Ritornello*. If we look at the analysis of the foregoing Chelleri sonata, substitute “*Ritornello*” for the word “Theme” and “*Fortspinnung*” for the word “Transition” we arrive at a blueprint for a form I call the “Binary *Ritornello*” (Figure 39.)

⁴ Richard Taruskin, *Oxford History of Western Music, Volume 1: Music from the Earliest Notations to the Sixteenth Century*. Oxford University Press. p. 786

Figure 39. Binary *Ritornello* Form

PRESENTATION

<i>Ritornello</i>	<i>Fortspinnung</i>	New Key	Close	
I	Ⓟ	V	Ⓞ V	Ⓣ

DEVELOPMENT

<i>Ritornello</i>	<i>Fortspinnung</i>	New Key	Close
I		iii	

RECAPITULATION

<i>Ritornello</i>	<i>Fortspinnung</i>	New key	Close
I		I	I

The difference between Cherelli’s sonata and a binary *ritornello* is found in the music between the Theme/*Ritornello* and the cadence. In the Binary *Ritornello*, this section is *Fortspinnung*. In a presentation, this *Vordersatz/Fortspinnung/Epilog* structure – or Theme/Y-material/cadence – produces a Top & Tails presentation. Repeating this same procedure for the development and recapitulation, results in a binary *ritornello*. In addition to his more fully integrated sonatas, Cherelli wrote many binary *ritornellos*. Here is an example from Sonata number 2, in F:

Example 83. Chelleri: Sonata in F, Allegro

PRESENTATION
Allegro
Vordersatz

Fortspinnung *Epilog*

8 *Fortspinnung 2* *Epilog*

15 *Epilog*

DEVELOPMENT
Vordersatz

21 *Epilog*

29

Example 83. Continued

The musical score consists of four systems of piano music. The first system, labeled 'RECAPITULATION' and 'Vordersatz', begins at measure 35. The second system starts at measure 43. The third system starts at measure 50. The fourth system, labeled 'Epilog', starts at measure 57. The music is written in G minor and 3/4 time, featuring a mix of eighth and sixteenth notes with some trills.

In this piece, each section is introduced by the same 4-measure theme, the *Ritornello*. The presentation and recapitulation also share the same closing 4-measure *Epilog*. The transitional material is Y material. Although this *Fortspinnung* is derived from the same thematic material, it is handled differently each time. It is more in the manner of an episode than a transition. The degree of translational symmetry is significantly lower than in the other forms discussed in this chapter.

Although Cherelli has been credited with the open V ending, I have found a few examples that predate him, such as the work below by Somis (Example 84). This piece has characteristics of Binary *Ritornello* but in a 2-cadence guise. After an opening period that ends on V (m. 8) the music continues in the dominant without cadential articulation until the ① cadence (m.19). Although there is a closing section implied by the caesura at

m. 15, there is no strong cadential definition of this boundary. As in the opening, the music simply continues at the level in which the previous section ended. The development begins as the opening did, but continues to the mediant, finally reaching a cadence in m. 43. The recapitulation mirrors the presentation, but it is no cut and paste job. The transitional material (mm. 52-59) successfully imitates the transitional material in the presentation in terms of thematic material, despite the fact that the harmonic trajectory and, indeed, the direction of the phrase, is reversed. This makes for a much more integrated binary *ritornello* than the Cherelli example above.

Example 84. Somis: Organ Sonata in Bb

Presentation

Development

Recapitulation

Point of tonal adjustment
iii

Alberti's Op.1 Sonatas represent a short-lived preoccupation of early 1720s and 30s: finding ways of making the transitional material equally thematic as the opening and closing sections. Alberti's solution in his opening Allegro from his Sonata in F is repetition (Ex. 85). As we have seen in the previous chapter, Alberti breaks the harmonic journey from tonic to dominant into multiple steps: the tonic region, the V in I region, the

V/V region, cadential evasion region, minor feint region, more cadential evasion, then resolution. Each region receives its own thematic material, which is usually repeated. On the other side of the double bar, after a very brief restatement of the opening in the dominant, the recapitulation begins. On the whole, Alberti's recapitulation is a literal restatement of the opening material, save for a region of Y material at measures 30-34. The role of the Y material is transitional: to make the harmonic adjustment that allows the remainder of the music to play out transposed down a fifth.⁵ The resultant form is one that has the translational symmetry and harmonic adjustments of sonata form, without the stable second key area of sonata form. Alberti's example was not widely adopted by composers – although we will see a similar procedure in C.P.E. Bach's movement below.

– We can speculate why it remained a minority interest. The challenge of composing a thematic transitional passage, compared to that of writing a theme in a stable key area, is great. If it is still necessary in the recapitulation to write a transition – a transition within a transition, as it were – why not simply write a theme in the new key? This solution, would not become common until the 1760s.

Example 85. Alberti Sonata in F, Allegro Moderato

PRESENTATION
Allegro Moderato
 Tonic region

4 V in I region

7 V/V region

10 Cadential evasion

13

16 (minor feint) Cadential evasion

19 Resolution!

V_2 /ii ii₆ V_2 /V V₆ v₆ C: V₇ /V /ii V $\frac{7}{3} \frac{6}{4}$
 ii_5^6 vii₄⁶ i₄⁶ $\flat VI$ v $\frac{6}{4} \frac{5}{3} \frac{7}{4}$ $\frac{6}{4}$ ii₆ V $\frac{5}{3} \frac{6}{4} \frac{5}{3}$
 $\frac{6}{4} \frac{5}{3} \frac{6}{4}$ $\frac{5}{3}$ $\frac{6}{4} \frac{5}{3}$ vii⁶/V V₇
 $\frac{6}{4} \frac{5}{3} \frac{6}{4}$ V /V V₇ $\frac{6}{4} \frac{5}{3}$ I (T)

Example 85. Continued

The musical score is presented in two systems, each with a grand staff (treble and bass clefs). The first system is labeled "DEVELOPMENT" and contains measures 18 through 24. The second system is labeled "RECAPITULATION" and contains measures 25 through 44. Measure numbers are placed at the beginning of each system. The key signature is one flat (B-flat). The score includes various musical notations such as slurs, trills (marked with "tr"), and dynamic markings. A section starting at measure 29 is labeled "Y material" and is enclosed in a dashed box. A section starting at measure 35 is labeled "Cadential evasion" and is also enclosed in a dashed box. A section starting at measure 41 is labeled "(minor feint)". The piece concludes with a double bar line at the end of measure 44.

Type-2 Symmetries

Type-2 symmetries are the only ones not seen at the beginning of the century, and remained rare for some time. The reason for this is easy to determine. A type-2 design, which has the restatement of the second key area at the tonic as its defining characteristic, requires a stable second key area. As we have seen, second key areas in the first half of the eighteenth century were usually brief closing areas. Although there was an ongoing trend to expand the closing areas, most were not sufficiently lengthy to sustain a type-2 design.

An early example of a true type-2 is found in Somis's sonata in G (Example 86). This example is odd in that it triply cut and pasted. The first cut-and-paste is the development section, in which the entire presentation plays out at the dominant level (mm. 25-48) before a brief transitional passage at mm. 49-52 restores the tonic. The second cut-and-paste, is of the second key area, this time transposed up a fourth so that it appears in the tonic (mm. 33-68). A final cut-and-paste is of the *Epilog* (m. 65-70), this time transposed down the octave. This final cut-and-paste creates a *petite reprise* that, in Schenkerian terms, returns the melody to the obligatory register.

Example 86. Type-2 Symmetry in Somis: Sonata in G

Vordersatz

Fortspinnung I

Epilog

Development/Episode

Epilog

transitional material

The musical score is written for piano in G major, 3/4 time. It consists of six systems of two staves each. The first system is labeled 'Vordersatz' and ends with a circled 'P'. The second system is labeled 'Fortspinnung I' and starts at measure 9. The third system is labeled 'Epilog' and starts at measure 16, ending with a circled 'T'. The fourth system is labeled 'Development/Episode' and starts at measure 23. The fifth system is labeled 'Epilog' and starts at measure 33. The sixth system is labeled 'transitional material' and starts at measure 39, ending with a circled 'V'.

Example 86. Continued

The musical score consists of three systems of piano music. The first system, labeled "Recap", begins at measure 53 and features a rhythmic pattern of eighth notes in the right hand and quarter notes in the left hand. The second system, labeled "Epilog", starts at measure 60 and shows a more melodic line in the right hand with sustained notes in the left hand. The third system, labeled "petite reprise", begins at measure 67 and concludes with a double bar line and repeat dots. The key signature is one sharp (F#) and the time signature is 4/4.

Often pieces that seem at first glance to be type-2s are actually top & tails pieces. The recapitulation in the *Aria Larghetto* from Platti's Sonata in A minor begins with a restatement of the opening (Example 87). The repetition of the closing material is quite large, extending from before the closing material proper (mm. 13-17) to include mm. 10-12. But the Y material between mm. 26-33 is substantial. This and many pieces like them are really top & tails pieces.

Example 87. Platti: Sonata in A minor, *Aria Larghetto*

Initially, Roman's Flute Sonata in F seems to be akin to the later variety of type-2s, where only the second key area of the presentation returns in the tonic (Example 88). But in Roman's 2-cadence example there is no second key area. Rather, there is an extended standing-on-the-dominant section (mm. 17-24) that, in this context, fulfills the role of a closing section. This closing section represents one-third of the exposition and is even longer in the recapitulation, where it includes a *petite reprise*. The significance of this closing section is further bolstered by the insertion of a cadenza immediately before

it in the recapitulation. However, the lack of tonal stability in the closing section precludes a type-2.

Example 88. Roman: Sonata in G, Allegro

Allegro

This musical score is for the first movement of Roman's Sonata in G, marked Allegro. It is written in G major and 2/4 time. The score is presented in a grand staff format, with a treble clef on the upper staff and a bass clef on the lower staff. The key signature has one sharp (F#). The piece begins with a treble clef and a 2/4 time signature. The first system (measures 1-8) shows a rhythmic pattern of eighth and sixteenth notes in the treble, with a bass line of quarter notes. The second system (measures 9-16) continues the melodic development in the treble, with a bass line of quarter notes and rests. The third system (measures 17-24) features trills in the treble and a bass line of quarter notes. The fourth system (measures 25-30) shows a more complex rhythmic pattern in the treble, with a bass line of quarter notes. The fifth system (measures 31-37) continues the melodic line in the treble, with a bass line of quarter notes. The sixth system (measures 38-45) features a more complex rhythmic pattern in the treble, with a bass line of quarter notes. The seventh system (measures 46-54) features trills in the treble and a bass line of quarter notes. The eighth system (measures 55-58) concludes the piece with a final cadence in the treble and a bass line of quarter notes. The piece ends with a double bar line.

9

17

25

31

38

46

55 *Petite reprise*

C.P.E. Bach's *Vivace* from the Prussian Sonata in F combines Alberti's device of thematic transitions with type-2 symmetry (Example 89). This is a 2-cadence piece. The opening 8 measures define the tonic key area and the next 8 measures (mm. 9-16) move toward the dominant pole. Two transitional *Fortspinnung* passages follow (mm. 19-24 and 25-32), which mediate the space between the subdominant and dominant of the new key, and a cadential passage (mm. 33-41).

Example 89. C.P.E. Bach: Sonata in F, 2-Cadence Type-2 Binary, Part 1

The musical score for C.P.E. Bach's *Vivace* is presented in three systems. The first system (measures 1-16) features a circled 'P' at measure 11. The second system (measures 17-26) begins at measure 14. The third system (measures 27-41) includes a circled 'T' at measure 41 and a 'M/C?' marking at measure 33. Trills are marked with 'tr' above notes in measures 29 and 30.

On the other side of the double bar, the development begins with a restatement of the opening. However, rather than achieving a cadence in the dominant, the music shifts, repurposing the opening material from a thematic statement to a transitional one.

Through a series of sequences, the music moves toward the tonic and achieves a weak IAC in the tonic at m. 57.

Example 90. C.P.E. Bach Sonata in F, 2-Cadence Type-2 Binary. Part 2

After 8 measures in the tonic but do not cadence there (mm. 57-64), we arrive at the true recapitulation of the two *Fortspinnung* and cadential passages, transposed so that they lead to the tonic in the final measure. This piece feels like a type-2 by dint of the sheer length of the material that reappears in the recapitulation. But the more familiar type-2 design will have to wait until the advent of distinctive stable key areas, which occurs sometime after the 1750s.

BIBLIOGRPHY

- Abert, H. "Joseph Haydns Klavierwerke." *Zeitschrift Für Musikwissenschaft* li (1919): 553–73.
- Adams, Douglas. *The Hitchhikers: Guide to the Galaxy*. New York: Ballantine Books, 2005.
- Alberti, Domenico. *Sonatas*. 1768.
- Alberti, Domenico. *VIII sonate per cembalo: opera prima*. Mytholmroyd, Hebden Bridge, UK: Peacock Press, 2006.
- Aldrovandini, Giuseppe Antonio Vincenzo, and Estienne Roger. *Sonate à Tre Due Violini e Violoncello Obligato col Basso per il Organo ; Opera Quinta*. Amsterdam: Roger, 1710.
- Andrews, Harold Lee. *Tonality and Structure in the First Movements of Haydn's Solo Keyboard Sonatas*. Ann Arbor: University Microfilms, 1968.
- Andrews, Harold Lee. "The Submediant in Haydn's Development Sections." *Haydn Studies: Proceedings of the International Haydn Conference, Washington, D. C., 1975*, New York: Norton, 1981.
- Ayres, Philip. "Popes Epistle to Burlington: The Vitruvian Analogies," *Studies in English Literature, 1500-1900* 30, no. 3, (1990): 429
- Bach, Carl Philipp Emanuel. *Sei sonate per cembalo: opera II da*. Norimberga: Haffner, 1744.
- Bach, Johann Christian. *Die Sinfonik Johann Christian Bachs. Ein Beitrag Zur Entwicklungsgeschichte Der Sinfonie Von 1750-80. Von Fritz Tutenberg. [With a "Thermatischer Katalog Der Bachschen Sinfonien."]*. Berlin: Wolfenbüttel, 1928.
- Barford, P. "Formalism in Clementi's Pianoforte Sonatas." *Monthly Musical Record* xxxii (1952): 205, 238.
- Barford, Philip. *The Keyboard Music of C.P.E. Bach, Considered in Relation to His Musical Aesthetic and the Rise of the Sonata Principle*. New York: October House, 1965.
- Bartha, D. "Song Form and the Concept of "Quatrain." In *Haydn Studies*, 353-355. N.Y.: Norton, 1981.
- Beach, D. "A Recurring Pattern in Mozart's Music." *Journal of Music Theory* xxvii (1983): 1-30.

- Bent, Ian. *Music Analysis in the Nineteenth Century*. Cambridge: Cambridge University Press, 1994.
- Benton, R. "Form in the Sonatas of Domenico Scarlatti." *Musical Review* xlii (1952): 264-75.
- Beste, Thomas. *The Sonata*. Cambridge, UK: Cambridge University Press, 2011.
- Bonds, Mark Evan. *Wordless Rhetoric: Musical Form and the Metaphor of the Oration*. Cambridge, Mass.: Harvard University Press, 1991.
- Brown, A.P. "The Structure of the Exposition in Haydn's Keyboard Sonatas." *Musical Review* xxxvi (1975): 102-29.
- Brown, Peter A. "Approaching Musical Classicism: Understanding Styles and Style Change in Eighteenth-Century Instrumental Music." *College Music Symposium* 20, no. 1 (1980): 7-48.
- Broyles, Michael. "The Two Instrumental Styles of Classicism." *Journal of the American Musicological Society* 36, no. 2 (1983): 210-42.
- Budday, Wolfgang. *Grundlagen Musikalischer Formen Der Wiener Klassik: An Hand Der Zeitgenössischen Theorie Von Joseph Riepel Und Heinrich Christoph Koch Dargestellt an Menuetten Und Sonatensätzen (1750-1790)*. Kassel: Bärenreiter, 1983.
- Buelow, George J., and Johann David Heinichen. *Thorough-bass Accompaniment According to Johann David Heinichen*. Berkeley: University of California Press, 1966.
- Buelow, George J., and Hans Joachim Marx. *New Mattheson Studies*. Cambridge: Cambridge University Press, 1983.
- Bull, John, Anthony Lewis, Thurston Dart, Francis Cameron, and John Steele. *Keyboard Music*. London: Published for the Royal Musical Association by Steiner and Bell, 1960.
- Burnham, S. "The Role of Sonata Form in A.B. Marx's Theory of Form." *Journal of Music Theory* xxxiii (1989): 247-72.
- Cannon, Beekman C. *Johann Mattheson; Spectator in Music*. New Haven: Archon Books, 1968.
- Caplin, William Earl. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*. New York: Oxford University Press, 1998.
- Cavalli, Francesco, Giacinto Andrea Cicognini, and Alessandro Stradella. *Il novello Giasone*. Milano: Ricordi, 2013.

- Carrow, Burton Stimson. *The Relationship between the Mannheim School and the Music of Franz Beck, Henri Blanchard and Pierre Gaveaux*. New York: Dissertation: New York University, 1956.
- Charles, Thibaud, Jean Beck, and Louise Beck. *Le Manuscrit du roi, fonds français no. 844 de la Bibliothèque nationale*. New York: Broude, 1970.
- Chelleri, Fortunato, and Vassilis Vavoulis. *Keyboard Music*. Madison: A-R Editions, 2000.
- Churgin, Bathia. "Francesco Galeazzi's Description (1796) of Sonata Form." *Journal of the American Musicological Society* xxi (1968): 181-99.
- Churgin, Bathia. "The Development Section in Early Viennese Symphonies: A Re-valuation." *Music Review* 24 (1963): 13.
- Churgin, Bathia. "The Recapitulation in Sonata-Form Movements of G. B. Sammartini and Early Haydn Symphonies." *Internationaler Joseph Haydn Kongress, Wien, 1982*, 136. Munich: Henle, 1986.
- Churgin, Bathia. "Beethoven and The New Development-Theme in Sonata-Form Movements." *Journal of Musicology* 16, no. 3 (1998): 323-43.
- Clérambault, Louis-Nicolas, Paul Brunold, and Thurston Dart. *Pièces de clavecin. Les Remparts*, Monaco: Éditions de l'Oiseau Lyre, 2004.
- Cone, Edward T. *Musical Form and Musical Performance*. New York: W.W. Norton, 1968.
- Corelli, Arcangelo, Hans Oesch, and Arcangelo Corelli. *Historisch-kritische Gesamtausgabe der musikalischen Werke*. Laaber: Laaber-Verlag, 1976.
- Corelli, Arcangelo. *[XII] sonate a violino e violone o cimbalo : op. 5. P. 2 P. 2*. [Roma]: Pietra Santa, 1700.
- Czerny, Carl. *School of Practical Composition: Complete Treatise on the Composition of All Kinds of Music, Both Instrumental and Vocal Together with a Treatise on Instrumentation, in Three Volumes; Opus 600*. New York: Da Capo Press, 1979.
- Dall'Abaco, Evaristo Felice, and Evaristo Felice Dall'Abaco. *Zwölf Solosonaten für Violine, Violoncell und Begleitung, aus Op. 1, aus Op. 4*. Leipzig: Breitkopf & Härtel, 1950.
- Dalhaus, Carl. "Der Rhetorische Formbegriff H. Chr. Kochs Und Die Theorie Der Sonatenform." *MAW* xxxv (1978): 155-61.
- Dalhaus, Carl. "Dritte Themen" in Clementi's Sonaten? Zur Theorie Der Sonatenform Im 18. Jahrhundert." *Analecta Musicologica* No. 21 (1982): 444-61.

- Dalhaus, Carl. *Analysis and Value Judgement*. New York: Pendragon Press, 1983.
- Dalhaus, Carl. "Ästhetische Prämissen Der "Sonatenform" Bei Adolf Bernhard Marx." *Archiv Für Musikwissenschaft* xli (1984): 73-85.
- Dinslage, Patrick. *Studien Zum Verhältnis Von Harmonik, Metrik Und Form in Den Klaviersonaten Ludwig Van Beethovens*. München: E. Katzbichler, 1987.
- Dunsby, Jonathan. 1987. "The Formal Repeat". *Journal of the Royal Musical Association*. 112, no. 2: 196-207.
- Dürrenmatt, Hans. *Die Durchführung Bei Johann Stamitz (1717-1757): Beiträge Zum Problem Der Durchführung Und Analytische Untersuchung Von Ersten Sinfoniesätzen*. Bern: P. Haupt, 1969.
- Feil, Arnold. *Satztechnische Fragen in Den Kompositionslehren Von F.E. Niedt, J. Riepel Und H. Chr. Koch*. Heidelberg: ?, 1955.
- Fillion, Michelle. "Sonata-Exposition Procedures in Haydn's Keyboard Sonatas." In *Haydn Studies*, 475-81. New York: Norton, 1975.
- Fillion, Michelle. *The Accompanied Keyboard Divertimenti of Haydn and His Viennese Contemporaries (c. 1750-1780)*. Ithaca: Diss. Cornell University, 1982.
- Fischer, W. *Zur Entwicklungsgeschichte des Wiener klassischen Stils: Versuch einer vergleichenden Charakteristik des altklassischen und Wiener klassischen Instrumentalstils*. Oesterreich: [publisher not identified], 1915.
- Galeazzi, Francesco, Deborah Burton, and Gregory W. Harwood. *Theoretical-Practical Elements of Music, Parts III and IV*. Urbana: University of Illinois Press, 2012.
- Gibbons, Orlando, and Margaret H. Glyn. *Complete Keyboard Works in Five Volumes*. London: Stainer and Bell, 1925.
- Giustini, Lodovico. *Sonate da cimbalo di piano, e forte ... Opera prima*. Florence: [publisher not identified], 1732.
- Göllner, Marie Louise. *The Early Symphony: 18th-century Views on Composition and Analysis*. Hildesheim: G. Olms, 2004.
- Graybill, R. "Sonata Form and Reicha's *Grande Coupe Binaire* of 1814." *Theoria* iv (1989): 89-105.
- Gwilt, R. "Sonata-Allegro Revisited." *Theory Only* vii, no. 5-6 (1984): 3-33.
- Hadow, W. H. *Sonata Form*. San Bernadino, CA: University of California Libraries, 2013.

- Heimes, K. "Tonal and Thematic Determinants of Form in the Eighteenth-Century Sonata: An Evaluation of Two Modes of Synoptic Comprehension." *South African Journal of Musicology* lii (1983): 1–19.
- Heimes, K.F. "The Ternary Sonata Principle before 1742." *Acta Musicologica* xiv (1973): 222–48.
- Helfert, V. "Zur Entwicklungsgeschichte Der Sonatenform." *Archiv Für Musikwissenschaft* vii (1925): 117-46.
- Hepokoski, J., and W. Darcy. "The Medial Caesura and its Role in the Eighteenth Century Sonata Exposition." *Music Theory Spectrum* X (1997): 115–54.
- Hepokoski, James. "MTO 16.2: Hepokoski, First Movement of Beethoven's "Tempest" Sonata." Music Theory Online. Accessed May 12, 2013.
<http://www.mtosmt.org/issues/mto.10.16.2/mto.10.16.2.hepokoski.html>.
- Hepokoski, James A., and Warren Darcy. *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-century Sonata*. Oxford: Oxford University Press, 2006.
- Herold, Johann Theodor. *Harmonia quadripartita*. 1702.
- Hogwood, Christopher. *Balli per cembalo: 90 keyboard pieces from early Italian manuscripts*. Launton, Oxfordshire: Edition HH, 2007.
- Hunter, M. "Haydn's Sonata Form Arias." *Current Musicology* 37–8 (1984): 19-32.
- Johannes, and Albert Seay. *Concerning Music (De Musica)*. Colorado Springs: [Colorado College Music Press], 1974.
- Kalib, Sylvan Sol, and Heinrich Schenker. *Thirteen Essays from the Three Yearbooks, Das Meisterwerk in Der Musik, by Heinrich Schenker; an Annotated Translation*. Evanston, Illinois: Northwestern University, 1973.
- Kamien, R. "Style Change in the Mid-18th-Century Keyboard Sonata." *Journal of the American Musicological Society* xix (1966): 37-58.
- Keller, Hermann, and Carl Parrish. *Thoroughbass Method: With Exerpts from the Theoretical Works of Praetorius, Niedt, Telemann, Mattheson, Heinichen, J.S. & C.P.E. Bach, Quantz, and Padre Mattei, and Numerous Examples from the Literature of the 17th and 18th Centuries*. New York: Norton, 1965.
- Kendall, Alan. *Vivaldi*. London: Chappell, 1978.

- Kirkpatrick, Ralph. *Domenico Scarlatti*. Princeton: Princeton University Press, 1953.
- Koch, Heinrich Christoph. *Introductory essay on composition. (Pt. 2), Sections 3 and 4. (Pt. 2), Sections 3 and 4*. London: Yale University Press, 1984.
- Krieger, Johann. *Johann Kriegers Sechs musicalische Partien, bestehende in Allemanden, Courenten, Sarabanden, Doublen und Giguen nebst eingemischten Bouréen, Minuetten, und Gavotten, ballen Liebhabern des Claviers auf einem Spinet oder Clavichordio zu spielen*. Nürnberg: W.M. Endter, 1697.
- Larsen, Jens Peter. *Handel, Haydn, and the Viennese Classical Style*. Ann Arbor, Mich.: UMI Research Press, 1988.
- Larsen, Jens Peter. "Some Observations on the Development and Characteristics of Vienna Classical Instrumental Music." In *Handel, Haydn, and the Viennese Classical Style*, 115-39. Ann Arbor, Mich.: UMI Research Press, 1988.
- Larsen, Jens Peter. "Sonata Form Problems." In *Handel, Haydn, and the Viennese Classical Style*, 269-80. Ann Arbor, Mich.: UMI Research Press, 1988.
- Larsen, Jens Peter. "Towards an Understanding of the Development of the Viennese Classical Style." In *Handel, Haydn, and the Viennese Classical Style*, 250-62. Ann Arbor, Mich.: UMI Research Press, 1988.
- Ulrich Krämer. Ann Arbor: UMI Research Press, 1988.
- Longyear, R.M. "The Minor Mode in Eighteenth-Century Sonata Form." *Journal of Music Theory* xv (1971): 182-229.
- Longyear, R.M. "Binary Variants of Early Classic Sonata Form." *Journal of Music Theory* xiii (1969): 162-85.
- Macdonald, H. "To Repeat or Not to Repeat." *Proceedings of the Royal Musical Association* cxi (1984): 121-37.
- Mandel-Yehuda, Sarah. "The Symphonies of Antonio Brioschi." Min-Ad: Isreal Studies in Musicology. Accessed May 11, 2013. http://www.biu.ac.il/hu/mu/ims/Min-ad/vol_1/brioschi.htm#T1.
- Marcello, Benedetto. *Six Sonatas For Violoncello and Continuo*. Boca Raton: Masters Music, n.d.
- Marx, Adolf Bernhard, and Herrman S. Saroni. *Theory and Practice of Musical Composition*. 5th American ed. New York: Mason Brothers, 1854.

- Marx, Adolf Bernhard, and Scott G. Burnham. *Musical Form in the Age of Beethoven Selected Writings on Theory and Method*. Cambridge, U.K.: Cambridge University Press, 1997.
- Marx, Adolf Bernhard. *The Music of the Nineteenth Century and Its Culture*. Cambridge: Cambridge University Press, 2009.
- Marx, Adolf Bernhard, and George Macirone. *General Musical Instruction*. London: Cambridge University Press, 2012.
- Mattheson, Johann, and Ernest Charles Harriss. *Johann Mattheson's Der Vollkommene Capellmeister: A Revised Translation with Critical Commentary*. Ann Arbor, Mich.: UMI Research Press, 1981.
- Molter, Johann Melchior. *Sonata á 3*. Manuscript Score. From *Digitale Sammlung der Badischen Landesbibliothek Karlsruhe*. <https://digital.blb-karlsruhe.de/blbihd/content/titleinfo/211513> (accessed May 27, 2019)
- Moortele, Steven. *Two-dimensional Sonata Form and Cycle in Single-movement Instrumental Works by Liszt, Strauss, Schoenberg, and Zemlinsky*. Leuven: Leuven University Press, 2009.
- Mozart, Leopold, and Hans Kann. *Notebook for Nannerl = Nannerl-Notenbuch*. [Vienna?]: Universal Edition, 1980.
- Neuman, F. "Der Typus Des Stufenganges Der Mozart'schen Sonatendurchführung." *Mozart-Jahrbuch?* (1959): 247-61.
- Newman, William S. "The Recognition of Sonata Form by Theorists of the 18th and 19th Centuries." *Papers of the American Musicological Society?* (1941): 21-9.
- Newman, William Stein. *The Sonata*. Chapel Hill: University of North Carolina Press, 1959.
- Nichelmann, Christoph, and Laura Cerutti. *Sei sonate per clavicambalo. Prima serie Prima serie*. Padova: Aremlin Musica, 2003.
- Palladio, Andrea, Richard Boyle Cork, and Paul Fourdrinier. *Fabbriche antiche diseguate da Andrea Palladio Vicentino e date in luce da Riccardo conte di Burlington*. 1730.
- Pincherle, Marc. *Vivaldi, Genius of the Baroque*. New York: W.W. Norton, 1957.
- Platti, Giovanni Benedetto. *Sonatas, Harpsichord: Zwoelf Sonaten Für Cembalo Oder Klavier*. Leipzig: Breitkopf und Haertel, 1957.

- Pope, Alexander. *Of Taste, an Epistle to the Right Honourable Richard Earl of Burlington. Occasion'd by His Publishing Palladio's Designs of the Baths, Arches, Theatres, &C. of Ancient Rome. By Mr. Pope.* [Edinburgh]: Printed in the year, 1732.
- Quantz, Johann Joachim, and Arthur Henry Christmann. *Johann Joachim Quantz on the Musical Practices of His Time.* 1950.
- Ratner, Leonard. "Harmonic Aspects of Classic Form." *Journal of the American Musicological Society* 11-12-13, no. 1 (1948): 45-46.
- Ratner, Leonard G. *Classic Music: Expression, Form, and Style.* New York: Schirmer Books, 1980.
- Reicha, Anton, and Edwin S. Metcalf. *Treatise on Melody Considered Apart from Its Relations to Harmony, Followed by Observations upon the Art of Accompanying the Melody with Harmony When the First Ought to Predominate ...* Chicago, Ill.: E. S. Metcalf &, 1893.
- Rice, John A. *The symphony in France, 1730-1790. The Symphony 1720-1840. a Comprehensive Collection of Full Scores in Sixty Volumes. Series D, France and the Low Countries. I.* New York [etc.]: Garland, 1984.
- Riepel, Joseph, and John Walter Hill. *Joseph Riepels Theory of Metric and Tonal Order: Phrase and Form: A Translation of His Anfangsgründe Zur Musicalischen Setzkunst, Chapters 1 and 2 (1752/54, 1755).* Hillsdale, NY: Pendragon Press, 2014.
- Ritzel, Fred. *Die Entwicklung Der "Sonatenform" Im Musiktheoretischen Schrifttum Des 18. Und 19. Jahrhunderts.* Wiesbaden: Breitkopf & Härtel, 1968.
- Roman, Johan Helmich. *Sonate a Flauto Traverso, Violone E Cembalo:* Bandhagen, Sweden: Autographus Musicus, 1977.
- Rosen, Charles. *Sonata Forms.* New York: W. W. Norton, 1980.
- Rosen, Charles. *The Classical Style: Haydn, Mozart, Beethoven.* Expanded ed. New York: W. W. Norton, 1997.
- Scheibe, Johann Adolph, and Karsten Mackensen. *Ueber Die Musikalische Composition.* Kassel: Bärenreiter, 2006.
- Schenker, Heinrich, and Ernst Oster. *Free Composition = (Der Freie Satz): Volume III of New Musical Theories and Fantasies.* New York: Longman, 1979.
- Schmalfeldt, J. "Towards a Reconciliation of Schenkerian Concepts with Traditional and Recent Theories of Form." *Music Analysis* x (1991): 233-87.

- Schmalzriedt, S. "Charakter Und Drama: Zur Historischen Analyse von Haydnschen Und Beethovenschen Sonatensätzen." *Archiv Für Musikwissenschaft* xliii (1985): 37-66.
- Schoenberg, Arnold, and Gerald Strang. *Fundamentals of Musical Composition*. New York: St. Martin's Press, 1967.
- Schoenberg, Arnold, and Leonard Stein. *Structural Functions of Harmony*. Rev. ed. New York: W.W. Norton, 1969.
- Schoenberg, Arnold. *Theory of Harmony*. Berkeley: University of California Press, 1978.
- Schoenberg, Arnold, Patricia Carpenter, and Severine Neff. *The Musical Idea and the Logic, Technique, and Art of Its Presentation*. New York: Columbia University Press, 1995.
- Shamgar, B. "On Locating the Retransition in Classic Sonata Form." *Musical Review* xlii (1981): 130-43.
- Sly, Gordon Cameron. *Keys to the Drama Nine Perspectives on Sonata Forms*. Farnham, England: Ashgate, 2009.
- Somis, Giovanni Lorenzo, and Michelangelo Abbado. *Sonate da camera opera II: per violino e violoncello o cembalo*. Milano: Suvini Zerboni, 1976.
- Stravinsky, Igor. *Poetics of Music in the Form of Six Lessons*. Cambridge, Mass: Harvard University Press, 1982.
- Stevens, Jane R. "Georg Joseph Vogler and The "Second Theme" In Sonata Form: Some 18th-Century Perceptions Of Musical Contrast." *Journal of Musicology* 2, no. 3 (1983): 278-304.
- Talbot, Michael. *Vivaldi*. London: Dent, 1978.
- Tamplin, Ronald. *Vivaldi*. Exeter, Eng.: University of Exeter, 1968.
- Taylor, Clare. *The Design, Production and Reception of Eighteenth-century Wallpaper in Britain*. London: Routledge, 2018.
- Telemann, Georg Philipp. *Musikalische Werke*. Kassel: Barenreiter, 2009.
- Tobin, J. Raymond. *Mozart and the Sonata Form*. New York: Da Capo Press, 1971.
- Todd, R. Larry. "From the Memoirs of Adolf Bernhard Marx." In *Mendelssohn and His World*, 206-220. Princeton, N.J.: Princeton University Press, 1991.
- Tovey, Donald. "Some Aspects of Beethoven's Art-Forms." *Music and Letters* lii (1949): 131-55.

- Tovey, Donald Francis. *Essays in Musical Analysis*, London: Oxford University Press, H. Milford, 193539.
- Tovey, Donald Francis, and Hubert J. Foss. *Essays in Musical Analysis; Chamber Music*, London: Oxford University Press, 1944.
- Tovey, Donald Francis, and Hubert James Foss. *Beethoven*. London: Oxford University Press, 1945.
- Tovey, Donald Francis. *The Forms of Music*. New York: Meridian Books, 1956.
- Vinton, J. "The Development Section in Early Viennese Symphonies: A Re-evaluation." *Musical Review* xxiv (1963): 13-22.
- Vivaldi, Antonio. *Sonate a Violino E Basso per Il Cembalo ... Opera Seconda*. Amsterdam: E. Roger, 1709.
- Vivaldi, Antonio. *Sonate a violino e basso per il cembalo: opera seconda*. New York: Performers' Facsimiles, 1994.
- Wagner, G. "Anmerkungen Zur Formtheorie Heinrich Christoph Kochs." *Archiv Für Musikwissenschaft* xli (1984): 86-112.
- Webster, James. "Binary Variants of Sonata Form in Early Haydn Instrumental Music." In *Joseph Haydn: Bericht über Den Internationalen Joseph Haydn Kongress, Wien, Hofburg 5-12 September 1982*, 127-135. Munich: G. Henle, 1986.
- Westphal, Kurt. *Der Begriff Der Musikalischen Form in Der Wiener Klassik Versuch E. Grundlegung D. Theorie D. Musikal. Formung*. 2. Aufl. ed. Giebing Üb. Prien Am Chiemsee: Musikverl. Katzibichler, 1971.
- Willheim, Imanuel. *Johann Adolph Scheibe, German Musical Thought in Transition*. Chicago: Dissertation, University of Illinois, 1963.
- Winter, Robert S. "The Bifocal Close and The Evolution Of The Viennese Classical Style." *Journal of the American Musicological Society* 42, no. 2 (1989): 275-337.
- Wolf, E.K. "The Recapitulations in Haydn's London Symphonies." *Musical Quarterly* lii (1966): 1989.
- Wolf, Eugene K. *The Symphonies of Johann Stamitz: A Study in the Formation of the Classic Style with a Thematic Catalogue of the Symphonies and Orchestral Trios*. Utrecht: Bohn, Scheltema & Holkema, 1981.

Wright, Alice Kepler. *The Chamber Music of the Mannheim School of Composers*. South Hadley, Massachusetts, 1941.