HARMONIC VARIANTS OF THE EXPANDED CADEN-TIAL PROGRESSION¹

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In a study entitled *The 'Expanded Cadential Progression': A Category for the Analysis of Classical Form*, I discussed and illustrated a particular compositional convention employed by Haydn, Mozart, and Beethoven in connection with their structuring of the subordinate theme (or second subject) of a sonata-form exposition.² I showed how the cadential harmonies used to close such themes can become highly expanded and how the resulting cadential phrase or phrases relate to the formal organisation of the subordinate theme as a whole. Here, I offer further examples of such expanded cadential progressions, with special emphasis on how the individual harmonies of the progression can be ingeniously varied, often in ways that involve some far-reaching chromatic alterations.

To begin, I introduce my approach to analysing musical form by comparing the cadential compression of the main theme with the cadential expansion of the subordinate theme within the first-movement exposition of Beethoven's Piano Sonata in F minor, Op. 2/1.³ The main theme is probably the *locus classicus* of the sentence form (Example 1). It begins with a two-measure *basic idea* that is repeated within the context of a tonic prolongational progression to create what I term *presentation* function. The subsequent *continuation* function features fragmentation of the grouping structure into one-measure units and an acceleration of the harmonic rhythm; a brief cadential idea leads to the concluding half cadence at measure 8. The underlying progression supporting this cadence begins with an initial I₆, continues with a pre-dominant II₆, and closes with a root-position dominant to create the half cadence. The basic diatonic versions of such a *cadential progression* are shown in Example 2.⁴

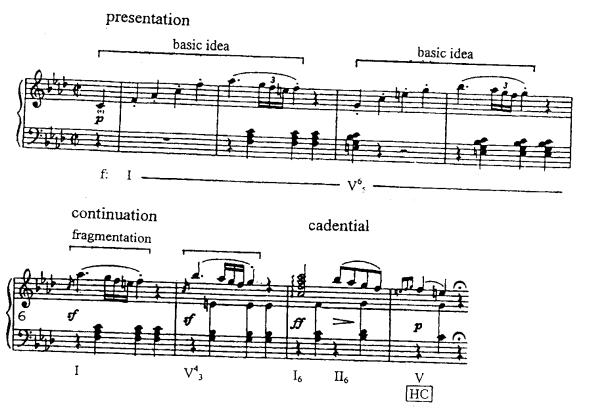
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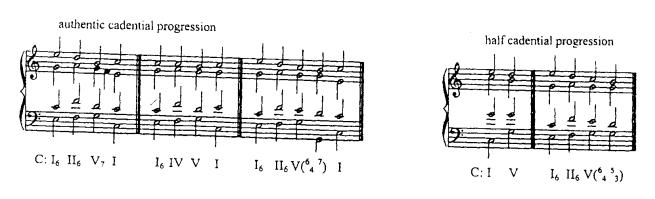
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⁴ See Classical Form, 27-29.

Example 1. Beethoven, Sonata Op. 2/1, first movement, mm. 1-8



Example 2. Cadential Progressions



Following a modulating transition, the subordinate theme begins with a basic idea, whose repetition creates a presentation (Example 3). A new eighth-note motive then brings about the fragmentation and harmonic acceleration so typical of continuation function, which is then extended for a full eight measures.

We now expect cadential function of some kind to close the theme. And indeed the prominent arrival of a I_6 chord in measure 33 at the climax of the continuation signals the beginning of a cadential progression, one that is stretched out to occupy a full four-measure phrase. Note that the individual chords of this expanded cadential progression (abbreviated E.C.P.) last twice as long as their corresponding chords in the main theme, and that the steady eighth-note descent against the syncopated figure in the bass fully distinguishes this cadential phrase from the

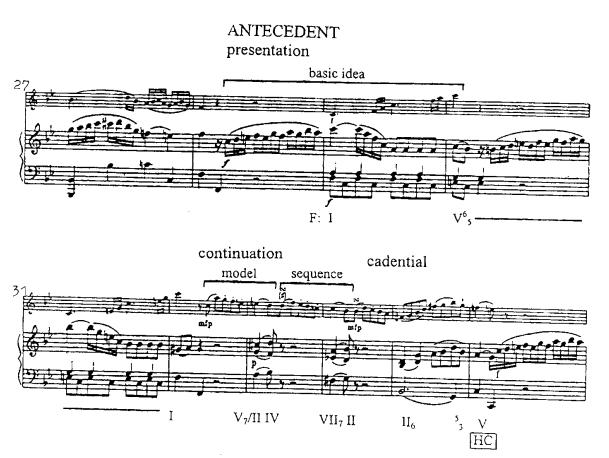
Example 3. Beethoven, Sonata Op. 2/1, first movement, mm. 20-41



continuation phrase that precedes it. Although the theme could have ended at measure 37, the implied cadence is *evaded* when the dominant seventh of measure 36 moves to another I_6 to initiate a repetition of the cadential phrase. The repeated expanded cadential progression finally reaches root-position tonic at measure 41 to bring the perfect authentic cadence that closes the theme.

Another expanded cadential progression will reinforce ideas already presented and introduce some new concepts important for my discussion of harmonic variants in subsequent examples. The subordinate theme from the first movement of Mozart's Violin Sonata in B-flat major, K. 454, begins with a standard presentation, followed by a continuation at measure 33 featuring a one-measure model that is repeated sequentially a third-lower (Example 4). Such model-sequence technique, which destabilises the preceding harmonic context, is typical of continuation function. The predominant II₆ chord in measure 35 marks the beginning of a short cadential idea, and following the half cadence, the basic idea starts over again in measure 37. In the repetition, the presentation and continuation remain the same, but at measure 43, the short half-cadence idea is now replaced by an expanded cadential progression, which stretches out for seven bars until the perfect authentic cadence in measure 49. Observe that the I_6 is embellished by V_2^4 . This particular embellishment of the initial tonic in a cadential progression is widespread in the classical literature and the source of some interesting harmonic variants, as shall soon be discussed.

Example 4. Mozart, Violin Sonata in B-flat major, K. 454, first movement, mm. 27-49







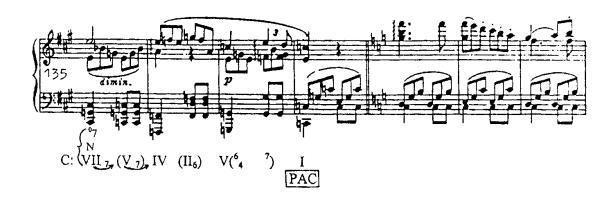


Throughout the high classical style, we can observe the regular use of expanded cadential progressions, especially in subordinate themes. The harmonic expansion creates the effect of a more longed-for, and thus more powerful, cadential arrival. As a result, the subordinate key gains sufficient tonal confirmation to compete effectively and dramatically with the initial home key of the movement. Nonetheless, because the technique is so conventional, it has the potential of becoming a rather hackneyed compositional cliché. There exist, however, some passages in which the harmonies of the progression are varied in highly ingenious ways. Such cases often reveal the composer's knack for harmonic invention, because we recognise how a potentially ordinary compositional situation has been turned into something quite magical.

One such example is found in the middle, major-mode theme of the slow movement of Beethoven's Symphony No. 7 in A major, Op. 92 (Example 5). The second part of this theme (which is binary in overall form), features at measure 117 imitation in the clarinet and horn over a pedal-point E. This passage first seems to prolong tonic harmony of E major, but retrospectively it is understood to prolong dominant, when measure 123 initiates an expanded cadential progression in A major, the opening tonality of the theme.

Example 5. Beethoven, Symphony No. 7, second movement, mm. 115–141

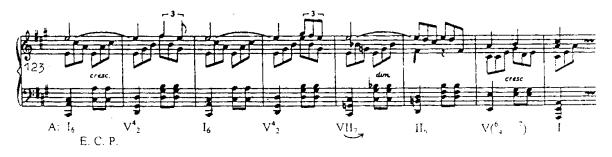




Note that in measures 123–127, the bass line rocks back and forth between the third and fourth scale-degrees, C-sharp and D-natural. We saw this kind of motion in the previous example 4, where the bass supports I_6 prolonged by a neighbouring V_2^4 . But the chord that stands on the third degree in example 5 is not the normal I_6 (as shown in the bracket below the chord), but a non-dominant diminished-seventh, which embellishes the V_2^4 . The standard functional roles have thus been reversed, and the dominant, rather than the tonic, becomes the prolonged harmony at the most local level. In measure 127, the diminished-seventh chord changes harmonic meaning and behaves as a VII_7 of the pre-dominant II_6 in the following measure. The imperfect authentic cadence in measure 130 keeps the soprano voice active on the third degree, and this lack of melodic closure motivates a repetition of the cadential phrase. In measure 135, the diminished-seventh is reinterpreted once again, this time as a secondary dominant leading to IV in C major, the key in which the theme ultimately closes with a perfect authentic cadence in measure 138.

A rewritten version of the passage (Example 5a) shows that the beginning of the melody can easily be supported by tonic harmony in first inversion. That Beethoven chooses to substitute a I_6 with a diminished-seventh chord may, of course, be explained on purely "coloristic" grounds. But from a more structural point of view, we can observe that it is precisely the enharmonic reinterpretation of this highly marked chord that permits the music to modulate smoothly from A major to C major, in preparation for an eventual return to the home key of A minor.

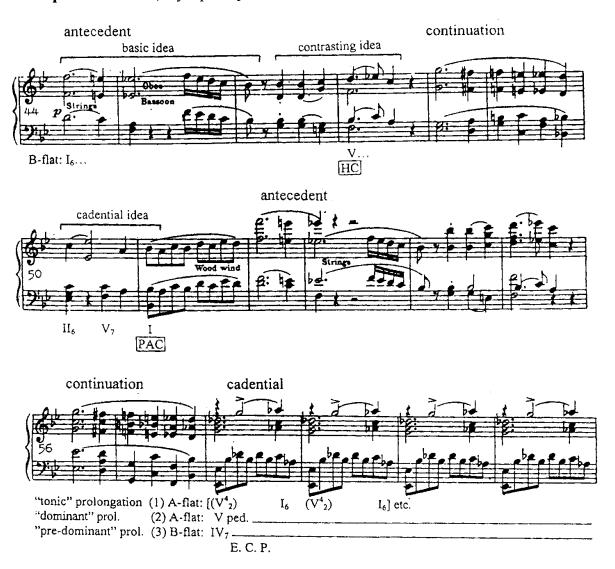
Example 5a. Beethoven, Symphony No. 7, second movement, rewritten version of mm.123-130



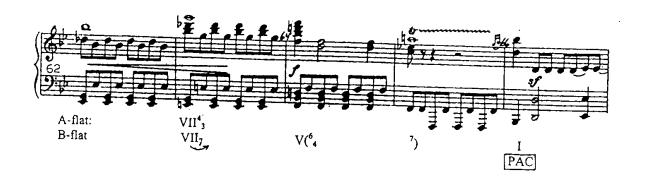
⁵ Bracketed harmonies in the analysis stand for the simple diatonic harmony expected at that point in the form.

A more complex case of harmonic variation arises in a well-known passage from the first movement of Mozart's Symphony No. 40 in G minor, K. 550 (Example 6). The subordinate theme area starts in measure 44 as an eight-measure theme, closing with a perfect authentic cadence in B-flat major at measure 51.6 The theme is then repeated exactly until an expanded cadential progression begins at measure 58, which corresponds to the very point where the simple cadence formula first arose back at measure 50. The note in the bass of measure 58, E-flat, would normally support a pre-dominant II₆ or IV harmony. But Mozart has the music digress into A-flat major and lets the bass function as a dominant pedal, which is prolonged through measure 62. The following measure sees the bass ascend to E-natural, and here the diminished seventh functions as a pivot chord that both prolongs the dominant of A-flat and brings the pre-dominant VII₇ of V in the true subordinate key, B-flat major. The dominant of B-flat arrives in measure 64 and leads to the perfect authentic cadence in measure 66.

Example 6. Mozart, Symphony in G minor, K. 550, first movement, mm. 44-66

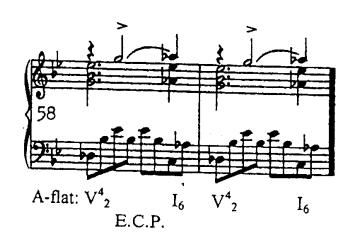


⁶ This eight-measure theme is structured as a hybrid theme, consisting of an antecedent phrase (as in a period) followed by a continuation phrase (as in a sentence): see *Classical Form*, 59–61.



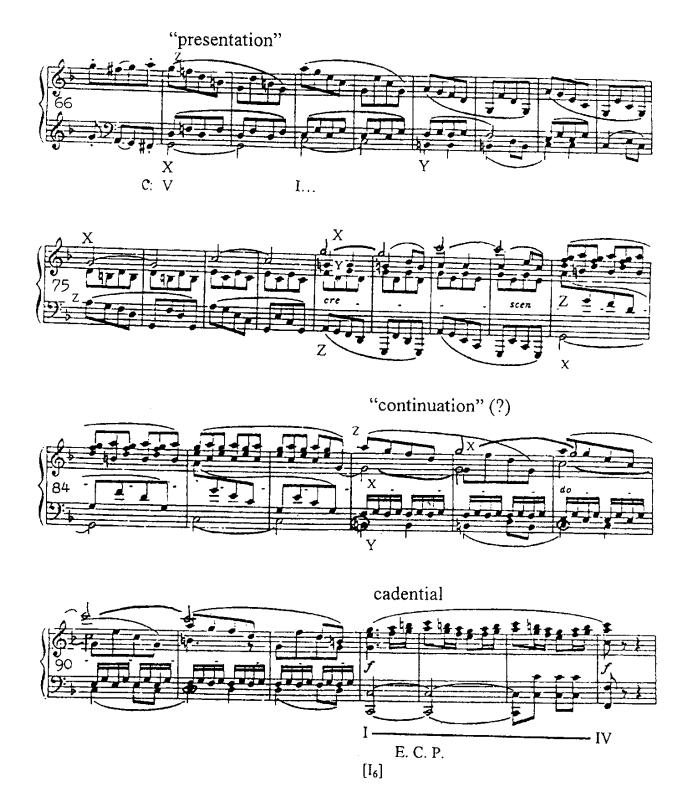
Examining the passage in measures 58-61 more closely, we can recognise three levels of harmonic activity, each prolonging a different harmonic function. At an intermediate level (line 2 of the analysis) the dominant harmony of A-flat is prolonged by virtue of the bass pedal-point E-flat. At a more local level, however, we very well could have the impression that the passage actually expresses tonic harmony of the same key: indeed, if we temporarily ignore the pedal (Example 6a), the melody suggests that a more appropriate harmonisation for each measure might have seen an alternation of V_2^4 with I_6 . In this rewritten version we recognise the same prolongation of a cadential tonic seen in connection with the expanded cadential progressions of the previous two examples. Yet, by placing this prolonged I₆ over a dominant pedal, Mozart assimilates the remote tonicisation of A-flat within the cadential progression of B-flat, the true subordinate key. Since the chord on the downbeat of each measure can also be understood as a " IV_7 " in B-flat (the D-flat in the soprano being borrowed from the minor mode), the passage expresses a pre-dominant prolongation at the highest conceptual level (line 3 in Example 6). As a result of this complicated manipulation of harmonic functionality, Mozart creates the illusion that the expanded cadential progression begins with the conventional prolongation of tonic (in the wrong key of course) even though the progression is actually initiated by a pre-dominant (in the correct key) analogous to that of the unexpanded cadential formula back at measure 50.

Example 6a. Mozart, Symphony in G minor, K. 550, first movement, rewritten version of mm. 58-59



Up to this point I have probably given the impression that variants to expanded cadential progressions involve fairly complex chromaticism, and indeed, this is usually the case. But I now want to draw attention to an expanded cadential progression that becomes varied through a kind of extreme simplification of the harmonies. As a brief intermezzo before the even more complicated examples yet to come, let us consider the subordinate theme from the first movement of Beethoven's Symphony No. 6 in F major ("Pastoral"), Op. 68 (Example 7).

Example 7. Beethoven, Symphony No. 6, first movement, mm. 66-116





The theme begins with a collection of simple tunes, labelled x, y, and z, forming a kind of musical round. From a functional point of view, it is all very presentational, but a certain sense of continuation function arises from the increasingly close entries of the rising fourth "x" motive. Moreover, at measures 91–92, the prevailing four-measure grouping is extended for an extra two bars. This leads to a new passage built over a root-position tonic. I would suggest that here is the beginning of an expanded cadential progression, one that continues with the subdominant of measures 96 and 97. What would normally follow next is an arrival on the dominant, usually with its six-four embellishment. Such a "cadential six-four" can also be described as a tonic chord in second inversion, and thus taking advantage of that fact, Beethoven "reinverts", so to speak, the cadential six-four, thus creating a root-position tonic between the preceding subdominant harmony and the following dominant. The resolution to a final cadential tonic in measure 100 brings an elided imperfect authentic cadence, which motivates a repetition of the complete expanded cadential progression; at measure 107 the same cadence brings a repetition of the second half of the cadential phrase, and the theme finally reaches perfect-authentic closure in measure 115.

That the root-position I in measure 93 substitutes for an expected first-inversion form of that harmony can be further substantiated by observing that the bass line beginning in measure 87 features an ascent from B, through C, to D in measure 91. The implied next step is surely an E, providing the appropriate bass support for a cadential I_6 . But Beethoven returns instead to a root-position tonic, and continues the rest of the way with root-position chords exclusively. It is not difficult to understand Beethoven's harmonic usage here. One of the conventional compositional devices for projecting a "pastoral" affect in eighteenth-century music involves using root-position harmonies, especially as a drone. Following tradition, Beethoven employs root-position chords in prominent ways throughout the entire symphony. That he extends this technique to the cadential progression as well follows directly from the aesthetic values that he wishes to convey in this special piece.

Although expanded cadential progressions are typically written in connection with subordinate themes, they can also be found in other sections of a work. My final two examples illustrate this technique within a slow introduction and coda respectively.

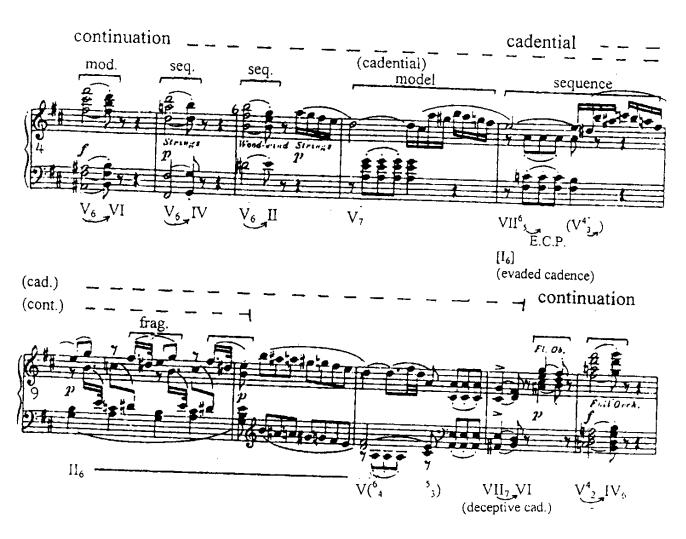
Example 8 contains the first part of the slow introduction to Mozart's Symphony No. 38 in D major ("Prague"), K. 504. It opens with fanfare-like flourishes typical of an introduction. The lack of a repeated basic idea prohibits us from speaking of a true presentation, but a general sense of "beginning" function is projected by the firm tonic prolongation of measures 1–3. The following three measures are obviously continuational, as witnessed by the fragmentation, harmonic acceleration, and descending-third sequential repetitions. The appearance of the root-position dominant in measure 7 holds out the possibility of a simple cadence formula that could have closed the theme in measure 8. But Mozart evades the cadence and allows measure 7 to serve as a model, which is sequenced a step higher in the following measure. Thus the continuation function of measures 4–6 is further expressed in measures 7–8 and reinforced even more by the fragmentation of measure 9.

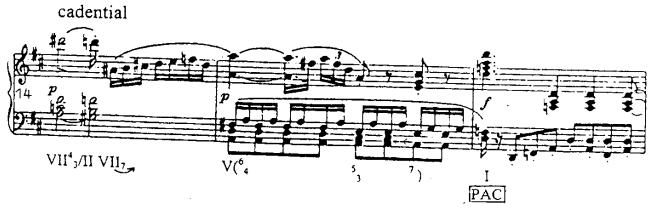
Notice, however, that the sequential repetition at measure 8 is not exact, for the bass part does not follow the melody by rising up a step to make a V_7 of II chord; rather, the bass descends to the third scale-degree and supports a substitute VII_5^6 of II. The use of this particular position for the diminished-seventh chord is especially noteworthy, because the bass line now conforms to the normal situation of an evaded cadence, whereby a root-position dominant moves to a first-inversion tonic, which usually then marks the beginning of another cadential progression.

⁷ See F. E. Kirby, *Beethoven's Pastoral Symphony as a "Sinfonia caracteristica"*. – The Creative World of Beethoven, ed. Paul Henry Lang. – New York: Norton, 1971, 103–121.

Example 8. Mozart, Symphony in D major, K. 504, first movement, mm. 1-17







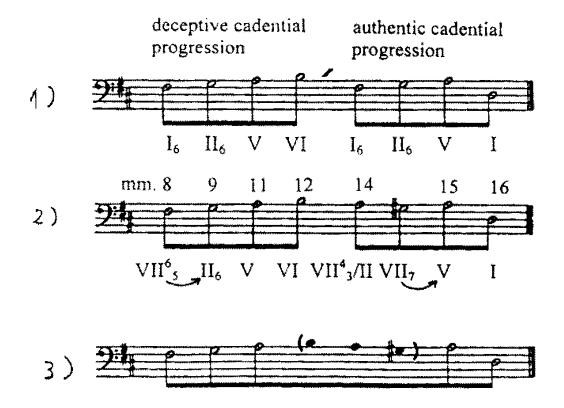
Here, also, the VII⁶₅ of II, as a chromatic substitute for I₆, signals the beginning of an expanded cadential progression, which continues with II₆ in measures 9–10 and the root-position dominant in measure 11. Usually, the onset of an expanded cadential progression is associated with a distinct change in musical material, thus creating a phrase that is clearly set off from the preceding continuation. Here, however, Mozart chooses a harmony for bar 8 that allows for a fusion of both continuation and cadential functions, at least as far as measure 9.

Once again, however, the theme fails to close, for the bass at measure 11 ascends chromatically to create a deceptive cadence in measure 12. A new continuation then begins as the woodwinds echo the deceptive cadence in the second half of the measure, thus initiating another descending-third sequence, analogous to that of measures 4–6. Thus the tonicisation of VI in measure 12 corresponds to measure 4, and the tonicisation of IV in measure 13 corresponds to measure 5. Measure 14 continues the sequence when VII⁴₃ of II substitutes for an implied V⁴₂ of II. But this diminished-seventh chord also reminds us of the similar harmony from measure 8, and thus this chord has the potential once again of initiating a cadential progression. Indeed, the subsequent VII₇ of V chord on the second half of measure 14 functions as the pre-dominant, which continues with the dominant in measure 15. The resolution to a root-position tonic on the downbeat of the next measure finally creates authentic-cadential closure for the entire passage.

Examining in greater detail the particular choice of harmonies for measures 12–16, we see that in this final phrase, Mozart twice prohibits the bass from moving back down to the fourth scale-degree, G. First in measure 13 he brings a IV₆ chord, preceded by its own dominant in third inversion; if an exact sequential repetition had occurred in that measure, along the lines of measures 4–5, then the bass would have been F-sharp–G, supporting a tonicisation of the subdominant in root position. Second, the composer brings in measure 14 a substitute, chromatic VII₇ of V set over G-sharp in the bass voice. He thus avoids allowing the VII⁴₃ of II to resolve normally to II₆, with G-natural in the bass. Why has Mozart so scrupulously shunned the G-natural in that voice? Because it was precisely that fourth scale-degree, supporting a II₆ chord, that had received the greatest emphasis in the expanded deceptive cadential progression of the previous phrase (measures 9 and 10); and thus to avoid redundancy for the second cadential progression, the dominant is approached in a completely different way.

There is, however, a further consequent of Mozart's having avoided a G-natural for the second cadential progression. In most cases where a deceptive progression is followed by an authentic one, the bass line is simply repeated, except for the resolution of the dominant to the final tonic (Example 8a, line 1). Mozart's bass, shown in line 2, does not create such a neat division into two parts, and thus offers the possibility of hearing a single, overarching cadential progression uniting both the deceptive and authentic progressions. One interpretation for how we might understand a more complex, hierarchical relation between the progressions is given in line 3.

Example 8a

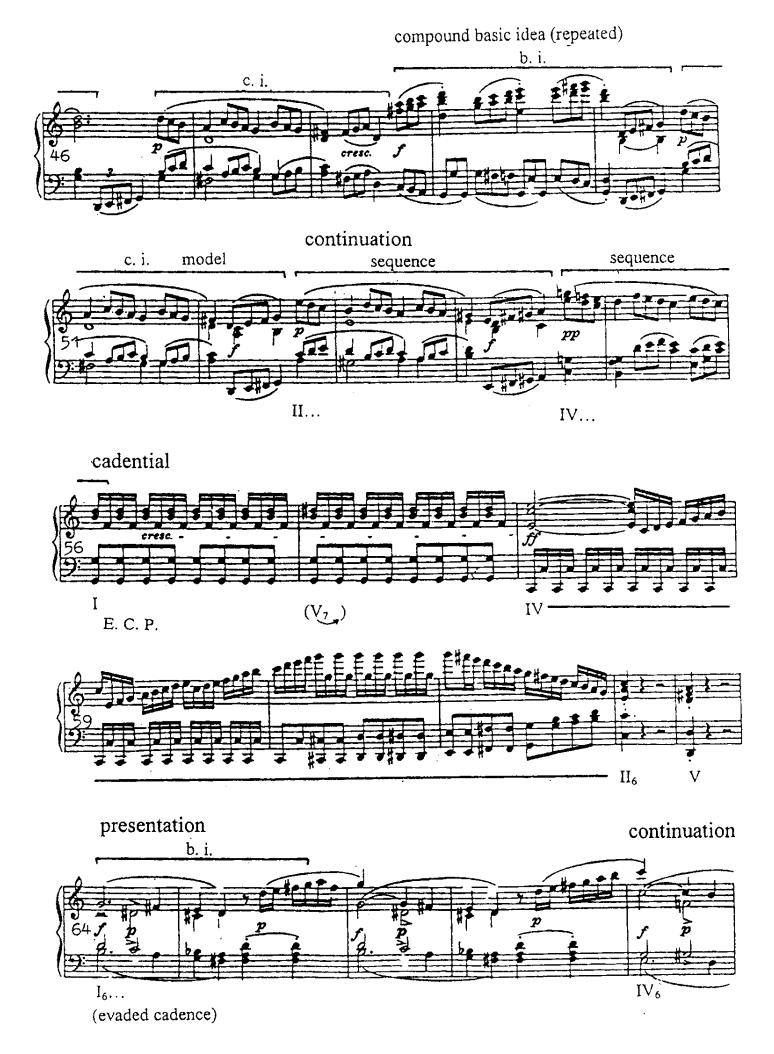


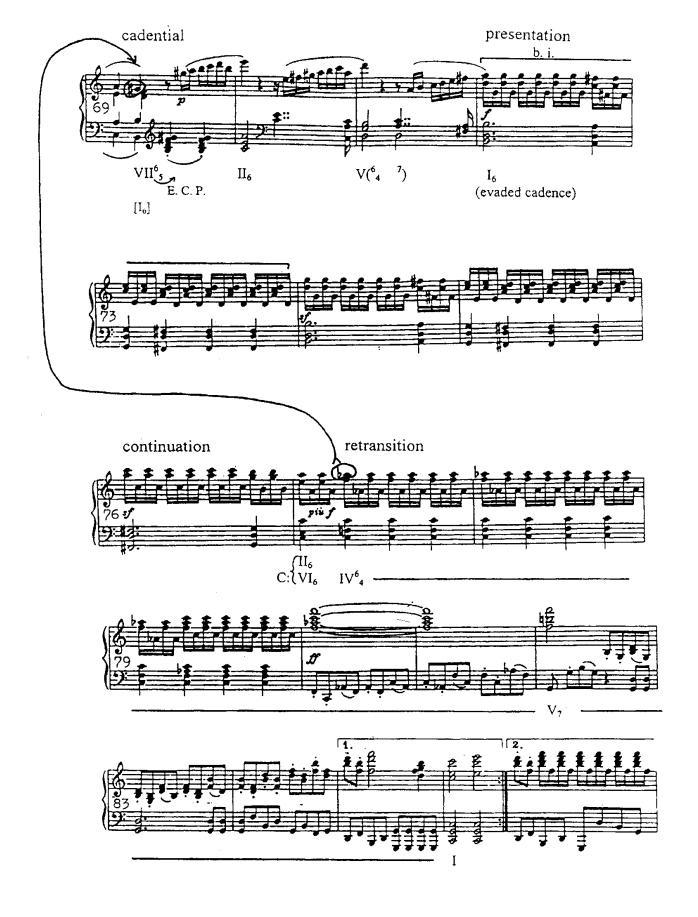
My last example is taken from the finale of Beethoven's Fifth Symphony in C minor, Op. 67. I want to focus primarily on the recapitulation and coda, but first, I must point out one striking irregularity in the exposition that has major consequences for what happens later in the movement. Unlike the vast majority of cases within the classical-period repertory, the subordinate theme of this exposition (Example 9), never achieves full cadential closure in the dominant key of G major. Instead, cadences are promised but then evaded in measures 64 and 72. And at measure 77, Beethoven suddenly changes the pre-dominant II_6 of G into an F-minor six-four chord, a pre-dominant of C, which combined with the resolution to V_7 creates a retransition for the repeat of the exposition.

Example 9. Beethoven, Symphony No. 5, fourth movement, mm. 41–86



G: I...

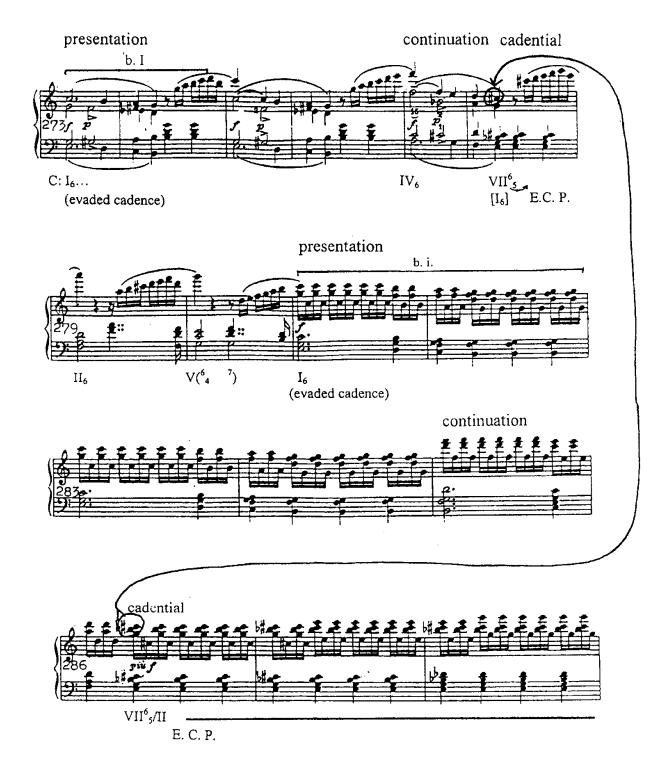




In order to understand the origin of the unusual six-four chord in measure 77, we can look back to the analogous moment in measure 69 and observe that the melodic G-sharp, supported by VII⁶, of II, is enharmonically altered to A-flat in

measure 77, to accommodate the IV⁶₄ chord. This detail is significant for what happens in the recapitulation, where the subordinate theme returns largely intact, though now transposed to the home key of C major (Example 10).⁸

Example 10. Beethoven, Symphony No. 5, fourth movement, mm. 273-327



⁸ To save space, Example 10 leaves out the whole first part of the theme and begins with the first evaded cadence in measure 273.

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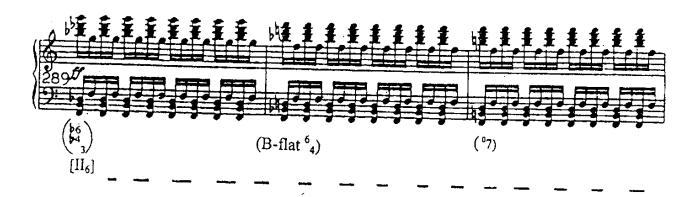
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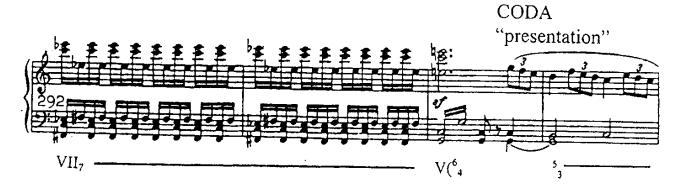
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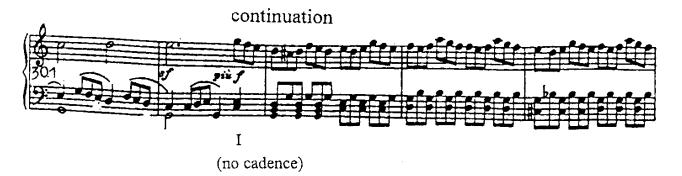
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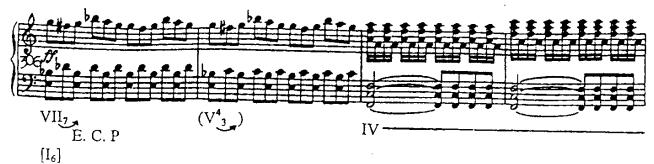


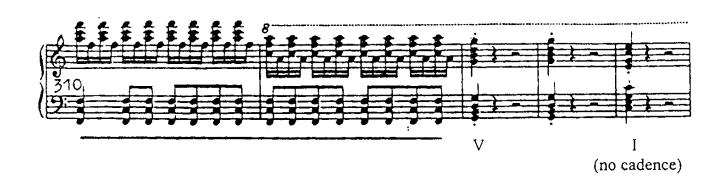


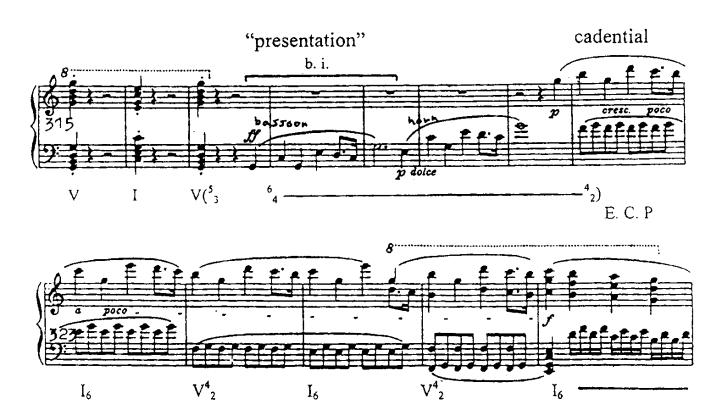


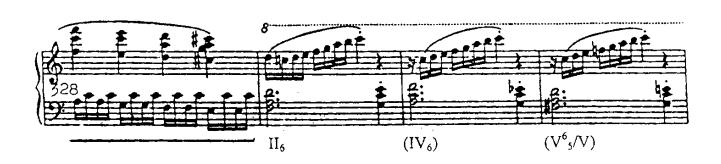


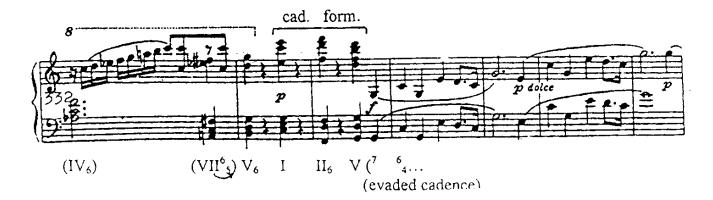
cadential



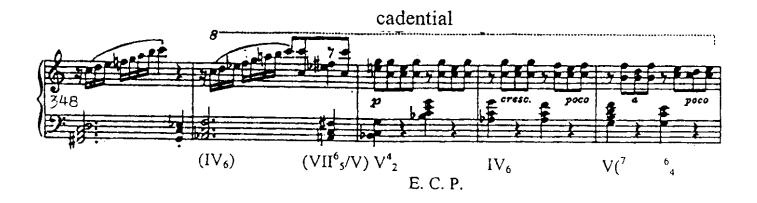




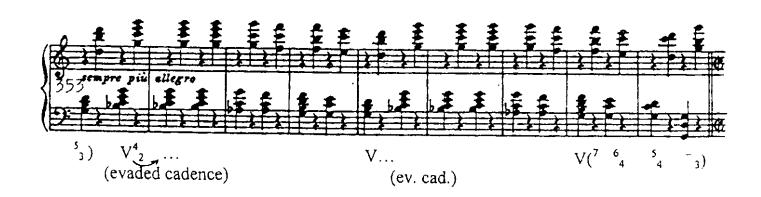








 $II_{6}\dots$





If the theme were to continue exactly as in the exposition, the melodic C-sharp of measure 278 would have been changed to D-flat in measure 286 and be harmonised by a B-flat-minor six-four chord. Instead, Beethoven continues to use the C-sharp for measure 286, and supports it, as in the earlier measure 278, with VII⁶₅ of II. This harmony now functions as a chromatic variant for the initial I₆ of an expanded cadential progression. But when the bass moves up to the fourth scale-degree in measure 289, the expected resolution to II₆ does not occur. Rather, Beethoven now brings a B-flat-minor six-four-three chord, an enriched version of the chord that had been avoided three measures earlier. Since the music must remain in the home key, the six-four-three chord ends up functioning as a most unusual, but fully understandable, pre-dominant substitute within the expanded cadential progression of C major. The progression continues with VII₇ of V in measure 292 and the arrival on the dominant, with six-four embellishment, two measures later, suggests that cadential closure for the subordinate theme is imminent.

The coda now begins by expanding the cadential dominant for eight measures, after which Beethoven evades the cadence, although in a more subtle manner than before. By the time the dominant moves to I at the end of measure 302, all sense of cadential goal has been lost, and the music vigorously drives forward through that moment. At measure 306, the bass line has risen to the third scale-degree, and once again a diminished-seventh chord substitutes for the initial I₆ of an expanded cadential progression. Earlier, this chord had functioned as VII⁶₅ of II; now it acts as a secondary dominant of IV, which resolves to that harmony at measure 308. After all of the prior evasions, the music seems desperately trying to close by means of the percussive chords beginning at measure 312. The effort fails, however, as the dominant of measure 317 wins out in the end.

The subsequent "call to arms", given first by the bassoons and then by the horns, actually takes place over dominant harmony. As the new tune is further developed by the winds at measure 322, we find the familiar rocking back and forth of the V_2^4 and I_6 chords, the conventional signal for the beginning of yet another expanded cadential progression. This one is abandoned when, at the end of measure 332, the pre-dominant VII 6 , of V moves up to a first-inversion dominant, rather than a root position one. The rather feeble, compressed cadential progression that follows in measures 333–334 can hardly do the trick, and when the cadence is evaded once more, the entire previous passage is repeated.

At measure 350, the cadential progression is about to be abandoned again, but now something new happens. Whereas the bass line of all the previous expanded cadential progressions approached the dominant from below, starting with scale-degree three, the new progression at measure 350 begins with the lowered-seventh degree in the bass supporting V_2^4 of IV, another chromatic substitute for an initial I_6 . The bass then descends

⁹ For a fuller discussion of abandoned cadence, sec Classical Form, 106.

to IV₆, borrowed from the minor mode, which in turn moves down a half-step to the cadential dominant. Although this cadence too is evaded at measure 353, the excitement generated by the tempo acceleration as the progression is repeated suggests that maybe this new approach to the dominant might succeed where other attempts had failed. Indeed, after a second evasion in measure 357, the momentum for cadence becomes overwhelming, and the dominant finally resolves to root-position tonic at the *Presto* of measure 362. Here, then, is the first authentic cadence since the beginning of the subordinate theme over one hundred measures earlier.

As far as I am aware, this symphony brings the most expansive series of cadential progressions within the entire classical repertory. In order to build a cadential area of such enormous scope, Beethoven draws upon a wide range of compositional resources, among which is the use of harmonic variants to the cadential progression itself; for repeating over and over the standard formula, $I_6-II_6-V_7-I$, will simply not do. Moreover, the particular choice of harmonic variants is far from arbitrary, but rather related to specific compositional goals and modes of expression. For example, the minor IV_6 chord at the final cadence allows Beethoven to replay once again the progression from C minor to C major that represents the fundamental modal drama of the entire symphony.

I want to conclude with a few remarks on the emphasis that I have given here to details of local chromatic harmony. Although this concern is rather unfashionable in the theoretical community today, I believe that such harmonic particularity is worthy of considerable study. For the composer's use of specific chromatic chords involves much more than providing mere "coloristic effect" or motivic play. Rather, the choice almost always has significant consequences for broader issues of musical form. I hope to have demonstrated that by identifying harmonic variants to the expanded cadential progression, it is possible to illuminate how a passage expresses its own logical placement within the formal organisation of the musical composition.