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MODAL IDENTITY AND IRREGULAR ENDINGS IN TWO CHORALE HARMONIZATIONS BY J. S. BACH*

Lori Burns

An interesting theoretical problem for chorale harmonization is posed by received cantus firmi that close on pitches other than the modal final. A common irregular melodic ending is on the confinal or "dominant."[1] Such confinal endings generate unusual harmonic settings, the larger harmonic movement being that of tonic to dominant. In the works of J. S. Bach, a confinal ending has interesting modal and tonal implications when the chorale concludes a larger work. This study considers two examples of irregular endings in Bach's chorale repertoire, his settings of the cantus firmi "Christ, unser Herr, zum Jordan kam" (the final chorale of Cantata 176) and "Durch Adams Fall ist ganz verderbt" (the final chorale of Cantata 18.)

The paper is organized in two parts. Part I introduces the cantus firmi in question and surveys pertinent historical writings on the sub-

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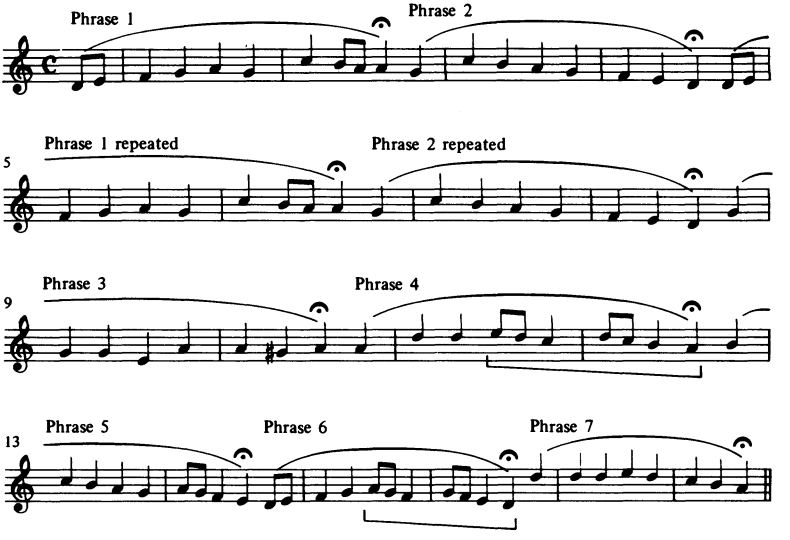
ject of irregular endings. Part II provides detailed analyses of the two chorales, using Schenkerian analytical techniques to focus on their modal organization. The analytical scope also includes the textual and tonal organization of the cantatas to which the chorales belong.

Part I: Irregular Endings

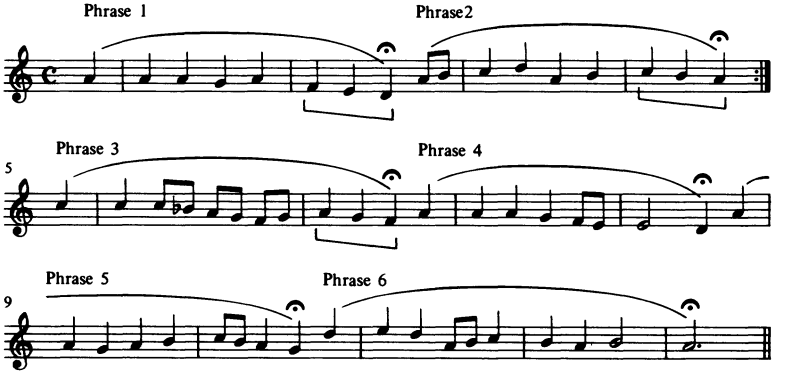
The cantus firmi of Bach's chorales "Christ, unser Herr, zum Jordan kam," BWV 176/6 and "Durch Adams Fall ist ganz verderbt," BWV 18/5 are reproduced in Examples 1a and b.[2] Their melodic and cadential organization suggests a Dorian final until the concluding phrase, which turns toward A. Throughout both melodies, the thematic and inherent harmonic relationships focus primarily on the modal tension between D and A.

In "Christ, unser Herr," the first phrase rises from D4 to its upper fifth A4, and then cadences on A4 approached by its upper third C5 in a descending third-progression (C–B–A). The second phrases returns to C5, but this time makes a complete descent to the initial D4. After a cadence on A4 in phrase 3, the fourth phrase returns to the upper register, introducing D5, which descends gradually to cadence on A4 once again. The fifth phrase appears to repeat the descending progression from C5 that was heard in phrase 2, but this time stops on E4 rather than D4. The sixth phrase answers the gesture by prolonging and firmly cadencing on the expected D4. Phrase 6 also makes a motivic connection to the earlier phrase 4 (indicated by the square brackets), imitating phrase 4 in such fashion that a cadence on A (m. 12) is answered by a cadence on D (m. 16). The melodic material of phrase 4 recurs, somewhat altered, in the final phrase; A thereby returns, superseding the sense of D-closure in mm. 15–16.

The melody "Durch Adams Fall" presents a similar tension between D and A. The first phrase spans the fifth from A4 to D4, approaching D at the cadence through a descending third-progression (F–E–D). The second phrase returns to the upper register A4 and elaborates it through its upper third, descending in a third-progression from C5 to A4 at the cadence. Phrase 3 picks up the C5 and spans the fifth from C to F; the cadence on F4 at m. 6 is also approached by a descending third-progression (A–G–F). The cadences in mm. 2, 4, and 6 share the motivic descending third-progression in quarter-note motion. The cadence on F mediates the cadences on D and A that have already been heard, composing out the D-minor triad, D–A–F. The fourth phrase articulates a clear descending fifth-progression from the upper fifth A4 to D4 at the cadence, returning to the fifth-span of the first phrase, but avoiding the motivic quarter-note descending



Example 1a: Christ, unser Herz, zum Jordan kam



Example 1b: Durch Adams Fall ist ganz verderbt

third-progression into the cadential pitch. This cadence prolongs instead the second degree above the cadence (E4) as a half note, the longest note value yet heard in the melody. The fifth phrase reintroduces the upper register A4 and cadences on G4 in a descending fourth-progression from C5. This phrase acts as a bridge to the final

phrase; its descending fourth-progression approach to the cadence on G is not motivically connected to the earlier phrases. The final phrase picks up on some motivic elements of earlier phrases. It begins on the upper register D5, repeating the highest pitch heard earlier in phrase 2. Here the phrase actually begins on this high note, then exceeds it by its upper neighbor E5, and gradually descends from E5 to cadence on A4. The cadential A4 is approached by its second degree B4 which is prolonged as a half note in a manner that is comparable to the cadential prolongation of E4 in m. 8.

In both melodies, the thematic conflict between D and A is enhanced by the registral presentation of cadences on those pitches. The cadences on A are consistently heard in the upper register (A4), while the cadences on D are heard a fifth below on D4. And the cadences on D4 are approached in stepwise descent from A4, seeming to resolve the upper fifth to its root. The final cadences on A4 suggest a possible continuation or resolution down to D4, a continuation that is not realized.

Certain seventeenth- and eighteenth-century theorists discuss the two cantus firmi in question and catalogue the melodies according to mode. For example, Johann Andreas Herbst, in *Musica poëtica* (1643), discusses them in the context of melodic endings. He first asks the question: How manyfold is the final? He answers that it is twofold—regular (*Regularis*) and irregular (*Irregularis*). He defines regular as "when the melody closes in the correct and natural place (*Clave*) of the mode, namely in *Clausula principali,*" and irregular as "when the voices do not close in their natural place (*Clave*), but rather in another *Clausula,* namely *Minus principali.*" He cites as examples the melodies "Christ, unser Herr, zum Jordan kam" and "Durch Adams Fall," whose endings are irregular because they close in A when they should close in D[3].

Johann Gottfried Walther, in his *Praecepta der musikalischen Componisten* (1708), lists both tunes as examples of Dorian-mode chorale melodies, but he does not explicitly identify their irregular endings (Walther 1708, 171). Johann Philipp Kirnberger (1776) also cites these cantus firmi as Dorian melodies, further classifying "Durch Adams Fall" as a Dorian melody that closes on the fifth degree, and offering a harmonic solution which I shall consider presently (Kirnberger [1776] 1982, 330). In Herbst's and Kirnberger's interpretations, therefore, as well as—implicitly—in Walther's classification of these melodies, it is appropriate to consider the chorales in question as Dorian, ending on the confinal or dominant.[4] I have not found *any* references to these melodies as examples of the Aeolian mode.

If these chorales are in the Dorian mode, ending on the confinal, then one must give thought to the interpretations of such irregular

closes in modal harmony. How does a structural progression from final to confinal function within a modal composition? Does such movement confuse modal identity? How does a confinal ending affect compositional finality? To consider these questions, I shall begin with a brief excursion into earlier modal theory, and then review pertinent seventeenth- and eighteenth-century views on modal harmonic closure.

There are numerous discussions of irregular endings by theorists in the Renaissance and early Baroque. They make it clear that sixteenth-century views on the subject of modal closure do not correspond with modern expectations concerning *tonal* closure. Bernhard Meier expresses this sentiment in the following remark taken from his extensive study *Die Tonarten der klassischen Vokalpolyphonie:*

> . . .there exist in sixteenth-century music works the last tone of which is not identical with the final of their mode. The assertion just articulated—and the further statement that endings of this sort are not so rare—may at first seem rather daring, not to say monstrous. Conceded, such endings—as something to which nothing similar exists in the more recent music familiar to us—impress us as particularly strange. But sixteenth-century music theory mentions them often enough, and if we use the clues given to us there, we can again recognize them without difficulty.[5]

Indeed there is ample evidence that the closing tone of a composition was not necessarily equated with the final of the mode. Zarlino discusses modal closure in a chapter of *Le Istitutione harmoniche* 4 (1558), entitled "What the Composer Should Observe When Composing, and How the Modes Should be Judged" (Zarlino [1558] 1983, 89–91). He addresses problems in recognizing the mode of a composition from the disposition of its cadences, including the final one. He recommends that, in addition to considering the modal final, it is necessary to consider the "form [*forma*] of the entire composition":

> When we have to judge a composition, then we shall have to examine it carefully from beginning to end and see in what form it is composed . . . This we can do by keeping an eye on cadences, which throw a great light on this matter. In this way we shall be able to judge in what mode the composition is written, even if the composition does not end on the proper final of the mode but rather on the median note, or some other note which has suited the composer's purpose.
>
> If we should end a composition on a note other than the final it would not be out of place, since churchmen also did this in their chants . . .[6]

The theorist describes, for example, a chant which is in the Dorian mode, but which ends on the confinal A, the note that divides the octave D–d harmonically. Zarlino emphasizes cadential organization as a means of defining the mode. In order to establish the mode, the internal cadences must be carefully constructed so that, despite the final cadence, the true modal final is never in doubt.[7]

Gallus Dressler, in his *Musicae practicae elementa* (1571), echoes Zarlino's sentiment that the internal organization of a composition helps define the mode, especially since the final cadence can be regular or irregular:

> What do you call an irregular ending? When songs do not end on the tone destined for them, but on another. By observing the species of fourth and fifth, such an ending is recognized with little difficulty. In mensural music often an irregular ending is inserted for the first part of the song, of which the second part that succeeds it then ends regularly.[8]

By identifying the possible placement of an irregular close at the end of the *prima pars,* Dressler addresses the compositional function of such an irregular ending. The harmonically open gesture of the irregular cadence is answered by the more conclusive *secunda pars,* in the manner of an antecedent and consequent. In this case, the irregular ending is dependent for its closure on the proper cadence that follows. But Dressler also admits the possibility of an irregular ending at the ultimate close of a composition: "it must not be overlooked that irregular endings often are conceded to the first part of a song when a second part is expected, but that the final ending is constructed irregularly more rarely."[9]

Seth Calvisius, in his *Melopoiia* (1592), further explores the musical effect of the irregular ending, suggesting that it creates an expectation for continuation, and that it should not be used at random, but only with reason:

> Then the end is built on the proper and perfect cadence of the mode; it cannot be made on an improper, peregrine, or imperfect cadence, because these cadences, by their imperfection, place the mode of the harmony in doubt, and suspend that harmony, so to speak, and change it into such a form that listeners, detained by the hope and expectation of something to come, await something more perfect which would constitute the end. Also, offence would be made against the popular rule of musicians: in the end its tone will appear. Although the mode of the harmony ought to be revealed everywhere, it ought to be done most at the ending, by which all its goodness, elegance, and perfection is judged. And although counterexamples are found in works by good authors, nevertheless he who will have examined *the agreement of the*

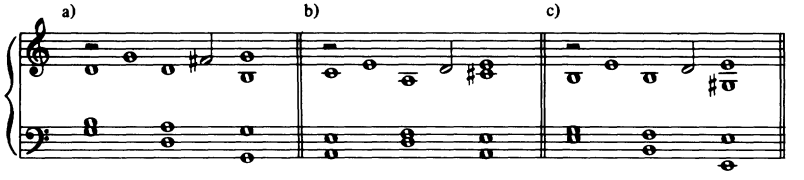
> *harmony with its text* will find that it [the regular ending] is not usurped at random, nor without the most serious reasons.[10]

With his final remark, Calvisius identifies a possible reason for closing irregularly—a composer might choose such an ending in order to express the affective content of the text.[11]

From these brief excerpts of sixteenth-century writings we can make the following statements about confinal endings: (1) An irregular ending is possible, provided that the mode is otherwise well established; (2) The mode will be so established by the internal cadences and melodic organization; (3) The irregular ending can be used to close the first part of a two-part composition and even, although more rarely, to close an entire work; (4)The irregular ending creates an expectation for continuation. When it occurs at the end of the *prima pars,* the continuation is realized in the *secunda pars.* When it occurs at the ultimate close, the sense of expectation might be justified as an affective setting of the text. From (4) we can understand that modal theorists heard such harmonic movement *functionally;* that is, they engaged analytical values such as harmonic expectation and harmonic closure. A confinal close did indeed have a striking effect on the finality of the composition.

These earlier theorists did not offer specific harmonic solutions for irregular endings. During the seventeenth and eighteenth centuries, however, certain theorists established descriptive terms for different root progressions. In so doing they instruct us further in the interpretation of the harmonic progression from final to confinal. I will begin with seventeenth-century definitions of harmonic progressions that engage the fifth relation and the irregular ending. I will then examine the remarks of the selected eighteenth-century theorists who admit the possibility of the confinal ending, especially in the context of chorale composition.

Herbst (1643) distinguishes two types of formal cadences—the falling-fifth progression, as shown in example 2a, and the falling-fourth (or rising-fifth) progression, as shown in example 2b.[12] Each formal cadence has three parts—antepenultimate–penultimate–ultimate; specific melodic progressions are designated for each voice part within the scheme. Herbst does not judge the completeness or incompleteness of the falling-fourth progression, but he does tell us where this progression is customarily used. In those cadences which close in *MI,* (for example, with the soprano moving E–D–E) the falling-fifth progression that is given in example 2c is impossible because of the false fifth between B and F in the penultimate chord; for such cadences, therefore, the falling-fourth progression of example 2b is advised.[13]

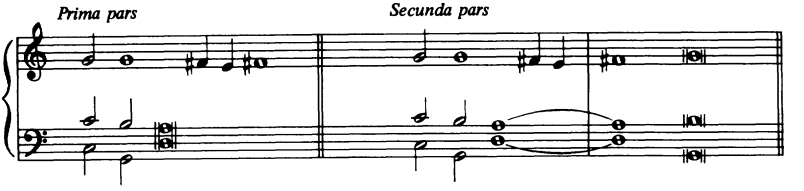


Example 2: Herbst (1643)

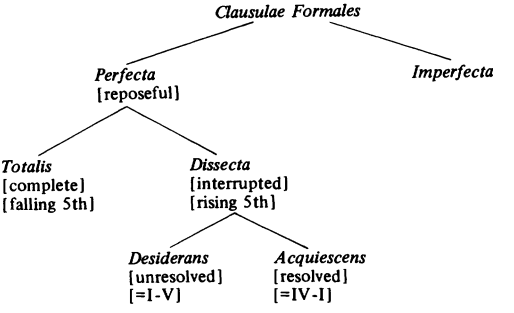
Herbst allows for the possibility of another cadence form, also a falling-fourth or rising-fifth progression, but this time with a different interpretation. Earlier, I cited his discussion of regular and irregular melodic endings. During this discussion he provides an example of the irregular close. He describes the situation in which an internal movement might close on a confinal in order to indicate that there is more to come. Herbst specifies the harmonic derivation of such a cadence: the cadence is an incomplete form of the antepenultimate–penultimate–ultimate formal cadence. The ultimate chord is held back and does not appear until the final cadence of the following movement. He describes a two-part composition and demonstrates with an example, reproduced as example 3. This can also be realized in a three-movement work—the first and last movements have the complete form of the cadence and the middle one is incomplete (Herbst 1643, 86–88). In addition to the strategic placement of an irregular close at the end of a "prima pars" or internal movement, Herbst identifies the possibility of a final irregular close, especially "when it is called for by the text."[14]

Wolfgang Caspar Printz develops a highly formalized system of modal cadences and harmonic function in his *Phrynis Mitelenaeus, oder Satyrischer Componist* (1676). Printz defines an extensive list of cadential progressions involving a full vocabulary of chords and cadence types.[15] A thorough review of his cadence systems is not possible here, but a brief summary will shed further light on the confinal ending. First, cadences are classified as perfect and reposeful, or imperfect and not reposeful.[16] These types are subdivided further, generating various forms and inversion. A general distinction can be made between the perfect and imperfect categories: the perfect cadences involve bass motion by fifth, falling or rising, and the imperfect mostly involve bass motion by step. It is the former with which we are concerned here.

The perfect or reposeful cadences are subdivided into two categories, as shown in example 4: *totalis,* or complete, which is a falling-fifth progression, and *dissecta,* or interrupted, which is a rising-fifth



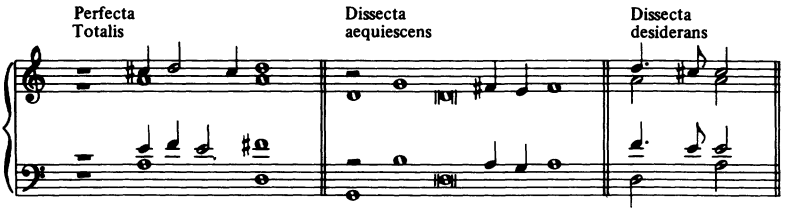
Example 3: Herbst (1643), Irregular Endings



Example 4: Printz (1676)

progression. The *dissecta* is further subdivided into two forms: the *desiderans,* or unresolved interrupted cadence, and the *acquiescens,* or resolved interrupted cadence. In his table of modal cadence patterns, the unresolved interrupted cadence is realized as a harmonic progression from the modal final to its fifth (in modern terminology, from I to V), and the resolved interrupted is realized as a progression from the fourth degree to the modal final (IV to I). Example 5 reproduces the *perfecta totalis, dissecta acquiescens* and *dissecta desiderans* cadences for the Dorian mode.

Keeping in mind that both forms of the *dissecta* cadence are classified at a higher level as perfect and reposeful, we can consider Printz's comparison of the resolved and unresolved interrupted cadences. He classifies the different cadence formulas according to whether the last chord—the one that is required to complete the formal cadence—is explicitly stated (*sedes expressa,* "an explicit place") or implied (*sedes subintellecta,* "an implicit place"). The *totalis* or complete perfect cadence is considered to be of the former category, as is the *dissecta acquiescens* or resolved interrupted cadence. *The dissecta desiderans,* or unresolved interrupted cadence, however, is of



Example 5: Printz (1676)

the latter type, because a final chord is required to make it complete (Printz 1676, ch. 8, §§28–31).

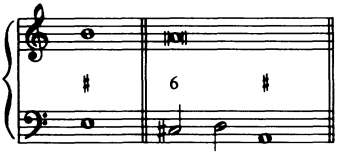
In his practical application of the formal cadence types to the modes, Printz makes one more remark concerning the unresolved form of the interrupted cadence (*dissecta desiderans*). He indicates that it is not appropriate at the end of a melody, "since it stimulates the emotions and makes one anxious to hear more"; it is appropriate, however, if the desired effect is to create this sense of expectation.[17]

During the eighteenth century, theorists continue to engage modal theorectical issues, especially as they are relevant to the harmonization of chorale melodies. Of particular interest to us are two of Bach's students—Johann Philipp Kirnberger and Johann Christian Kittel—who aim, in their theorectical writings, to explicate their teacher's musical practice.

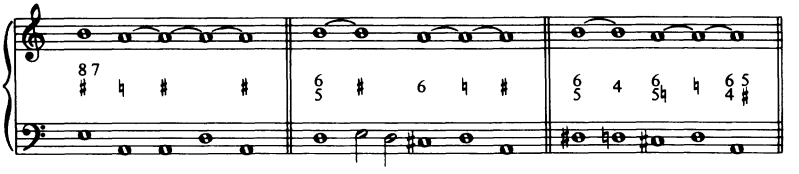
Kirnberger explicitly addresses the problem of finding a harmonic solution for a cantus firmus with an irregular ending. He makes the following remarks about the chorale "Durch Adams Fall":

> Among the hymns, there are a few which do not close with the principal note. For example, the chorale melody "Durch Adams Fall" . . . is Dorian but closes on the fifth of the main [mode]. Such cadences must be treated in conformity with the main mode. Thus it would be faulty if one were to conclude the cited chorale in A with a minor third. The cadence must be as shown in [example 6] (Kirnberger [1776] 1982, 330).

Kirnberger's harmonic solution is to hold onto the A in the cantus long enough that the final gesture can be from a D-minor triad to an A-major triad, creating what might be recognized as a "half cadence" from i to V in D. I interpret his comments above to mean that the major third, C♯, of the final triad on A is crucial in order to define A as a dominant and not as a tonic. The final melodic gesture of both melodies—B4–A4—might rather be harmonized by the progression



Example 6: Kirnberger (1776)



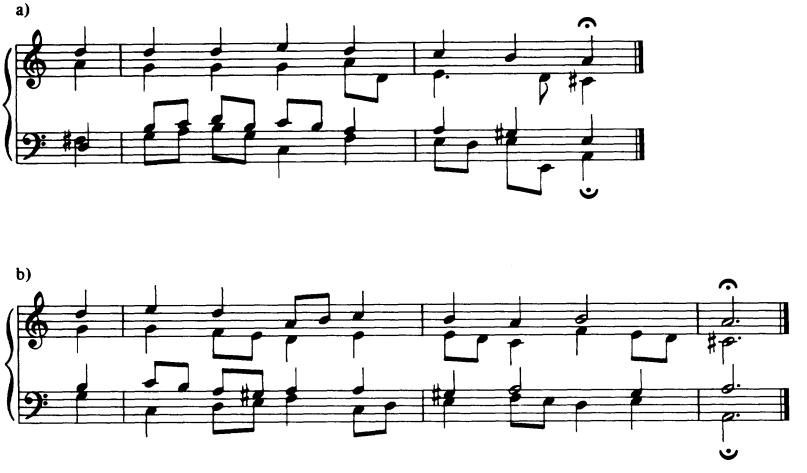
Example 7: Türk (1787)

from V to I in A, but Kirnberger does not favor this progression. He wishes to suggest the function of A as the dominant of D.

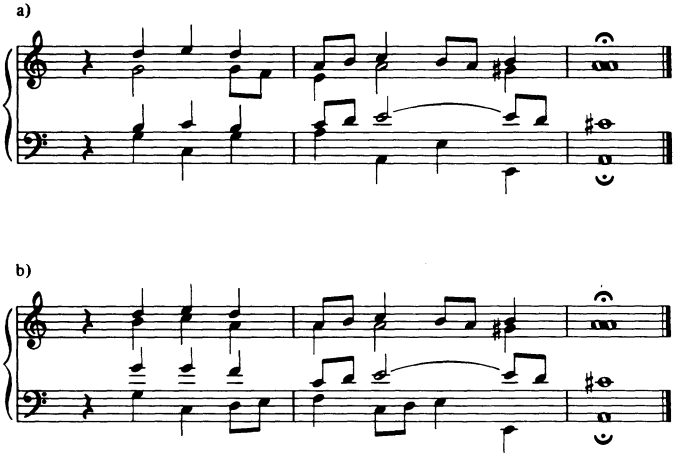
Following Kirnberger, Daniel Gottlieb Türk also identifies "Durch Adams Fall" as a "melody that closes not with the harmony of the tonic, but rather with an interval of the dominant harmony. . . ."[18] He maintains that this occurs often in melodies of the old modes, and he advocates using the major third in the last chord to help define the tonic. His examples of such closes, given as my example 7, are quite similar to the Kirnberger example. The final note of the cantus firmus, A, is sustained while the harmony defines A major as the dominant and D minor as the tonic in the final half cadence.

Kirnberger and Türk thus solve the problem of the irregular ending with a half cadence from tonic to dominant. Their solutions, however, do not accurately reflect Bach's compositional practice. His harmonizations of "Durch Adams Fall" and "Christ, unser Herr" present final authentic cadences that tonicize the confinal or fifth degree.[19] Example 8 reproduces the final phrase from each chorale. Part II of this paper will demonstrate that the larger harmonic progression of each chorale is indeed form tonic (D) to dominant (A), but the final cadence on A is itself a perfect cadence in A and not a half cadence in D. Perhaps Kirnberger's solution is an idealized formula intended to convey the larger function of D as modal final and A as confinal.

Johann Christian Kittel, in his *Der angehende praktische Organist* (1808), provides an interesting interpretation of "Durch Adams Fall." He studies the cantus firmus phrase by phrase, exploring what he



Example 8: a) Final phrase, "Christ, unser Herr," BWV 176/6;
b) Final phrase, "Durch Adams Fall," BWV 18/5



Example 9: Kittel (1808)

refers to as "modern" harmonizations versus "Dorian" harmonizations.[20] When he reaches the final phrase of the tune, he presents two Dorian solutions and several modern settings. We will concern ourselves here with the two modal harmonizations. The first, shown in

example 9a, is classified as "Dorian, with a plagal cadence"; the second, given in example 9b, "is of a similar type, but the harmony is different" (Kittel [1808] 1982, 3: 46–47). Both cadences are dominant-tonic resolutions in A; the second solution is quite similar to Bach's own harmonization in BWV 18/5, reproduced earlier as example 8b. Kittel's harmonic solutions and his brief classifications of them as "Dorian, with a plagal cadence" illustrate his theoretical conception of the confinal ending. First, Kittel understands the cadences on A to be conventional within the Dorian modality. A second observation is the more remarkable: in both solutions, the final cadence resolves from dominant to tonic in A, yet Kittel describes these as "plagal" cadences. Certainly he cannot be referring to the harmonic cadence E–A as a plagal gesture; he is more likely referring to the higher-level function of the cadence on A within the harmony of D.

The historical theorists reviewed here substantiate an interpretation of these two chorales as Dorian, ending on the dominant. In the hands of an eighteenth-century composer such as Bach, what does it mean to conclude a multi-movement work with a cadence on the dominant? The earlier theorists suggested that such an unresolved ending could be justified as an affective representation of the text. In the following analyses, I will consider the individual chorales as well as the larger textual and tonal plan of the cantatas to which they belong. It will not be possible here to provide a thorough text/music analysis of these cantatas, but an overview will establish a broader context for the detailed analysis of the individual chorales.

Part II: Analysis

Cantatas 176 and 18 are similar in textual and tonal design. Examples 10 and 11 provide the texts of cantatas 176 and 18, respectively.[21] The larger tonal structure of each cantata is indicated along the left-hand column of these examples. The modality of the final chorales is indicated by the label "d/a," symbolizing the polarity of these degrees. In each cantata, the tension between D and A in the final movement is prepared by earlier tonal events. Indeed, it is the very first tonal relationship to be explored in both compositions; in example 10, the first movement exposes a harmonic progression from A minor to D minor and back; in example 11, the first and second movements in A minor are followed by the third movement in D minor. The tonal connection from the opening movement to the final chorale of each cantata has significant implications for the interpretation of the confinal ending; indeed, the cantatas in question begin in A, and the closing chorales tonicize A in the final cadential progressions, seeming to

Example 10: Text† and tonal plan* of Cantata 176, "Es ist ein trotzig und verzagt Ding" (text: M. von Ziegler)

†Text and tranlation © Hänssler-Verlag, Neuhausen-Stuttgart, 1984. (Used by permission.)

*Tonal organization based on the transposition of the cantata down a third from C to A.

[a]	**1. Coro**	**1. Chorus [Dictum] (S, A, T, B)**
a-d-a	Es ist ein trotzig und verzagt Ding um aller Menschen Herze.	There is a daring and a shy thing about the human spirit.
	2. Recitativo	**2. Recitative (A)**
a	Ich meine, recht verzagt, Daß Nikodemus sich bei Tage nicht, Bei Nacht zu Jesus wagt.	I think it very shy That Nicodemus did by day come not, By night did Jesus face.
d	Die Sonne mußte dort bei Josua so lange stille stehn, So lange bis der Sieg vollkommen war geschehn; Hier aber wünschet Nikodem: O Säh ich sie zu Rüste gehn!	The sun was forced one day for Joshua so long to stand in place, Until at last the victory was fully won; Here, though, did Nicodemus wish: O would the sun now go to
e		rest!
[G]	**3. Aria**	**3. Aria (S)**
	Dein sonst hell beliebter Schein Soll vor mich umnebelt sein, Weil ich nach dem Meister frage, Denn ich scheue mich bei Tage. Niemand kann die Wunder tun, Denn sein Allmacht und sein Wesen, Scheint, ist göttlich auserlesen, Gottes Geist muß auf ihm ruhn.	Thy dear light, before so bright, Must for me the clouds obscure, While I go to seek the master, For by day I am too fearful. No man can these wonders do, For his nature and vast power, It would seem, by God are chosen; God's own Spirit on him rests.
[e]	**4. Recitativo**	**4. Recitative (B)**
e	So wundre dich, o Meister, nicht, Warum ich dich bei Nacht aus- frage!	So marvel then, O Master, not, That I should thee at night be seeking!

Example 10: (continued)

	Ich fürchte, daß bei Tage	I'm fearful, lest by daylight
a	Mein Ohnmacht nicht bestehen kann.	My weakness could not stand the test.
e	Doch tröst ich mich, du nimmst mein Herz und Geist	And yet I hope thou shalt my heart and soul
	Zum Leben auf und an,	To life exalt and take.
	Weil alle, die nur an dich glauben, nicht verloren werden.	For all men who in thee believe now shall not be forsaken.
C	**5. Aria**	**5. Aria (A)**
C	Ermuntert euch, furchtsam und schüchterne Sinne,	Have courage now, fearful and timorous spirits,
	Erholet euch, höret, was Jesus verspricht:	Recover now, hear ye what Jesus doth pledge:
	Daß ich durch den Glauben den	That I through belief shall now
d	Himmel gewinne.	heaven inherit.
a	Wenn die Verheißung erfüllend geschicht,	When this great promise fulfill- ment achieves,
	Werd ich dort oben	Shall I in heaven
C	Mit Danken und Loben	With thanks and with praises
	Vater, Sohn und Heilgen Geist	Father, Son and Holy Ghost
	Preisen, der dreieinig heißt.	Honor, the Three-in-One named.
d/a	**6. Choral**	**6. Chorale (S, A, T, B)**
	Auf daß wir also allzugleich	Rise, that we may now all as one
	Zur Himmelspforten dringen	To heaven's portals hasten;
	Und dermaleinst in deinem Reich	And when at last within thy realm
	Ohn alles Ende singen,	May we forever sing there
	Daß du alleine König seist,	That thou alone sweet honey art,
	Hoch über alle Götter,	All other gods excelling,
	Gott Vater, Sohn und Heilger Geist,	God Father, Son and Holy Ghost,
	Der Frommen Schutz und Retter,	Of good men shield and Savior,
	Ein Wesen, drei Personen.	One being, but three persons.

Example 11: Text† and tonal plan of Cantata 18, "Gleichwie der Regen und Schnee vom Himmel fällt" (text: E. Neumeister)

†Text and translation © Hänssler-Verlag, Neuhausen- Stuttgart, 1984. (Used by permission.)

a	**1. Sinfonia**	**1. Sinfonia**
	2. Recitativo *Gleichwie der Regen und Schnee vom Himmel fällt und nicht wieder dahin kommet, sondern feuchtet die Erde und macht sie fruchtbar und wachsend, daß sie gibt Samen zu säen und Brot zu essen: Also soll das Wort, so aus meinem Munde gehet, auch sein; es soll nicht wieder zu mir leer kommen, sondern tun, das mir gefället, und soll ihm gelingen, dazu ich's sende.*	**2. Recitative [Dictum] (B)** *Just as the showers and snow from heaven fall and return again not thither, rather give the earth moisture and make it fertile and fruitful, so it gives seed for the sowing and bread for eating: Just so shall the word which from mine own mouth proceedeth, be too; it shall not come again to me empty, but shall do what I have purposed and shall that accomplish for which I send it.*
d	**3. Recitativo e Litania**	**3. Recitative (T, B) and Litany (S, A, T, B)**
F	Tenor Mein Gott, hier wird mein Herze sein: Ich öffne dir's in meines Jesu Namen; So streue deinen Samen Als in ein gutes Land hinein. Mein Gott, hier wird mein Herze sein: Laß solches Frucht, und hundertfältig, bringen. O Herr, Herr, hilf! o Herr, laß wohlgelingen!	(T) My God, here shall my heart abide: I open it to thee in Jesus' name now; So scatter wide thy seed then As if on fertile land in me. My God, here shall my heart abide: Let it bring forth in hundredfold its harvest. O Lord, Lord, help! O Lord, O let it prosper! (S, A, T, B)
d		
a-F-d	**Du wollest deinen Geist und Kraft zum Worte geben. Erhör uns, lieber Herre Gott!**	**That thou might to the word thy Spirit add, and power, O hear us, O good Lord, our God!**
a	Baß Nur wehre, treuer Vater, wehre, Daß mich und keinen Christen nicht Des Teufels Trug verkehre. Sein Sinn ist ganz dahin gericht', Uns deines Wortes zu berauben Mit aller Seligkeit.	(B) But keep us, faithful Father, keep us, Both me and any Christian soul, From Satan's lies attending. His mind has only one intent, Of this thy word to rob us With all our happiness.
a-F-d	**Den Satan unter unsre Füße treten. Erhör uns, lieber Herre Gott!**	**That Satan underneath our feet be trodden, O hear us, O good Lord, our God!**
e	Tenor Ach! viel' verleugnen Wort und Glauben	(T) Ah! Many, word and faith renouncing,

Example 11: (continued)

	Und fallen ab wie faules Obst, Wenn sie Verfolgung sollen leiden. So stürzen sie in ewig Herzeleid, Da sie ein zeitlich Weh vermeiden.	Now fall away like rotting fruit, When persecution they must suffer. Thus they are plunged in everlasting grief For having passing woe avoided.
a-F-d	**Und uns für des Türken und des Papsts grausamen Mord und Lästerungen, Wüten and Toben väterlich behüten. Erhör uns, lieber Herre Gott!**	**And from all the Turk's and all the Pope's Most cruel murder and oppression, Anger and fury, fatherlike protect us. O hear us, O good Lord, our God!**
g	Baß Ein andrer sorgt nur für den Bauch; Inzwischen wird der Seele ganz vergessen; Der Mammon auch Hat vieler Herz besessen. So kann das Wort zu keiner Kraft gelangen. Und wieviel Seelen hält Die Wollust nicht gefangen? So sehr verführet sie die Welt,	(B) One man may but for belly care, And meanwhile is his soul left quite forgotten; And Mammon, too, Hath many hearts' allegiance, And then the word is left without its power. How many are the souls
a	Die Welt, die ihnen muß anstatt des Himmels stehen, Darüber sie vom Himmel irregehen.	By pleasure not the captive? So well seduceth them the world, The world which now they must instead of heaven honor,
a-F-d	**Alle Irrige und Verführte wiederbringen. Erhör uns, lieber Herre Gott!**	And therefore shall from heaven stray and wander. **All those now who are gone and led astray recover. O hear us, O good Lord, our God!**
F	**4. Aria** Mein Seelenschatz ist Gottes Wort;	**4. Aria (S)** My soul's true treasure is God's word;
F-d-a-d-F	Außer dem sind alle Schätze Solche Netze, Welche Welt und Satan stricken, Schnöde Seelen zu berücken. Fort mit allen, fort, nur fort! Mein Seelenschatz ist Gottes Wort.	Otherwise are all those treasures Mere devices By the world and Satan woven, Scornful spirits for beguiling. Take them all now, take them hence! My soul's true treasure is God's word.
d/a	**5. Choral Ich bitt, o Herr, aus Herzens Grund, Du wollst nicht von mir nehmen Dein heilges Wort aus meinem Mund; So wird mich nicht beschämen Mein Sünd und Schuld, denn in dein Huld Setz ich all mein Vertrauen: Wer sich nur fest darauf verläßt, Der wird den Tod nicht schauen.**	**5. Chorale (S, A, T, B) I pray, O Lord, with inmost heart, May thou not take it from me, Thy holy word take from my mouth; For thus shall not confound me My sin and shame, for in thy care I have all mine assurance: Who shall steadfast on this rely Shall surely death not witness.**

round off a large tonal progression. Given this broader context, perhaps these chorales should be understood in A, rather than D. Certainly that interpretation would admit tonal closure, while the confinal interpretation does not. I favor the confinal interpretation, but I am interested in how the final cadence of each chorale creates an unresolved modal structure at the level of the individual movement, while at the same time creating a closed tonal structure at the level of the entire cantata.

The text of Cantata 176 is translated in example 10. In this work the duality of the mode depicts the dichotomy of human nature that is the main textual issue. The cantata is based on an incident related in the Gospel according to St. John [iii, 1–15] in which Nicodemus is afraid to visit Christ by daylight. The first movement is a choral fugue on a quotation from Jeremiah: "There is a defiant and a faint-hearted thing about the human spirit (Es ist ein trotzig und versagt Ding um aller Menschen Herze)." In this movement the larger tonal organization is from A minor to D minor and back to A minor.

The conflict between human weakness and strength expressed in the opening dictum is the basis of the texts that follow. The first recitative comments on Nicodemus's fear of meeting Jesus by daylight, a fear represented by A minor. A reference to the sun, textually linked with victory, is sung in D minor, but the recitative ends by invoking once again the fearful Nicodemus, this time in E minor, the fifth degree of A. The third movement, an aria, makes explicit that Nicodemus's avoidance of light symbolizes his fear of Christ, who in turn represents God. The key of the aria is G major, approached from the recitative as III of E minor, the dominant of A. The fourth movement, a bass recitative, is a personal expression of Nicodemus's weakness, sung in E minor with a reference to the A minor tonic. The fifth movement is an appeal to faith, sung in the mediant of A minor, C major. The final chorale, the eighth strophe of Gerhardt's "Was alle Weisheit in der Welt," sung to the tune "Christ, unser Herr, zum Jordan kam," is a more positive *assertion* of faith, with no implications of doubt or weakness. The harmonic language of the chorale is not, however, equally dogmatic in its assertion of a modal final. Rather, an ambiguous musical setting casts a reflective shadow over the decisive expression of faith. This musical irony is a fitting commentary on the nature of the text. While, at the local level—within the context of the chorale alone—the final triad on A may be perceived as the dominant of D minor, within the larger context—the entire cantata—A is perceived as the tonic, and thus the final cadence refers us back to the key of the opening movement and to the expression of humankind's dual nature.

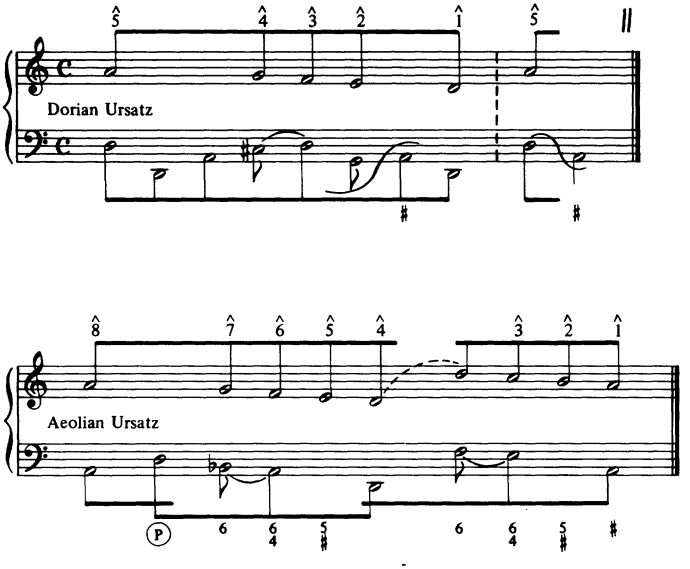
The text of BWV 18 is translated in example 11. Cantata 18 is based on the parable of the sower, from the Gospel according to St. Luke

[viii, 4–15] in which the seed is portrayed as the word of God: the seeds that yield fruit are likened to those who accept God's word, and the seeds that do not bear fruit are likened to those who are distracted from the word of God by the Devil. The basic premise, therefore, is once again the duality of the human spirit—strength or faith versus weakness or sin. The opening movement is a Sinfonia in A minor. This is followed by a recitative in A minor, the text of which is a passage from Isaiah [55, 10–11] that likens God's word to fruitful seed. The third movement is a recitative and litany appealing to God for the strength to resist evil. The recitative statements are interrupted by choral phrases based on Luther's litany, which have the refrain "Erhör uns, lieber Herre Gott." Each of these choral statements are supported by an overall harmonic progression from A minor through F major to D minor. The movement closes ultimately in D. The fourth movement takes up one verse from the parable which claims that God's word is the only treasure and that other treasures are the devices of Satan. The aria is in F major but its harmonic scheme again refers us to D minor and A minor. The final chorale is the eighth strophe of Spengler's hymn "Durch Adams Fall." The text is a reflective plea for God's assurance that His word will be granted despite the sins of human beings. In its modal conflict between D and A, the music complements the dual sentiments of fear and hope that are expressed in the chorale. Once again, the modal conflict within the chorale itself may not be ultimately resolved by the final cadence in A, but within the context of the entire cantata, the final cadence connects with the opening key of A minor.

In the analyses that follow, the reductive approach is clearly Schenkerian, although his system is expanded to accommodate certain modal features of these chorales. The purpose of this paper is not to categorize Dorian or Aeolian modal patterns, but it will be necessary during the course of our analytical discussion to define certain of these patterns as they occur.[22]

The chorale "Christ, unser Herr, zum Jordan kam," BWV 176/6 is analyzed in Sketch 1, which appears over two pages.[23] The chorale appears at the bottom of the page, with two different deep middleground interpretations aligned above it—a Dorian interpretation, in which the role of modal final is assigned to D, and an Aeolian interpretation, in which the modal final is analyzed as A. The Overview of Sketch 1 also provides the different *Ursätze* that derive from the Dorian and Aeolian analyses. I shall discuss both interpretations in order to evaluate the degree to which it is possible to hear the chorale in Dorian and Aeolian.

The Dorian *Ursatz* provides an interpretation of the chorale as Dorian, ending on the dominant. In this interpretation, the chorale



Overview of Sketch 1

does "close" in an Schenkerian sense, at an earlier point. That is, there is an *Urlinie* descent and a completed *Baßbrechung*. The Dorian *Urlinie* is a $\hat{5}$-line in D accompanied by a bass arpeggiation of the D-minor harmony. The *Urlinie* completes its descent to $\hat{1}$ accompanied by a clear harmonic closure in D. A dotted barline indicates the harmonic and melodic closure. Following this closure the *Ursatz* begins again, as it were, with the reestablishment of the *Kopfton* and tonic support. A final gesture turns the harmony toward the dominant, which is left unresolved. To indicate the open-ended structure, I will borrow Schenker's symbol for interruption (‖).

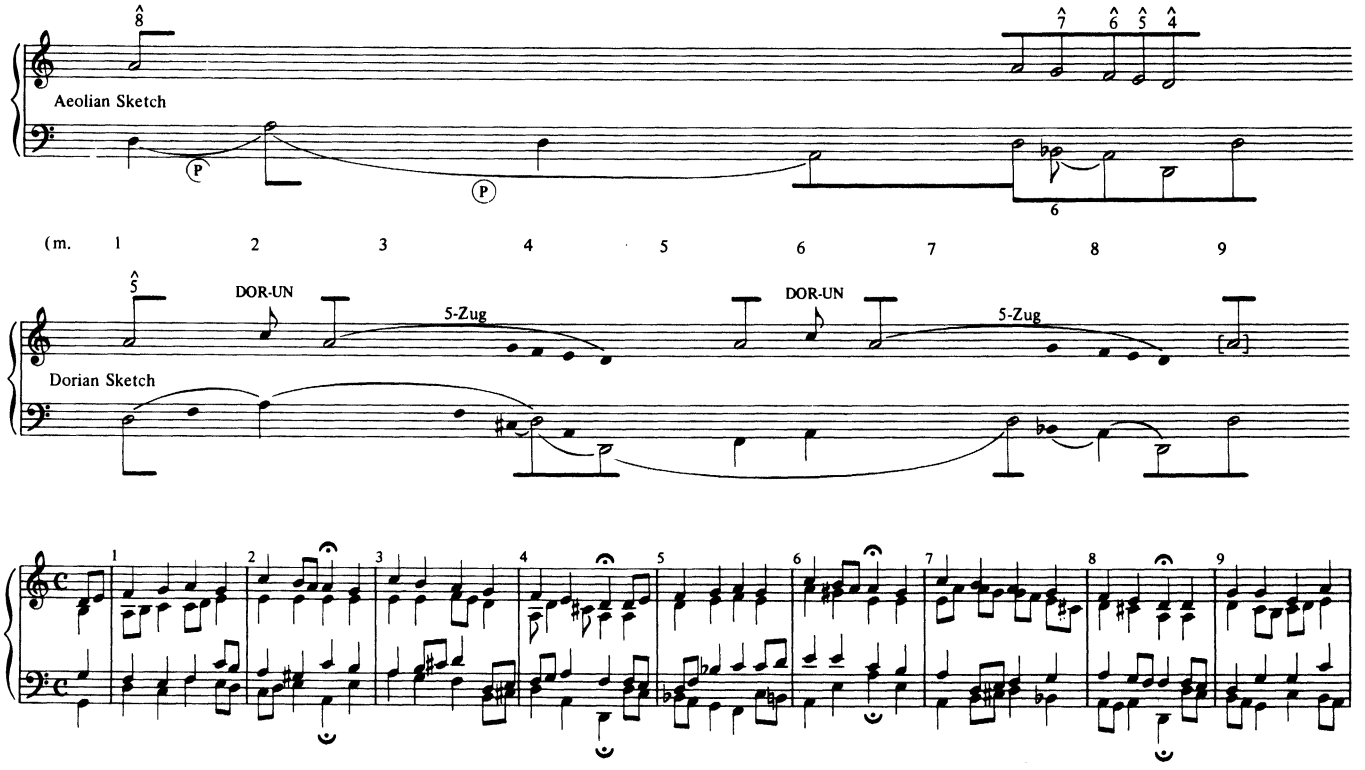
In the Dorian Sketch, two melodic gestures appear to control the soprano voice. The first is a characteristic Dorian pattern in which the *Kopfton* A4 is prolonged by means of its upper third C5 in the manner of a neighbor-note figure, A4–C5–A4. The C5, labelled a "Dorian Upper Neighbor" (DOR-UN), is flagged to symbolize its melodic embellishing function.[24] The second melodic gesture prolongs the *Kopfton* A4 in a descending fifth-progression from A4 to D4. Throughout the Dorian sketch, the DOR-UN prefaces every instance of the fifth-progression from A to D in the structural soprano voice, including the final descent. When the DOR-UN figure is heard again in mm. 17–18, it creates an expectation for a subsequent descending fifth-progression, but this expectation is never realized.

In the music, the DOR-UN figure of m. 2 is composed out as a 3-*Zug* (C5–B4–A4) that tonicizes A. The A-minor cadence of m. 2 is immediately followed by the D-minor cadence of m. 4. The DOR-UN figure of m. 6 is similarly tonicized in an A-minor cadential progression that is again followed by a D-minor cadence in m. 8. These opening four phrases, therefore, express a tonal conflict by alternating cadences on A and D.

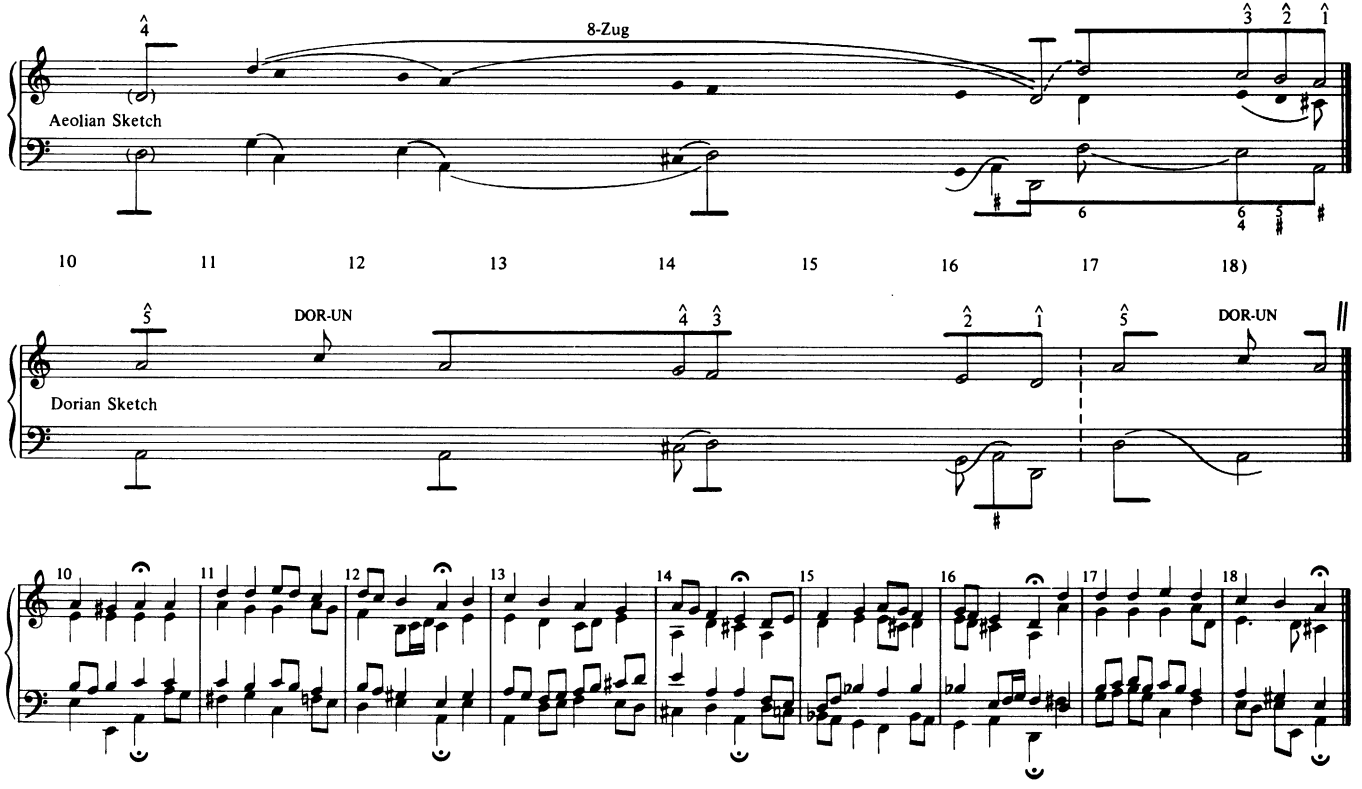
The Dorian Sketch analyzes the cadences on D as tonic, but one can also entertain hearing A as tonic. The Aeolian interpretation accepts the modal final as A rather than D. The Aeolian *Urzatz* (which appears in the Overview of Sketch 1) contains as its *Urlinie* an $\hat{8}$-line descent. The line begins by descending from A4 to D4; it then continues, after an octave transfer, from D5 down to A4. The *Kopfton* is first supported by tonic, and then by subdominant harmony. D minor as subdominant is prolonged, during mm. 7–8, in the cadential progression i–iv$_6$–V $[\frac{6-5}{4-3}]$–i as the *Kopfton* descends from $\hat{8}$ to $\hat{4}$ in the *Urlinie*. The final descent from $\hat{4}$ to $\hat{1}$, is harmonized by iv$_6$–V $[\frac{6-5}{4-3}]$–I in A. The tiered system of beams in the *Baßbrechung* symbolizes the prolongation of A through its subdominant.

In the Aeolian Sketch, the plagal relation between A and D is further developed. The opening A-minor triad which supports the *Kopfton* is approached by an initial subdominant and then embellished by a plagal progression A–D–A. In addition, $\hat{4}$, established in m. 8 with subdominant support, is sustained in mm. 11–16 through a complete octave-progression from D5 to D4.

While a subdominant emphasis is not unusual in the Aeolian mode, the *Ursatz* of this choral does pose certain problems. The interrruption of the octave descent at scale degree $\hat{4}$ articulated by the registral shift is unusual. To avoid an interruption in the obligatory register, one might try to find a *Kopfton* in the same register as the final cadence, a $\hat{3}$ (C5) or $\hat{5}$ (E5). But the repeated linear progressions from A4 down to D4, harmonized in D minor, make it impossible to prolong C5—C is dissonant against the D-minor harmony that is so strongly defined in m. 8 and m. 16. And since E5 is never prolonged in the soprano, it is not really a contender for *Kopfton* status. The descent from $\hat{8}$, which prolongs the Aeolian octave from A to A while at the same time accounting for the emphasis on D throughout the chorale, is the best alternative. However, the division of the Aeolian octave into the descending fifth A4–D4 and the descending fourth D5–A4 does not outline the species of fifth and fourth that define the Aeolian mode, but rather the Dorian mode. The historical theorists discussed earlier (Dressler, for instance) suggest that the mode is defined by the internal cadences *and* by the species of fifth and fourth. From that point of view the Aeolian sketch shows a paradigmatic



Sketch 1: "Christ, unser Herr, zum Jordan Kam," BWV 176/6



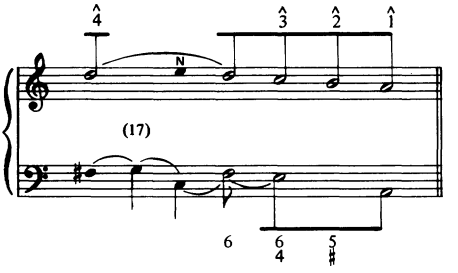
Sketch 1 (continued)

Dorian disposition, despite my attempts to find an Aeolian analytic solution.

The Aeolian *Ursatz*, therefore, reveals a strong emphasis on the harmony of D within an A-minor prolongation. The *Urlinie* descent is not entirely satisfactory as an expression of the *Aeolian* octave since it divides at $\hat{4}$, articulating a registral shift just before the final cadence. The Dorian *Ursatz* is also problematic since it denies modal closure, ending on the dominant A instead of the tonic D. The two sketches reveal the degree to which it is possible to understand the chorale in Dorian or Aeolian; in either case, a tension between D and A emerges at the highest level of structure. Let us consider the deep middleground levels once again to discover how the D/A conflict is expressed.

In the Aeolian Sketch, $\hat{4}$ (D) and the harmony of D minor are established at the cadence of m. 8 and prolonged until m. 17. During mm. 11–16, $\hat{4}$ is prolonged by means of a descending octave progression from D5 to D4; D5 introduces the upper register to which the soprano will return in m. 17 for the final descent. Thus, within the larger articulation of the interrupted Aeolian octave descent there is an uninterrupted articulation of a descending Dorian octave. The first leg of the Dorian octave descent, from D5 to A4, is supported in the bass by the falling fifth sequence G–C followed by E–A. The E–A resolution coincides with the cadence of m. 12, after which the octave descent continues from A4 to D4 and the harmony resolves to D. The last phrase of the chorale repeats the melodic descent from D5 to A4 and (with some modifications) the harmonic progression from mm. 11–12. A more detailed Aeolian analysis of mm. 17–18, given in example 12, shows the bass recalling the falling fifth sequence of mm. 11–12—the bass falls G–C followed by the structural resolution from E to A. In the final phrase, however, neither the melodic descent nor the bass progression continue to a resolution in D. Our expectation, established by the events of mm. 11–16, is denied.

A thematic connection within the Dorian octave descent of mm. 11–16 also helps undermine the final A cadence. In my opening discussion of the cantus firmus (example 1a), I pointed out a thematic relationship between the melodic phrase of mm. 11–12 and that of mm. 15–16. The latter phrase (mm. 15–16) is a tonal imitation of the former, and the melodic gestures that lead to a cadence on A in m. 12 are adjusted to lead to a cadence on D in m. 16. In the Aeolian Sketch, the phrase in mm. 15–16 is analysed as a strong cadential progression in D which concludes the octave descent from D5 to D4. The melodic and harmonic material of mm. 11–16 might thus be viewed as a question—the phrase in mm. 11–12—that is answered or resolved by mm. 15–16. When the same question is posed again in the final

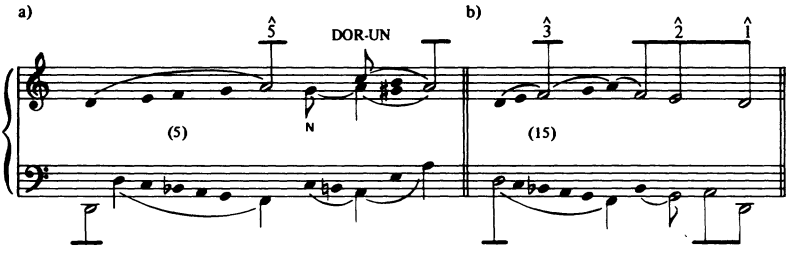


Example 12: "Christ, unser Herr," Aeolian foreground sketch, mm. 17–18.

phrase, we expect, but do not hear, a similar resolution. The thematic and harmonic recollections of the final phrase strengthen a Dorian rather than an Aeolian interpretation.

Now let us return to the Dorian Sketch to consider the same musical passage. The fifth progression from A4 to D4 in mm. 7–8, which was analyzed in the Aeolian Sketch as the structural descent to $\hat{4}$, is here presented as a lower-level 5-*Zug* which prolongs the *Kopfton* A4 and the tonic D harmony. A4 is reestablished in m. 9 and is then prolonged by a DOR-UN figure supported by the dominant, A. The soprano's D5 in the music of m. 11 would be reduced, at a lower level, to an upper neighbor embellishment of the DOR-UN, C5. Whereas the Aeolian Sketch gives priority to the D5 by initiating a descending Dorian octave descent, the Dorian analysis reduces D5 to the role of an upper neighbor, assigning priority instead to the C5. In the Aeolian Sketch it is necessary to give analytic weight to the D5 since the structural soprano pitch being prolonged is D4; in the Dorian Sketch, the structural soprano remains on A4 and its prolongation by the DOR-UN figure is idiomatic. (The structural soprano pitch cannot be A4 in the Aeolian Sketch since that is the assumed tonic for the analysis, and a prolongation of A4 throughout the chorale would deny any kind of *Urlinie* descent.)

In my discussion of the Aeolian Sketch, I considered the thematic connection between mm. 11–12 and 15–16 as support for a Dorian interpretation of the chorale. That is, the melodic and harmonic material of mm. 11–12 in A minor is answered by that of mm. 15–16 in D minor. The return of the A-minor material in the final phrase appears to prepare for a continuation in D that is never realized. Yet another thematic conflict between D and A is resolved by mm. 15–16 in the Dorian reading. In the Dorian foreground sketch of m. 5, given as example 13a, the soprano begins the phrase with an ascending

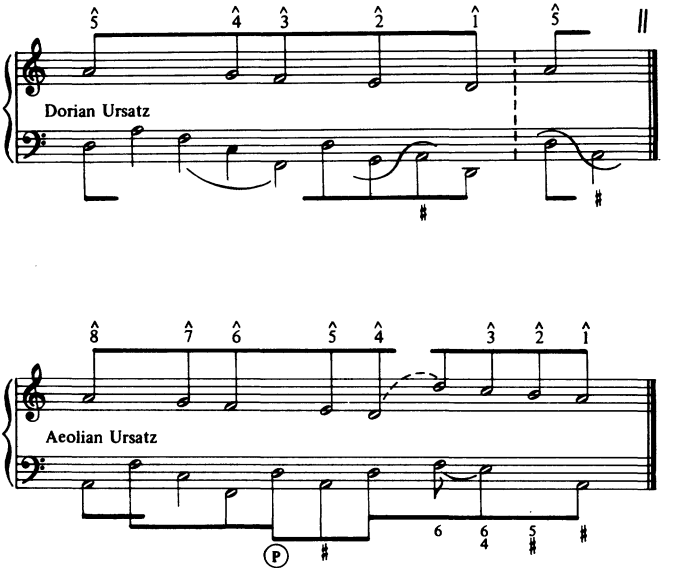


Example 13: "Christ, unser Herr," Dorian sketch, mm. 5–6 and mm. 15–16.

fifth-progression from D4 to A4, accompanied by a stepwise descent in the bass from D3 (through B♭) to F2. After the triad on F, the harmony turns toward A, and cadences in that key (m. 6). In the foreground sketch of m. 15, given as example 13b, the soprano once again begins the phrase with an ascending fifth-progression from D4 to A4, again accompanied by a stepwise descent from D3 (through B♭) to F2. Now, however, the harmony does not turn toward A, but rather toward D for a strong cadential progression in that key.

Based on thematic considerations, therefore, an interpretation that assigns D as the modal final best expresses the melodic and harmonic formulations of this chorale. The Dorian interpretation appears not to be entirely satisfactory, however, since it subverts modal closure. In either sketch, there remains a conflict between D and A at the highest level of structure. Since this is the final chorale of a cantata, the unresolved tension between D and A is particularly problematic. The larger tonal scheme and the text of the cantata offer some explanation for the unresolved conflict within the final chorale. The cantata text explores the textual issue of humankind's duality, which is reflected (especially in the first movement) by the harmonic opposition of A minor and D minor. The final choral of cantata 176 may not lend itself successfully to a detailed text/music analysis in its own right, but it is interesting to consider its broader textual effect at the end of the larger work. The final chorale text (given in example 10) dogmatically asserts faith in the trinity but its modally ambiguous harmonization casts a layer of doubt that is prepared by the tonal and textual duality of the earlier movements.

The chorale "Durch Adams Fall ist ganz verderbt," BWV 18/5 is analyzed in Sketch 2.[25] This chorale also expresses a modal conflict between D and A; Sketch 2 thus presents a Dorian as well as an Aeolian interpretation. The Dorian *Ursatz* given in the Overview of

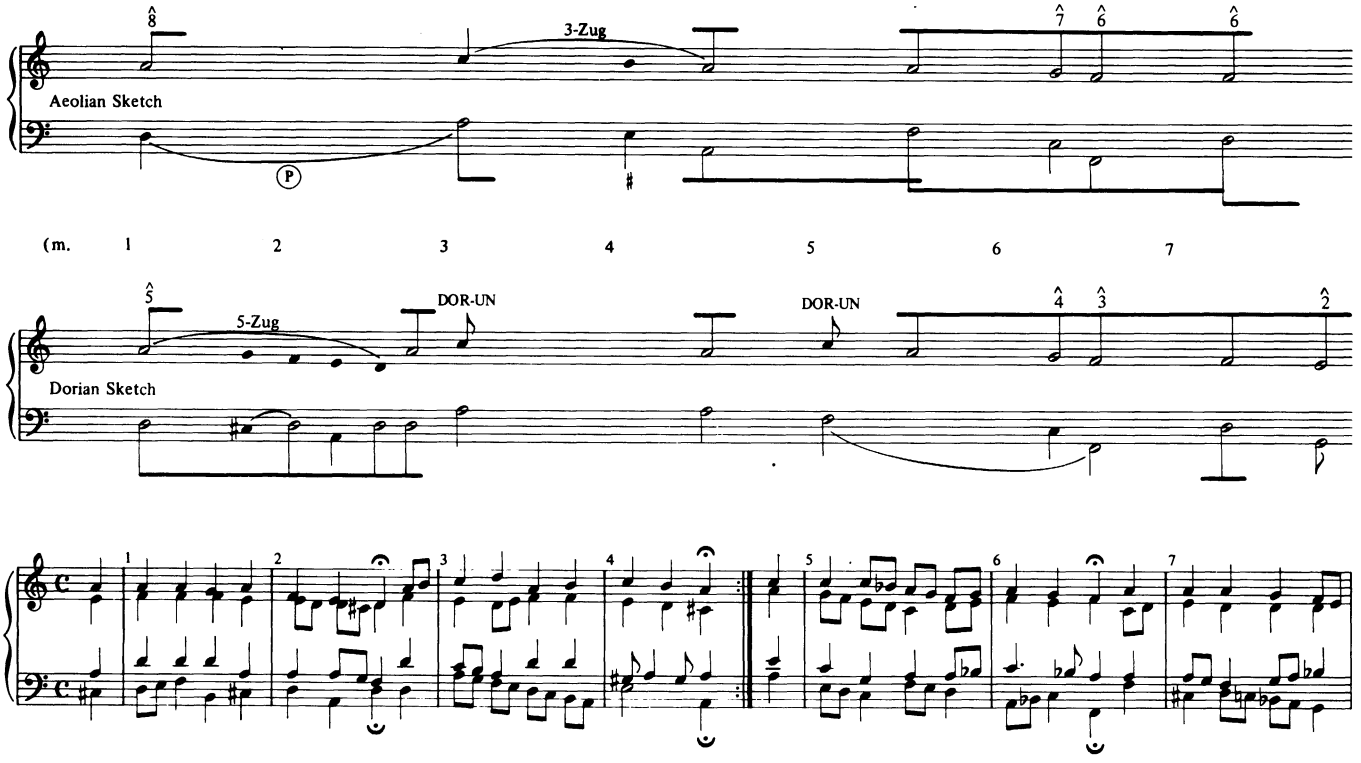


Overview of Sketch 2

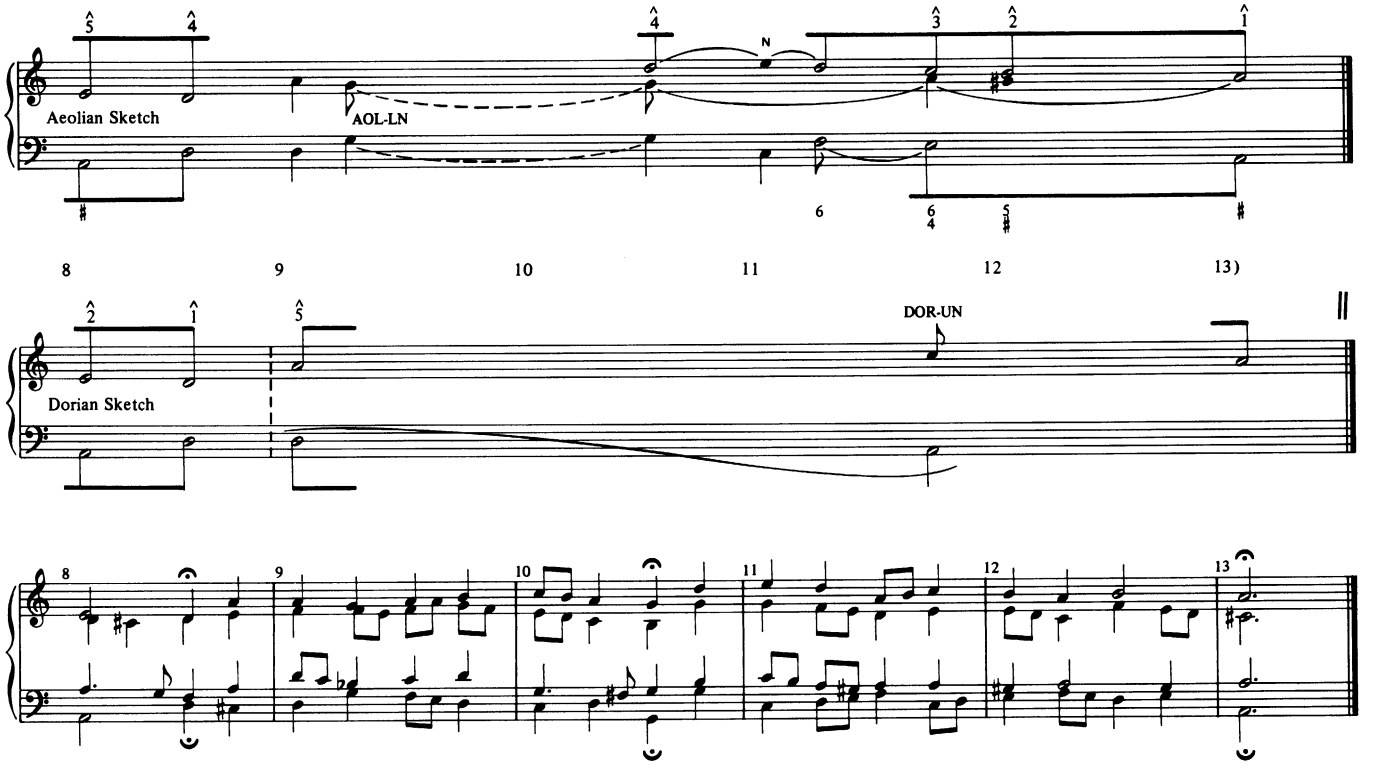
Sketch 2 comprises a $\hat{5}$-line descent from A4 to D4. The *Kopfton* is established with tonic support. Following the initial D in the bass, there is a descending arpeggiation of the tonic triad from its fifth, A–F–D; the F is prolonged by a fifth progression F–C–F. The descent from $\hat{5}$ through $\hat{4}$ to $\hat{3}$ is treated locally as a third-progression harmonized by the I–V–I movement in F major. D minor is reestablished as support for $\hat{3}$ and the descent through $\hat{2}$ to $\hat{1}$ is harmonized by a cadential dominant-tonic progression. Following the tonic closure, the *Kopfton* is reintroduced, supported first by tonic and then by dominant. The concluding dominant is never resolved.

In the Dorian Sketch, given immediately above the chorale, the DOR-UN (C5–A4) is present once again as an embellishment of the *Kopfton*. The UN is heard twice before the final *Urlinie* descent—first harmonized by A minor and then by F major—and once after the *Urlinie* descent, harmonized by A minor. As in the previous chorale, because we have heard the DOR-UN preceding the structural fifth-progression in D, the final DOR-UN suggests an unrealized continuation.

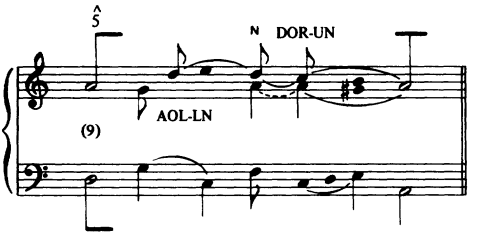
The tonal closure in D occurs quite early in the Dorian sketch (m. 8). Two additional phrases follow (mm. 9–13) which articulate the final harmonic gesture from D to A. A more detailed sketch of mm.



Sketch 2: "Durch Adams Fall ist ganz verderbt," BWV 18/5



Sketch 2 (continued)



Example 14: "Durch Adams Fall," Dorian foreground sketch, mm. 9–13.

9–13 appears in example 14. The penultimate phrase (mm. 9–10) is analyzed as a prolongation of G as V of C, resolving to C in m. 11. In the voice-leading sketch of example 14, G4 in the alto is analyzed as an "Aeolian Lower Neighbor" (AOL-LN), the diatonic seventh degree of the Aeolian scale (G) functioning as a full-step lower neighbor to A.[26] (It is important to note here that the alto of the voice-leading sketch does not necessarily correspond to the literal alto voice in the music; the G4 is in fact first introduced by the soprano in m. 9. but is taken up by the alto voice at the end of m. 10.) Example 14 analyzes the G4 in m. 11 as the fifth of C major; it resolves up to A4 as the harmony changes to a first-inversion D-minor triad. A is then tonicized in a final V–I cadence; the soprano composes out the DOR-UN pattern C5–A4 as in a 3-*Zug* in A minor. This analysis exposes the conflation of D and A in the final two phrases—while the alto gesture over mm. 9–11 is an *Aeolian* lower neighbor figure A–G–A, the final soprano gesture is analyzed as a *Dorian* upper neighbor, tonicized by A minor.

The Aeolian *Ursatz* is given in the Overview of Sketch 2. Here the *Urlinie* is an 8̂-line descent, comparable to that of "Christ, unser Herr," which descends from A4 to D4 and continues, after a register transfer, from D5 down to A4. An emphasis on the subdominant is realized in a descending *Baßbrechung* from A through F to D. The tiered system of beams symbolizes the unconventional prolongation of A through its fourth degree, D, and the mediant of that fourth degree, F.

The *Kopfton* A4 is established at the outset with tonic support. As 8̂ is held, the harmony changes to F, which is then prolonged in a I–V–I progression as support for the descent from 8̂ through 7̂ to 6̂ which is heard locally as 3̂–2̂–1̂ in F. The harmony of F yields to the harmony of D as support for 6̂; D is then prolonged through a i–V–i progression as support for the descent from 6̂ to 4̂, which is heard

locally as $\hat{3}$–$\hat{2}$–$\hat{1}$ in D. $\hat{4}$ is then transferred up an octave while the bass returns to F; the descent from $\hat{3}$ to $\hat{1}$ is harmonized by a V–I progression in A.

As in the other chorale, the Aeolian sketch is not successful as a clear expression of the Aeolian mode. Rather, the subdivision of the Aeolian octave into a descending fifth A–D followed by a descending fourth D–A actually projects the Dorian species of fifth and fourth. Once again, the Aeolian sketch shows a paradigmatic Dorian disposition, despite my efforts to explore an Aeolian analysis.

The interpretation that this chorale is Dorian, ending on the confinal can be justified as an expression of the text, not only of the chorale itself but of the cantata as a whole. The modal conflict between D and A complements the dual sentiments of fear and hope that are expressed in the chorale. Once again, the modal conflict within the chorale itself may not be ultimately resolved by the final cadence in A, but within the context of the entire cantata, the final cadence connects with the opening key of A minor.

In both cantatas, one hears the musical opposition of D and A in the context of a textual conflict between strength and weakness in human nature. In neither text nor music are these polar opposites resolved by the endings of the compositions. The final chorales, in their unresolved modal organization, refer us back to the opening movements of the cantatas, and thus to the symbolic duality of the text. The circular connection suggests that there is no end or solution to the problems posed.

NOTES

1. The terminology used to describe the confinal ending is problematic. Sixteenth- and seventeenth-century theorists who discussed irregular endings certainly did not invoke the term "dominant." I will, however, occasionally refer to "dominant" and "tonic" harmonies, especially during the analytical discussions.
2. In example 1a the cantus firmus "Christ, unser Herr, zum Jordan kam," as it appears in BWV 176/6, is transposed. Cantata 176 presents the melody a minor third higher, but the transposition of the example restores the cantus firmus to its original pitch level. The transposition of BWV 176 is offered for the purposes of our analytical study and is not to be imagined as the composition itself. (Incidentally, another setting of this tune by Bach (BWV 280) does present the chorale at its original pitch level.)
3. "*Regularis* ist/wann der Gesang in deß *Modi* rechtem natürlichen *Clave*/ nemblichen *in Clausula principali* sich endet. *Irregularis* ist/wann die Stimmen nicht in ihrem natürlichen Sitz oder *Clave,* sondern in einer andern *Clausula* nemlich *minus principali* sich enden/ein Exempel ist der Gesang: Christ unser Herr zum Jordan kam. Item/Durch Adams Fall: da das End *irregularis* ist/weil es sich im *A* endet/da es doch im *D* sich enden solte" (Herbst 1643, 86). It is important to note here that Herbst uses the term *minus principali* in the way

that most theorists use *affinalis* or *confinalis*. In his tables of modal cadence formulas (which are too extensive to be reproduced here) the *minus principalis* cadence occurs consistently on the fifth note of the mode in the soprano voice.

4. Others have also classified the melodies in question as Dorian. Bernhard Meier ([1974] 1988, 342) cites both tunes as examples of confinal endings. Conrad Matthaei (1652, 86) identifies "Durch Adams Fall" as a Dorian melody, although he does not explicitly identify it as having an irregular ending. Johann Christian Kittel ([1808] 1981, 3: 37–48) chooses the *Dorian* melody "Durch Adams Fall" to demonstrate modal harmonic practice. He compares different "Dorian" and "modern D minor" harmonizations of each phrase. I shall return to Kittel's remarks later.
5. Meier [1974] 1988, 225. Meier dedicates a chapter to the subject of "Modally Irregular Exordia and Endings," part 2, chapter 3, 330–354. He reviews the sixteenth-century theoretical sources that address the issue of the irregular ending. In particular, he focuses on the use of irregular endings to depict an unusual text; he explores this possibility through the analysis of several compositions. Although I do not wish simply to repeat his work, many of the theoretical writings he cites will be helpful to us here.
6. Zarlino [1558] 1983, 90–91. Elsewhere, Zarlino defines the median note as the harmonic division of the diapason, which is the fifth above the final in the authentic modes. Zarlino's point about the importance of internal cadences in judging the mode is not original; Aron and Glarean discuss the role of the characteristic intervals of a mode, and not only the final, in defining the mode (please see Zarlino's footnote, p. 90).
7. Although it is not my purpose in this paper to investigate thoroughly Zarlino's modal cadence schemata, I will point out one problem inherent in Zarlino's system: the cadences for each mode occur on the same degrees—$\hat{1}$, $\hat{3}$, and 5. This system breaks down for the Phrygian and Mixolydian modes, where cadential emphasis on those degrees is not possible because of the false fifth on B. Zarlino still insists upon his $\hat{1}$–$\hat{5}$–$\hat{3}$ schema of cadences in these modes, but he must find a way of accounting for the compositional emphasis on $\hat{4}$. He does so by relying upon the theoretical concept of mixture. For a thorough discussion of this subject, the reader may refer to Burns (1991, 12–15).
8. Dressler 1571, bk. 2, ch. 7. This passage is translated by Meier ([1974] 1988, 338).
9. Dressler 1563/64, ch. 14. This passage is translated by Meier ([1974] 1988, 339).
10. Calvisius 1592, ch. 17. This passage is translated by Meier ([1974] 1988, 341). The emphasis is mine.
11. Meier explores the subject of confinal endings and text expression, analyzing several compositions that end irregularly and relating the final cadences to the text ([1974] 1988, 344–354).
12. Herbst 1643, 58–62. For a comprehensive discussion of seventeenth-century cadence theories, the reader may wish to refer to Jakoby (1955).
13. In the Phrygian mode, for instance, the falling-fourth cadence as it is shown in example 2b is the progression used to create modal closure. This paper will not investigate thoroughly Herbst's modal cadence systems; the present discussion simplifies his work somewhat. A more thorough discussion of Herbst's cadences will be found in Burns (1991, 18–22).

14. Herbst (1643, 84) cites as an example a song by Orlando di Lasso, "Frohlich zu sein," relating its irregular ending to the text. Meier also discusses this song ([1974.] 1988, 343).
15. Printz (1676) discusses the modal cadences in chapter 8, §§34–42. Chapters 9 and 10 also discuss the modes. Printz's cadence formulas carried theoretical importance into the eighteenth century. His influence is seen, for instance, in Johann Gottfried Walther's modal cadences, presented in the *Musikalisches Lexikon* of 1732.
16. "*Perfecta* ist/welche die Melodey oder Zusammenstimmung zur Ruhe führet/ also daß darmit ein vollkommenes Ende einer vollkommenen Melodey oder Harmony kan gemacht werden. . . *Clausula formalis [im]perfecta* [sic] ist/ welche sich zwar zur Ruhe neiget/aber doch die Harmony nicht zur Ruhe führet/daß mit einer solchen ein vollkommenes *Final* einer vollkommenen Melodey und Zusammenstimmung könte gemacht werden/sondern die Melodey etlicher massen auszeucht/und das weiter solle fort gesungen werden/ andeutet" (Printz 1676, ch. 8, §§4 and 11).
17. "*Clausula formalis* perfecta dissecta desiderans wird am Ende der Melodey nicht leicht gefunden/weil sie das Gemüth gleichsam auffzeucht/und mehr zu hören begierig macht:/Es sey dann/daß man ein Verlangen andeuten wolle" (Printz 1676, ch. 8, §40).
18. ". . . die Melodie nicht mit dem Akkorde der Tonica selbst, sondern mit einem Intervall des Dominantenakkords aufhört. . ." (Türk 1787, 67).
19. Bach's solution is in keeping with tradition. Settings of "Christ, unser Herr" and "Durch Adams Fall" by Praetorius, Schein, Scheidt, and Telemann, for instance, also treat A as a local tonic in the final phrase.
20. Kittel [1808] 1981, 3:37–48. Kittel does not present an abstract theoretical system in the manner of his colleague Kirnberger but rather takes a practical approach to the study of organ chorale harmonization. His discussion of "Durch Adams Fall" is especially interesting if one wishes to compare harmonic language in Dorian modality versus D-minor tonality, but that topic is beyond the scope of this paper.
21. The tonal scheme of example 10 is based on transposition down a third, in keeping with the transposition of Sketch 1 and my discussion of Cantata 176. This transposition will facilitate the theoretical and analytical discussion of the two chorales under investigation. The text and translation given in example 10 are reproduced from Ambrose (1984, 414–15). The text and translation given in example 11 are reproduced from Ambrose (1984, 60–61).
22. For a discussion of Dorian and Aeolian modal patterns, please refer to Burns (1991, chs. 5 and 6).
23. Again, I wish to remind the reader that the chorale has been transposed down a minor third, in order to restore the cantus firmus to its original pitch level and in order to facilitate our discussion of the Dorian confinal ending. The chorale is catalogued in the *Bach Compendium* I/4, F65; it is the final chorale of cantata "Es ist ein trotzig und versagt Ding" (*Bach Compendium* I/1, A92). The musical text in Sketch 1 is based on *Neue Bach-Ausgabe* I/15, 35–36.
24. Edward Phillips has discussed neighbor relationships at the interval of a third (1981, 98–116). He identifies the interval of a third as an important characteristic of organization in the chorale. In his discussion, the concept of neighbor

note "is expanded to allow the ornamental pitch to be a distance of a second or a third from the principal pitch, either above or below." Phillips examines several melodies in which C acts as an upper neighbor to A. The neighbor-note configuration A–C–A can be presented in its pure form, or the motion from C to A can be filled in with a passing tone B. The DOR-UN figure is discussed at length in Burns (1991, 215–219).

25. The chorale is catalogue in *Bach Compendium* I/4, F52; it is the final chorale of the cantata "Gleichwie der Regen und Schnee vom Himmel fällt" (*Bach Compendium* I/4, A44b). The musical text in Sketch 2 is based on the *Neue Bachausgabe* I/7, 132 (2nd version).
26. Aeolian progressions are discussed in Burns (1991, 266–271).

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