What Is a Cadence?

Theoretical and Analytical Perspectives on Cadences in the Classical Repertoire

Markus Neuwirth
Pieter Bergé (eds)

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The Cadence in the Partitura Tradition

Felix Diergarten

Mille viae ducunt hominem per saecula Romam

According to a Latin proverb, a thousand roads lead men forever to Rome. Of even greater importance for music history might be the fact that for centuries a thousand roads have led musicians back home, and that these musicians imported to their homelands the musical ideas and concepts they had been exposed to in Rome. In the 1680s, for example, Georg Muffat, a young organist in his 30s, travelled back northwards across the Alps towards Salzburg, where he was employed at the time. His Italian journey had given Muffat the opportunity to hear Arcangelo Corelli’s music and to have his own work performed in Corelli’s house, and he had also studied with the famous Bernardo Pasquini. Pasquini and Corelli—two names indicative of one of the most fascinating constellations in music history. In 1706, two decades after Muffat’s stay in Rome, these two composers, together with Alessandro Scarlatti, became the only musicians ever to join the famous Academia dell’Arcadia, a Roman club of intellectuals founded around the eccentric Christina of Sweden. The Italian partimento tradition had important roots in these circles.¹ The tradition of a practical musical stenography known since around 1600 as bassus continuus first served as a kind of game and esoteric science for encoding polyphonic compositions into a single bass line, and later—when transferred to Naples and its conservatories—as a pedagogical tool that influenced the training of musicians all over Europe during the eighteenth and nineteenth centuries. The partimento tradition has received intense scrutiny from musicologists, theorists, and musicians over recent years. The time is now ripe to investigate the dissemination and local branches of this tradition and its interactions with other pedagogical and theoretical traditions. The successful and sought-after musicians educated in Naples exported their partimenti to the musical centers of the world, where a thousand roads had led them. At the same time, however, the local musicians were developing or refining their own traditions. Some work has been done in this field with regard to the French

but much research remains to be conducted on the Spanish, English, Eastern European, Southern German, and Austrian teaching methods. It is this final element that represents the primary concern of this text: more precisely, the Salzburgian thoroughbass tradition of the seventeenth, eighteenth, and nineteenth centuries, for which I introduce the term “partitura tradition.” This terminology stresses both the autonomy of the practice and its relationship to the Italian partimento tradition. Instead of “partitura tradition,” one could also speak of a “fundamenta partiturae tradition.” Several Austrian and Southern German treatises employ these two words in their titles, referring both to the partitura tradition and to the tradition of Fundamentbücher, a term linked to manuals circulating in Southern Germany since the fifteenth century intended to teach improvisation on a keyboard instrument.

In German-language (that is, German-Latin) manuscripts and prints from the period between 1600 and 1800, the term “partitura” is used synonymously with “thoroughbass.” The subtitle of Matthäus Gugl’s 1719 treatise Fundamenta partiturae, for example, promises “a brief but thorough instruction to thoroughbass or partitura.” The interchangeable use of the terms “partitura” and “thoroughbass” was already a longstanding practice, as demonstrated by the 1676 Compendium of Alessandro Poglietti, one of the most renowned organ teachers of his time. Poglietti writes that “roughly 80 years ago, the partitura, also known as Bassus continuus or General Baß, was invented by Ludovico Vidana [sic].” Indeed, Viadana had used the term “partitura” in his famous and influential Cento concerti ecclesiastici, drawing on a terminological tradition of naming tablatures “partiturae,” in reference to their partition by barlines. Interestingly, the Italian term “partimento” was—as far as I can determine—not common to the Austrian tradition. Only in 1833 (that is, post facto) was Michael Haydn’s contribution to the partitura tradition, his Partiturfundament, referred to as “Michael Haydn’s partimenti.” A thorough examination of the etymology of the term “partimento” remains a desideratum, as does the history of the terminological dissociation of the Italian partimento from the Austrian partitura tradition. It is obvious, however, that “partire” generated both an Italian (“partimento”) and a Latin term (“partitura”), while at the same time in Italy the term “partitura” took on the meaning it has today (namely, “score”).

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4. “Kurzer und gründlicher Unterricht, den Generalbaß oder Partitur nach den Regeln recht und wohl zu schlagen” (Gugl, Fundamenta [1719], my translation).
5. “Ungefehr vor achtzig Jahren ist die Partitur, welche auch genennet wird Bassus continuus oder General Baß mit Nottzen und Ziffern zu schlagen von Ludovico Vidana [sic] erfunden worden” (Poglietti, Compendium [undated], 54). Somewhat later, Johann Jacob Prinner used the term “partitura” in a similar sense (Prinner, Musikalischer Schlüssel [1677], 1).
Beyond ‘Harmony’

THE PARTITURA TRADITION:
A HISTORICAL-BIOPGRAPHICAL OUTLINE

As the terminological reflection presented above emphasizes, the Austrian partitura tradition had old Roman roots in the seventh century. But it obviously received another important impulse from Rome around 1700, when Georg Muffat returned to Salzburg. During this time, the terminology used in Austria to classify cadences suddenly transformed into a typology closely related to Italian models, which points to a renewed influence from Rome around that time.

A treatise by Wolfgang Ebner (1612–1675) is today considered “the first thoroughbass manual on Austrian soil.” The original is lost; only a translation by Johann Andreas Herbst as an appendix to his Arte prattica & poëtica is extant. Ebner speaks of “cadentia,” and some of his examples (not referred to as “cadentia”) show the progressions comprised by the later cadence typology; however, the precise classification of cadences as given in later treatises is still lacking here. Likewise, in the Musicalischer Schlissl by Johann Jacob Prinner, cadences are only briefly touched upon. Much more abundant in this regard is the aforementioned Compendium by Poglietti from the middle of the seventeenth century, featuring nearly all of the schemata that became so important for eighteenth-century compositional practice. Poglietti’s terminology for describing cadences, however, differs from the terminology used in the partitura and partimento tradition. Against this backdrop, it seems quite probable that Muffat imported not only the spirit of Correlian concerti and Pasquini’s organ music, but also the recent theoretical concepts and pedagogical tools associated with this music. He laid these out in his Regulae concentuum partiturae, a thoroughbass manual for the organ (most later Neapolitan partimento treatises focus on the harpsichord). This commitment to the organ and to church music was to remain a characteristic feature also of later contributions to the partitura tradition; this is accompanied by a rather traditional musical language in comparison to the more advanced operatic language of many Neapolitan partimento treatises. This is obvious, for example, in the persistent adherence to what is called tabula naturalis, a precursor of the “rule of the octave,” regulating progressions of triads in root position over certain movements in the bass. The

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12. There is no doubt about the fact that composers in Salzburg produced instrumental and operatic music in a more modern style. Consequently, this kind of music must also have played a certain role in their education. The preponderance of church music in the surviving sources might simply be related to certain conditions of the local printing culture as well as to the arbitrariness of manuscript survival.
reliance of the *tabula naturalis* on triads in root position lends it a much more conservative sound than the modern rule of the octave;¹³ this sound was of great importance for the daily lives of musicians and composers working in an ecclesiastic environment.

A further difference between the *partimento* and *partitura* traditions lies in the fact that most *partitura* exercises have thoroughbass figures given explicitly, whereas Neapolitan *partimento* collections typically feature unfigured basses. There could be a variety of reasons for the usage of thoroughbass figures in the *partitura* tradition. First, *partitura* treatises are “treatises” in a more narrow sense, offering both text-based and musical examples. The Neapolitan tradition, by contrast, is characterized by the lack of written explanations: Where Italian *partimento* treatises do include text, the examples tend to have explicative thoroughbass figures as well. Conversely, one could hypothesize that collections of exercises for a *partitura* student might also have been unfigured, but that these have not been transmitted or have yet to be discovered. But there might also be another reason: Perhaps *partitura* treatises, focusing on sacred music, adhered to a rather strict concept of counterpoint and voice leading enciphered in precise thoroughbass figures.

While there are some obvious differences between the *partitura* and *partimento* traditions, there are also remarkable similarities. Both in Salzburg and Naples, for example, musical knowledge was handed down in an almost dynastic line of teachers, students, and successors. Muffat, who is considered to be the founder of the Salzburgian *partitura* tradition, had a pupil named Johann Baptist Samber (1654–1717). Samber published a *Manuductio ad organum* in 1704, followed by a *Continuatio* three years later. As an organist at the Salzburg cathedral, Samber, like his predecessors and successors, also had to teach at the Kapellhaus, the school attached to the cathedral. In his *Manuductio*, Samber reports that he taught 300 students there over the years. Samber’s successor as an organist at the cathedral in Salzburg was Matthäus Gugl (c1683–1721), whose 1719 treatise *Fundamenta partiturae* was obviously influenced by Samber; five additional editions were issued, the last in 1805 (Joseph Haydn had a copy in his library). Gugl’s successor Johann Ernst Eberlin (1702–1762) is well-known from the biography of the Mozart family. Two manuscripts under Eberlin’s name have been preserved, entitled *Fundamenta partiturae* and *Fundamentum praemambilandi*. In the latter, a further manuscript by Eberlin, *De arte componendi*, is mentioned, a work that is considered lost. Eberlin’s student, successor, and son-in-law was Anton Cajetan Adlgasser (1729–1777), who left a treatise entitled *Fundamenta compositionis*. Adlgasser’s successor as a cathedral organist was a certain Wolfgang Amadé Mozart, and his successor as an organist at Salzburg’s Dreifaltigkeitskirche was one Michael Haydn. While no doubts have been expressed regarding the authenticity

of Michael Haydn’s Partiturfundament (the editor Martin Bischofreiter obviously only provided the keyboard realization of Haydn’s basses), the authenticity of the Kurzgefaßte Generalbaß-Schule ascribed to Mozart is rather doubtful and still a matter of debate.14 Some thoroughbass exercises by Leopold Mozart, notated for his children, exhibit a proximity to the exercises used in the Kapellhaus, demonstrating the continuous line of a Salzburgian tradition from Muffat to Mozart.15

Further treatises related to the Salzburgian tradition and indebted to Muffat’s cadence typology include four books published by Lotter in Augsburg: the 1738 manual Die auf dem Clavier lehrende Caecilia (whose second part is entitled “de fundamentis partiturae”),16 Leonhard Reinhard’s Kurzer und deutlicher Unterricht von dem General-Bass (1744),17 Johann Xaver Nauß’s Gründlicher Unterricht den General-Baß recht zu lernen (1751),18 and Johann Franz Peter Deysinger’s Fundamenta partiturae (1763).19

**The “cadences common here”**

The term “cadentia” has two meanings in the partitura tradition. Following a long-standing terminological tradition, it denotes on the one hand the “ending either of a part of a composition or of a composition as a whole”20 and accordingly a repertory of standardized progressions that form these endings. My text focuses specifically on this aspect of the cadence.21 However, “cadentia” also signified a small musical piece or improvisation ending with (and therefore conceivable as an expanded and embellished version of) a cadence in the first sense. “Just for the fun of it I played the organ here in the chapel last Sunday,” writes W.A. Mozart in a letter from Mannheim. “I entered during the Kyrie and played the end of it. After the priest had intoned the Gloria, I played a cadence. Because it was so different from the cadences common here, everybody turned around, especially [Ignaz] Holzbauer.”22 In this context, “cadence” obviously

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16. The cadence typology can be found on page 32 of the second part.
17. Cadence typology on page 54.
18. Here a different terminology is used, referring to the “cadenza doppia” as “doppelte Kadenz” (32).
20. Sambier, Manuductio (1704), 154.
21. My text only deals with “true” cadences and omits all kinds of “deceptive” cadences. On this topic, see Markus Neuwirth’s contribution to this volume.
22. “vergangenen Sonn=tag spielte ich aus spass die orgl in der kapelle. ich kamm unter den Kyrie. spielte das End davon; und nachdem der Priester das gloria angestimmet, machte ich eine Cadenz. weil sie aber gar so verschieden von den hier so gewöhnlichen war, so gugte alles um, und besonders gleich der holzbauer.” (letter of November 13, 1777, quoted in Bauer/Deutsch, Mozart Briefe (1962), 120, my translation).
means a short prelude or intonation. This practice of playing small “cadences” on the organ can be studied in Eberlin’s Fundamenta praembulandi, in which Eberlin teaches students to improvise variations and embellishments of small musical units, one of which is termed cadenza (Ex. 1 shows the original cadenza and the first three of Eberlin’s variations). In addition to Eberlin’s cadenza, a sketch of an organ improvisation by Mozart (preserved in the context of thoroughbass exercises) might offer a glimpse of the kind of cadence Mozart might have played in Mannheim.

Example 1: Eberlin, Fundamentum praembulandi (ms., D-Mbs mus. ms. 261), fol. 19

To return to the cadence in the first sense (a repertory of closing formulas), it is quite easy to determine what the cadences common in Salzburg sounded like, since the partitura tradition is remarkably consistent in this regard (see Table 1 and Ex. 2). Both the partitura and the Italian partimento tradition employ two fundamental criteria to distinguish between cadences: the presence (or absence) of a suspension dissonance in the upper voices and the movement of the bass (by leap or by step). The distinction between consonant cadences and cadences involving a suspension is a tradition that dates back to Renaissance contrapuntal theory. Zarlino, for instance, distinguishes between cadenze semplici and cadenze diminuite: The former move in consonant note-against-note counterpoint (“first species”), while the latter have a suspension dissonance on the

The latter type is preferable for cadences of structural significance, since the dissonant syncopation acts “as the signal that a cadence is coming” and combines metrical and contrapuntal features to signal closure. In technical terms, this suspension always works in the following way: The fourth-to-last beat of a section in two-part counterpoint is a consonance; one of the two voices is tied over to the next beat while the other moves to a note that creates a dissonance; then, on the penultimate beat, the voice that has become dissonant resolves downwards by step, and the resulting (imperfect) consonance proceeds to the final octave or unison.

The typology based on the presence (or absence) of a dissonance remained valid in contrapuntal theory throughout the seventeenth century. As Giovanni Maria Bononcini writes in 1673, “[a] cadence is the final termination of a part or of a whole composition. It is twofold, simple and compound. The simple proceeds note against note in consonances; the compound uses different notes with a suspension.” Zarlino’s term “diminuite” has been replaced by “composta” (“compound”), a term that was to become characteristic of the Italian tradition as a whole in the eighteenth century. The term “compound” here refers to the fact that the “compound cadence” is a compound of consonances and dissonances, whereas “simple cadences” only have consonances. In the same manner, “simple counterpoint” is distinguished from “compound counterpoint”: “Compound counterpoint is made up of all kinds of notes, be they consonances or syncopated dissonances, resolved according to the good rules.”

This terminological differentiation provides an important corrective to how the term “cadenza composta” has been defined in recent (influential) music-theoretical studies. Gjerdingen defines the concept as follows: “If [in the bass] was repeated an octave lower before continuing to 1, the clausula was called cadenza composta, a ‘compound ending’ involving the addition of a ‘cadential’ 7 or 75 chord.” The octave leap in the bass is, however, by no means a defining feature of the compound cadence, whose conditio sine qua non is the contrapuntal dissonance described above. All of the examples Gasparini provides for the compound cadence lack an octave leap, and

28. “La Cadenza è una terminazione finale d’una parte, & di tutta la Cantilena, & è di due sorti, cioè semplice, e composta; la semplice procede con figure eguali l’una contra l’altra tutte in consonanza; e la composta procede con figure diverse in legatura” (Bonoenmi, Music pratic [1673], 80, my translation).
29. Interestingly, Giovanni Maria Artusi uses the terms “semplice” and “composta” in his 1586 treatise L’arte del contrapunto ridotta in tavole (Artusi, L’arte [1586], 30), but adopts Zarlino’s “semplice” and “diminuite” in his later L’arte del contrapunto from 1598 (Artusi, L’arte [1598], 61).
30. “Il Contrapunto composto è quello, che si fabrica d’ogni sorte di figure, e di qualsivoglia consonanza, e dissonanza legata, risoluta con le buone regole” (Bononcini, Musico pratico [1673], 77, my translation).
32. Gasparini, L’armonico pratico (1722), 30. Gasparini’s terminology was applied by Johann Gottfried Walther (Walther, Musikalischer Lexikon [1732], in his articles “Cadenza composta,” “Cadenza composta maggiore,” and “Cadenza composta minore”).
the example Gjerdingen gives for the simple cadence is in fact a compound cadence according to seventeenth- and eighteenth-century sources, since scale degree 4 in the bass is figured with a 6 chord, necessitating a suspension in the upper voices.33

Whereas the Italian sources refer to consonant and dissonant cadences as “simplice” and “composta,” Muffat uses the Latin terms “simplex” and “ligata,” the latter referring to the ligature (the tie) used in the suspension.34 Interestingly, none of Muffat’s successors adopts the term “ligata,” even when explaining the same phenomenon. For this reason, I will adhere to the term “compound cadence” (from the Italian “composta”) in the following analysis. It is important to note that such a compound cadence is not necessarily a cadence with an “embellished dominant.” Every cadence that features a suspended discant clausula while moving from the antepenultimate to the ultimate note can be referred to as a compound cadence—for example, a cadence employing a ii6 chord.

Table 1: Synopsis of cadence terminology

<table>
<thead>
<tr>
<th>German / Latin</th>
<th>Italian</th>
<th>Proposed Modern Terminology</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>major perfectis</td>
<td>doppia / composta di salto maggiore</td>
<td>doppia</td>
<td>2 m–o</td>
</tr>
<tr>
<td>major ligata</td>
<td>composta di salto minore</td>
<td>compound major</td>
<td>2 f–l</td>
</tr>
<tr>
<td>major simplex</td>
<td>semplice di salto</td>
<td>simple major</td>
<td>2 a–e</td>
</tr>
<tr>
<td>minima ligata (ascendens/ descendens)</td>
<td>composta, di grado</td>
<td>compound minimal (ascending or descending)</td>
<td>2 q–r</td>
</tr>
<tr>
<td>minima simplex (ascendens/ descendens)</td>
<td>semplice, di grado</td>
<td>simple minimal (ascending or descending)</td>
<td>2 p</td>
</tr>
<tr>
<td>minor</td>
<td>minor</td>
<td>2 s–u</td>
<td></td>
</tr>
</tbody>
</table>

33. Ibid., 141, ex. 11.3.
34. Muffat writes that a “cadentia simplex” is a cadence “in which no ligature [tie] is used in the upper voices” (“Cadentia major simplex [...], in welcher bey den Oberstimmen kein Ligatur gebraucht wird” [Muffat, Regulae [undated], 93, my translation]).
Example 2: Partitura/Partimento cadences

A subcategory of the compound cadence is the cadence with a consonant fourth, referred to as cadentia major perfectis by Muffat and as cadenza doppia by the Italians (Ex. 2m–o). All three thorough bass exercises Leopold Mozart wrote down for his children end with a cadenza doppia, and it is the final cadence of most partitura exercises. It seems, however, that this cadence was perceived as outmoded or overly formal during the second half of the eighteenth century. Although it still plays an important role in the sacred music of Mozart and his contemporaries (Ex. 3a–e), it is nearly nonexistent in classical instrumental music. The rare exceptions can be found (not surprisingly) in instrumental music that deliberately evokes the “old style” (Ex. 3f–h). Because the Salzburgian partitura tradition was part of an ecclesiastic environment in which sacred music was everyday business for musicians, it comes as no surprise that a more conservative style in general and the cadenza doppia in particular were cultivated in this practice throughout the eighteenth century.

Example 3: Classical examples of the *cadentia perfecta* / *cadenza doppia*. (a) L. Mozart, Missa in A, Kyrie, mm. 15–17; (b) J.E. Eberlin, Missa brevis in a, Kyrie, mm. 12–13; (c) J. Haydn, Missa brevis in F, Hob. XXII:1, Credo, mm. 11–13; (d) W. A. Mozart, Requiem, K. 626, Introit, mm. 6–7; (e) ibid., Offertorium, mm. 11–13; (f) W.A. Mozart, Präludium (Fantasie) und Fuge K. 394, fugue, mm. 66–67; (g) W.A. Mozart, Zwei kleine Fugen (Versetten) für Orgel, K. 154a, no. 1, mm. 10–12; and (h) ibid., no. 2, mm. 12–13

As mentioned above, apart from the employment of syncopation, the second criterion used to distinguish cadences in the *partitura* tradition concerns movement in the bass. The Italian tradition (which, however, apparently achieved terminological agreement only with Fenaroli) distinguishes between *cadenze di salto* (cadences with a leaping bass) and *cadenze di grado* (cadences with a stepwise bass). The German-Latin tradition uses the terms “*maior*,” “*minor*,” and “*minima*” for this distinction, with “*maior*” signifying a bass *clausula* in the bass (falling fifth or ascending fourth), “*minima*” a discant or tenor *clausula* in the bass (ascending second or falling second), and “*minor*” a “plagal” bass *clausula* (falling fourth or ascending fifth). The final category consists of (and does not distinguish between) “plagal cadences” and “half closes” in the modern sense (Ex. 2s–u).
Muffat’s terms “maior,” “minor,” and “minima” as descriptors of the bass might possibly have been the result of a (productive) misreading. These terms were current in the Italian tradition and signified something completely different. Gasparini, who spent some time in the Roman circles around Corelli and Pasquini at roughly the same time as Muffat, uses the terms “minore” and “maggiore” to describe two subcategories of the compound cadence: Cadenza minore was the normal compound cadence, while cadenza maggiore referred to the later cadenza doppia described above.\(^{36}\) Perhaps Muffat appropriated these terms but (accidentally?) transferred them to a different part of the typology (the movement of the bass). Further confusion arises from the fact that in traditional contrapuntal theory, the terms “maggiore,” “minore,” and “minima” have yet a different meaning, namely the rhythmic movement of a cadence—a cadenza maggiore being a cadence in breves and semibreves, a cadenza minore in semibreves and minimis, and a cadenza minima in minimis and semiminims.\(^{37}\)

However diverse and confusing the evolution of historical terminology may seem, the criteria invoked by historical theorists to classify cadences are exactly the same in the partimento and partitura tradition; they also have a longstanding tradition in contrapuntal theory. Again, the arrangement of the discant clausula (with or without suspension or “double”) and the movement of the bass (by leap or by step) are decisive.\(^{38}\) The question I will address in the following section is whether this represents just another chapter in the history of theory or whether there are ways in which the cadences of the partitura and partimento tradition can inform our modern understanding of eighteenth-century cadences. The distinction between consonant and dissonant cadences has been completely neglected in all of our modern cadence typologies that focus primarily on the last two harmonic events (the ultima and penultima) and define a cadence as consisting of a root-position dominant and tonic (Table 2).\(^{39}\) In so doing, they classify cadences on the basis of their harmonic profiles and regard dissonances as a negligible, contrapuntal surface phenomena, thereby missing an important nuance of classical voice leading in general and of the classical cadence in particular. I am convinced (to anticipate my findings) that the cadence typology presented here will help to refine our concept of seventeenth- and eighteenth-century cadences.

\(^{36}\) Gasparini, L’armonico pratico (1722), 29–32.
\(^{37}\) Tigrini, Compendio III (1602), 72.
\(^{38}\) The neglect of rigorous treatment of melodic aspects in eighteenth-century thoroughbass and counterpoint pedagogy is a necessary background for understanding the boom of Melodielehre in the eighteenth century, manuals that filled this gap but sometimes seem to be completely lacking in contrapuntal or harmonic foundation: Thoroughbass was always understood as a fundamental precondition.
\(^{39}\) The partitura and partimento cadences are also neglected in Schmalzriedt, “Kadenz” (1974).

Table 2: Classification of cadences

<table>
<thead>
<tr>
<th>MODERN CLASSIFICATION OF CADENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>by harmonic final</td>
</tr>
<tr>
<td>authentic</td>
</tr>
<tr>
<td>deceptive</td>
</tr>
<tr>
<td>plagal / half-close</td>
</tr>
<tr>
<td>by melodic final</td>
</tr>
<tr>
<td>perfect</td>
</tr>
<tr>
<td>imperfect</td>
</tr>
<tr>
<td>by bass movement</td>
</tr>
<tr>
<td>root position</td>
</tr>
<tr>
<td>inversion</td>
</tr>
<tr>
<td>ADDITIONAL CATEGORY PROVIDED BY EIGHTEENTH-CENTURY CLASSIFICATIONS</td>
</tr>
<tr>
<td>by dissonance (implying metre and melody)</td>
</tr>
<tr>
<td>simple</td>
</tr>
<tr>
<td>compound</td>
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</tbody>
</table>

The dissonant cadence I:
Simple and compound cadences in the sentence

The beginning of Mozart’s Piano Sonata K. 279 has been cited by Caplin as an example of the sentence; Hepokoski and Darcy identify it as an example of the “loop,” a subtype of the sentence-presentation introduced in their Elements of Sonata Theory (Ex. 4).40 Mm. 1–4 constitute the presentation (comprising a basic idea and its exact repetition), mm. 5–12 are the continuation, exhibiting the characteristic fragmentation, a first (deceptive) cadence in m. 10, and a final cadence in m. 12. Within Caplin’s theory, this beginning raises certain difficulties, since it seems to contradict his rigid definition of the sentence: “the initial four-measure phrase of the sentence, what I have termed a presentation, never closes with a cadence, even if its final harmonic progression (V–I) suggests one. […] To be sure, there are musical forces that effect closure of some kind for the phrase, or else we would not perceive it to be a unified group; but the nature of that closure—be it harmonic, melodic, rhythmic, or textural—is not cadential.”41

In Mozart’s sonata, however, not only does the presentation end with a PAC, but the basic idea already features a PAC at its end. Within Caplin’s theory, this is a contradictio in adjecto: This cadence cannot be a cadence in a narrow sense, since at this point in the sentence, no cadence is allowed: “For at the level of the theme, a basic idea is exclusively an opening idea; that idea itself cannot bring a formal cadence.”42 Caplin resolves this “dilemma” by introducing the concept of a “limited cadential

41. Caplin, “The Classical Cadence” (2004), 59f. Against the backdrop of the wider concept of cadence in eighteenth-century theories, I have difficulty accepting Caplin’s rigid definition of what constitutes a cadence (and this makes it hard for me to agree with several of his conclusions that are built upon this definition; see also the critique in Hepokoski and Darcy, Elements [2006], 66 [n. 5]). I understand, however, the central function that this concept serves within Caplin’s theory.
scope,” a kind of hierarchy (or Schichtenlehre) of cadences that measures the “weight” of cadences not according to their intrinsic features but by their temporal position and context. The appendant observation that a cadence after two measures of a piece is less “convincing” or less “weighty” than a cadence after eight or twelve bars of the same piece is so far beyond dispute that even Hepokoski and Darcy cannot but agree with Caplin on this point (not, however, without adding their own nuance concerning the “loop” structure): “Notwithstanding the two obvious PACs, the positionality of those cadences within the larger sentential-thematic structure, along with their sub-ordination to the circular loops within which they are generated, weakens the usual sense of a PAC as a sign of emphatic structural closure and renders them incapable of functioning as normative structural. These perfect authentic cadences, in short, cannot ‘end’ the theme in question.”43

Example 4: Mozart, Piano Sonata K. 279/i, mm. 1–12

Notwithstanding the necessity and importance of a temporal and context-based approach to cadences, this very example clearly shows that the difference in “weight” of the cadences employed here has been distinctly marked by Mozart by means of the intrinsic features of every cadence. As PACs, all three cadences in this example (mm. 2–3, 4–5, and 12) would fall under the same category according to modern cadence

typologies. Considering the employment of dissonances according to the partimento and partitura tradition, however, an important difference is revealed: Only the last cadence is a compound cadence, while the first two are simple cadences.

At the same time, this example necessitates the discussion of an important challenge in relation to eighteenth-century keyboard music. Characteristic for broad segments of this repertory are two-voice textures that function as “figurations of a virtual polyphonic texture.”\textsuperscript{44} Also for Austrian music pedagogy of the eighteenth century, it is a matter of course that a two-voice texture can be regarded as representing a full-voice texture. Exercises in reducing full-voice textures to two voices and (vice versa) exercises in filling in the “missing” voices of a two-voice setting with the help of thoroughbass figures constituted an important part of compositional training.\textsuperscript{45} Since the bass lines of piano music do not feature thoroughbass figures, sometimes it is not obvious whether a two-voice cadence was intended as a reduction of a full-voice compound cadence or a full-voice simple cadence. A two-voice cadence’s consonance on paper could be understood as a dissonant cadence whose inner voices are concealed but should be imagined or realized by the player in terms of a dissonance sous-entendue.\textsuperscript{46} To return to the example from the Mozart Piano Sonata, at first sight the cadence in mm. 2–3 simply represents the harmonic progression I\textsuperscript{6}–ii\textsuperscript{6}–V–I (Ex. 5a). If we omit the top voice (doubling the bass in octaves), the consonant contrapuntal outer-voice framework of this passage sounds like what is shown in Ex. 5b. To integrate the b at the end of the bar, one could either accept the purely consonant framework as given in Ex. 5c or assume that the c\textsuperscript{1} is a sustained dissonance sous-entendue, resulting in the dissonant compound cadence as shown in Ex. 5d.

Example 5: Reduction and analysis of Ex. 4, mm. 2–3

As this analysis suggests, it is by no means obvious that the basic idea and presentation in Mozart’s example end with simple cadences, since a dissonance sous-entendue could make them sound like two-voice reductions of a full-voice compound cadence.

\textsuperscript{44} Holtmeier, “Review of Music in the Galant Style” (2011), 314.
\textsuperscript{45} Diergarten and Holtmeier, “Nicht zu disputieren” (2011).
\textsuperscript{46} Holtmeier, Rameaus langer Schatten (forthcoming), and Holtmeier, “Review of Music in the Galant Style” (2011), 315–320.
Does this render the cadence typology of the partitura tradition (which is based on full-voice textures) useless for the “free” and thin two-voice textures of galant and classical piano music? Quite the opposite, since the argument presented above reveals further interesting details about the cadences used in this example. The first concerns pianistic instrumentation. Whenever Mozart wanted to employ a “stronger” cadence (mm. 10 and 12), he apparently switched to an explicit full-voice texture, laying open the dissonances of the compound cadences that had remained only implicit (if at all) in the “weaker” cadences at the beginning of the example. So while one might accept the idea of an implicit compound cadence by sous-entendu in mm. 2–3 and 4–5, there are definitely explicit compound cadences in mm. 10 and 12. The second interesting detail is the temporal and metrical duration of the cadences in this example. Even if we accept mm. 2–3 as an implicit compound cadence, the suspension here would be on the metrical level of eighth notes; in contrast, the explicit compound cadences in mm. 10 and 12 are at half speed (quarter notes) and are consequently more conclusive.

Another example of the employment of simple and compound cadences in the sentence can be found in a locus classicus of the sentence, the beginning of Beethoven’s Piano Sonata op. 2 No. 3 (Ex. 6). Also here, the presentation ends with a V–I progression in root position leading to a short Einschnitt (caesura). For Caplin, however, it would be an “analytical mistake” to speak of a “cadence” here, but also in this case, his “fundamental reason” seems to run the risk of a circular argument: “Inasmuch as the basic idea itself functions to begin a theme, a repetition of that idea must also express a similar function of beginning.” In other words, either the progression in m. 4 is not a cadence because by definition no cadence is allowed there, or mm. 3–4 are not a basic idea and the whole example cannot be a sentence at all. Would it not be more rewarding to leave the firm ground of stipulative definitions, instead asking under what circumstances various kinds of cadences were possible, even at the end of a basic idea and presentation, or exploring (following Wittgenstein’s famous dictum that “the meaning of a word is its use in the language”) the progressions that would have been described as “cadences” by the theoretical traditions of the eighteenth century? Of course, Caplin is right in claiming that the progression in m. 4 produces a different kind of closure than the later cadences in mm. 8 and 12–13. But also here, it seems more rewarding to me (now following Wittgenstein’s appeal, “do away with all explanation, and description alone must take its place”) to look for compositional, intrinsic features of the cadence-like progression used by Beethoven than to deductively define which progression “is” a cadence and which “is not.” Caplin himself discusses some of these features. The first feature is “harmonic”: According to Caplin,

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49. Ibid., §109.
m. 4 is not a cadence in the narrow sense, but rather a “[tonic] prolongation that ends with a root-position dominant resolving to a root-position tonic.” Caplin’s second feature is “melodic”: “Beethoven leaves the melodic line open at the end of the phrase, thus helping to counteract the cadential implications given by the harmony.”

Example 6: Beethoven, Piano Sonata op. 2 No. 3/i, mm. 1–13

Also here, the categories of the partitura cadence open up new perspectives for an even more nuanced description: The cadence in m. 4 is a “simple cadence,” while the cadences in m. 8 and mm. 12–13 are “compound cadences.” This contrapuntal distinction supports the melodic nuance described by Caplin. With regard to Caplin’s “harmonic” argument, again, instead of delineating “cadences” from “prolongations” by stipulative definition, it seems to me to be more challenging and rewarding to take as a point of departure the broad repertory of progressions that would have been described as “cadences” in the eighteenth century. By means of a thorough examination of contextual and intrinsic features, one could then try to describe what “cadential” or “closing” effects these progressions have (or potentially have) at a certain moment in a given piece of music. On this basis, Caplin’s distinction between a “real” cadential progression on the one hand and a “prolongation with a root-position dominant resolving to a

root-position tonic” on the other might be reformulated as follows: The dissonance of a compound cadence generally has its regular preparation in the preceding beats, and this frequently (though not invariably) leads to one or several “predominant” chords corresponding to Caplin’s examples of a “real” cadential progression. The simple cadence, on the other hand, can occur everywhere without preparation, and for this reason this type of progression can be associated with Caplin’s “prolongational” progressions.

**The dissonant cadence II: Simple and compound cadences in the period**

The concept of period implies that “a musical unit of partial cadential closure is repeated so as to produce a stronger cadential closure.” In other words, the cadence at the end of the consequent must express a “stronger” ending than the one found at the end of the antecedent. Most frequently this is realized by the succession HC–PAC, although other examples show the succession IAC–PAC. However, a tonic-key PAC at the end of the antecedent is by definition impossible, “since this strong cadence achieves complete harmonic and melodic closure.” But also here, various factors (one of which is the distinction between simple and compound cadences) open up

Example 7: Mozart, Clarinet Quintet K. 581/i, mm. 65–75

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51. Ibid., 49.
52. Ibid., 51.
possibilities to evaluate two otherwise similar PACs in different ways. A passage from Mozart's Clarinet Quintet K. 581/i serves as an example (Ex. 7).

Various factors in this example give the first PAC a more limited cadential scope, turning the entire passage into a period-like theme. First, the reentrance of the drum-bass in m. 65 signals that the theme has not yet reached its end. Second, the appoggiatura in the melody at the end of the antecedent weakens the first PAC. Third, the cadential progression at the end of the consequent is expanded by a sequence (m. 72) and by an abandoned cadence (m. 73). This finally leads to a compound cadence, whereas the antecedent had ended with a simple cadence. Periods built in this way are relatively rare, however. More frequent are periods featuring a succession of simple and compound cadences that contrapuntally underpin the melodic succession IAC–PAC. Caplin’s example of a period punctuated by an IAC and a PAC is the beginning of Mozart’s Piano Sonata K. 281, and in fact, the IAC here is a simple cadence, the PAC a compound cadence (Ex. 8).

Example 8: Mozart, Piano Sonata K. 281/i, mm. 1–9

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53. Due to the PAC in m. 69, this passage cannot be defined as a period under Caplin's theory. He describes it as a four-bar codetta-theme “repeated with extension” (ibid., 110).
The distinction between simple and compound cadences is also of great value for larger musical forms. The exposition of Mozart’s Sonata facile (Ex. 9), a work that displays its compositional craft on all levels of the musical fabric including the employment of different types of cadences, may serve as an example. The primary theme (P) is structured as a sentence whose eight-bar continuation ends with a I:HC medial caesura that prepares the secondary theme (S).54 Both the basic idea and its varied repetition end with a simple minimal cadence (the “lightest” category of the partitura cadences)—that is, a cadence without suspension and with a stepwise bass, the first voice ascending, the second descending. The subsequent passage (mm. 5–8) features parallel tenths in the outer voices, referred to by Gjerdingen as a variant of his Prinner schema.55 This passage is punctuated by another descending simple minimal cadence (m. 8) that creates a smooth connection to the end of the basic idea (m. 4). The I:HC medial caesura is marked by another ascending simple minimal cadence (connecting this moment to the end of the repeated basic idea, m. 4). S is also formed as a sentence:

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55. Gjerdingen, Music in the Galant Style (2007), 365; but see Holtmeier, “Review of Music in the Galant Style” (2011), 313–322. It should be noted that Gjerdingen takes his musical example from an outdated edition with a flaw in m. 7 (compare Plath and Rehm, Klaviersonaten II [1986], 122).
Example 9: Mozart, Piano Sonata K. 545/i, exposition

A basic idea, its literal repetition, and a sequential continuation (whose contrapuntal complexity has been demonstrated by Ludwig Holtmeier⁵⁶) directly lead to the EEC. Until this moment, neither a cadence with V and I in root position (a major cadence) nor a compound cadence has been sounded. Mozart saves both for the EEC in mm. 24–25, a cadence that is furthermore emphasized by its metrical-temporal duration of two measures. Until the end of the exposition, this EEC remains the only compound cadence, since both subsequent PACs are simple cadences: The employment of these two different types of cadences clearly relegates cadences after the EEC to the status of ending formulae belonging to what is commonly considered “post-cadential” space.

Conclusion

Mozart’s *Sonata facile* and the other examples presented in this text have shown that in order to paint a complete and nuanced picture of classical cadences, modern cadence typologies can and should be complemented by a further criterion that has thus far been overlooked: the employment of suspension dissonances in the cadential process. This criterion also points to a more fundamental problem of music analysis: How much analytical abstraction and reduction of an alleged “surface” is beneficial in the analysis of classical cadences? “Harmonic” analyses based on progressions of a *basse fondamentale* and voice-leading analyses abstracting from dissonances risk neglecting contrapuntal details that were highly important for eighteenth-century musicians. The partitura cadences suggest that we rethink the generally accepted notion that in the eighteenth century, “cadential classifications became based primarily on harmony rather than on melodic or contrapuntal interval.”\(^\text{57}\) As numerous musicians and writers from the seventeenth and eighteenth centuries suggest, contrapuntal details played a constitutive role in understanding cadences and their closural implications.

Coda: Two Salzburgians in Rome

A thousand roads lead men forever to Rome. Two musicians led to Rome by one of these roads were Leopold and Wolfgang Amadé Mozart. On the Wednesday of Holy Week in 1770, they heard a performance of the legendary *Miserere* by Gregorio Allegri in the Sistine Chapel.\(^\text{58}\) Mozart, as is known, transcribed the piece after the performance and returned to the chapel on Holy Friday to hear it again and to check his sketches. The fact that Allegri’s piece is a psalm-composition that uses the same harmonic formula for all verses of the psalm and accordingly involves a great deal of repetition renders Mozart’s achievement much more plausible. Furthermore, to return to the partitura tradition, the music that the Mozarts heard in the Sistine Chapel exhibits exactly those schemata that a young musician in Salzburg would have been familiar with in Mozart’s time. It was not necessary for him to memorize and transcribe a polyphonic texture note by note and voice by voice; he could have memorized (and sketched) a partitura stenography, as suggested by the lowest staff of Ex. 10. The beginning of the 1731 version of the *Miserere* features a progression according to the *tabula naturalis* mentioned above (see p. 61), namely triads in root position. The beginning of the second


Example 10: Gregorio Allegri, Miserere (vatican version, I-Rvat cap.sis. ms. 205, quoted from http://www.ancientgroove.co.uk/essays/allegri.html), with partitura reduction added for analytical purposes
line shows the famous sequential progression with ascending fifths in the bass and 4–3 suspensions in the upper voice, as described in most treatises of the partitura tradition. The end of the first phrase is punctuated by a cadencia maior perfecta, the cadenza doppia of the Italian tradition, complemented by the characteristic legatura di settima (bound seventh, treble 1, mm. 3–4). At the end of the second phrase, there is a combination of a simple major cadence (cadentia maior simplex, the Italian cadenza semplice di salto) and a compound minor cadence (cadentia minor ligata).

In the Sistine Chapel, Leopold and Wolfgang Amadé Mozart heard a musical language they had been familiar with ever since childhood. A Roman language, a lingua franca that had its roots in late Renaissance polyphony and was cultivated everywhere along the thousand roads that exported the partitura and bassus continuus from Italy. In Salzburg, this tradition was revitalized around 1700 by Georg Muffat, who had studied under Pasquini in Rome. And finally, if we consider the fact that it was the inspiring atmosphere of Rome that stimulated this book and the present attempt to reanimate the partitura tradition and its dissonant cadences, we can again see another turn of the eternal cycle of musicians going to and leaving Rome.

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