

The Concept of *Ausweichung* in Music Theory, ca. 1770–1832

Janna K. Saslaw

In this essay I should like to address a misconception among some present-day writers who equate the late eighteenth- and early nineteenth-century German concept of *Ausweichung* with the modern notion of modulation. One typical twentieth-century definition of modulation, from Arnold Schoenberg's *Structural Functions of Harmony*, states that, "One should not speak of modulation unless a tonality has been abandoned definitely and for a considerable time, and another tonality has been established harmonically as well as thematically" (1968:19). Chromatic pitches introduced in a less definite manner are treated as embellishments to diatonic members of the prevailing key. Thus, the designation "V of V" indicates a harmony that, while not strictly diatonic, may be considered within the pitch constellation of a key.

Applying the modern notion of modulation retroactively to the work of theorists from the late eighteenth and the early nineteenth centuries can produce negative assessments like the following entry on Gottfried Weber in Damschroder and Williams' bibliography, *Music Theory from Zarlino to Schenker*:

A shift of tonal center is accommodated simply by indicating the key in which a group of Roman numerals is to be interpreted. Weber used this technique freely—perhaps too freely for twentieth-century tastes, which have generally inclined towards the concept of applied, or 'secondary,' dominants. (377)

It is my contention that our modern sense of modulation—that is, the process of firmly and definitely leaving one key and establishing another—can mask the true nature of *Ausweichung*. To this end, I shall examine the term *Ausweichung* as employed by five theorists—Johann Philipp Kirnberger and Johann Sulzer, Heinrich Christoph Koch, Georg Vogler, and Gottfried Weber—over a period spanning 1771 to 1832.¹ In the writings of these five authors, *Ausweichung* proves to be an extremely flexible concept, encompassing gradations from the briefest references to other keys to complete modulations in the modern sense. In the following discussion, therefore, I shall leave *Ausweichung* untranslated, and allow the authors in question to define it. I should state that the German word *Modulation* is also used by these theorists. Usually, *Modulation* describes harmonic and melodic progression in general,² but it is occasionally treated as synonymous with

Ausweichung, particularly by Kirnberger. Complicating matters further, later in the nineteenth-century *Modulation* began designating a formal change of tonal center, while *Ausweichung* was reserved only for passing references to other keys.³

Another factor that makes it difficult to assess analyses from these authors is that one cannot look at the analytical graphs alone. It is often crucial to read all the accompanying discussion, as well as definitions and discussions in other passages in a treatise, or even in other volumes by the same author.

A final complicating factor is our tendency to look at the past through the lens of extended chromatic tonality. This may cause certain features of the theories articulated by these five authors to be overlooked. These writers conceive of tonality as comprising a specific limited set of pitch classes, a conception different from that of theorists of the late nineteenth and twentieth centuries. Schoenberg accurately recognized the discrepancy between the modern and the earlier notion when he stated that, "Intermixing of substitute tones [i.e. chromatic pitches] and chords with otherwise diatonic progressions, even in non-cadential segments, was considered by former theorists as modulation. This is a narrow and, therefore, obsolete concept of tonality" (1968:19).

As a result of this diatonic sense of tonality, these Enlightenment-era theorists display an acute sensitivity to the harmonic introduction of chromatic pitches. This sensitivity, in turn, results in notational systems and modes of discourse that recognize changes of key that may appear too frequent for some modern readers. Example 1, a portion of an analysis by Weber of his own composition, *Polimeter* (1830–32, 2:177–82⁴), a song for four voices with piano accompaniment, might have inspired the statement quoted earlier from Damschroder and Williams. We see beneath example 1 the combination of upper- and lower-case Arabic letters and Roman numerals that Weber invented to designate key and scale-degree functions of each chord, and which is still in use today. The upper- and lower-case letters and numerals represent, respectively, major and minor keys and chords. The superscripted circle represents diminished chord quality (note that Weber placed the circle before the Roman numeral, not after). Two of Weber's labels here require explanation. In m. 24 we see that Weber treats augmented sixth chords as altered forms of ii in minor (since this is a German sixth, it is also V⁷ of G, considered enharmonically). In m. 29 we see that Weber treats diminished seventh chords as incomplete dominant ninth chords and so labels them V⁷.

For the moment, I only wish to indicate the kind of passage that can be misunderstood if the modern concept of modulation is applied. Notice that almost every bar in the example, which incorporates a substantial

Example 1: Weber's analysis of his own composition, *Polimeter* (1830–32).

Polimeter

Gottfried Weber

The musical score for "Polimeter" by Gottfried Weber is presented in two systems. The first system covers measures 21 to 28, and the second system covers measures 29 to 36. The vocal parts (Soprano I, Soprano II, Tenor, Bass) and piano accompaniment (Cembalo) are shown. The piano part includes harmonic analysis below the staff, with chords such as f#:i, b:V7, c#:V7, f#:ii7, f#:i, c#:V7, E:V7, d#:i, a#:V7, c#:V7, VI, f#:V7, c#:V7, and f#:V. The score also includes dynamic markings like *ff*.

amount of chromaticism, contains the designation of a key different from that of the bar preceding it. Some of the bars have been provided with two different key labels. In Weber's view, these are measures in which the determination of a single key is not possible, at least on first hearing of the passage. I shall return to this example for further examination.

Before turning to a selection of statements by this group of German theorists, a few words are necessary about the specific pitch collections they considered diatonic. Most of the authors (Koch, Vogler, and Weber) cited here draw the pitch classes that comprise a key from the contents of the three fundamental or essential triads: I, IV, and V. Kirnberger and Sulzer draw the pitches of a key from major and minor scales. The products of these two methods of derivation are essentially the same in the major mode, but diverge with respect to the minor mode. Weber recognizes only the harmonic minor, Vogler the natural minor, and Kirnberger, Koch, and Sulzer the melodic minor.

Kirnberger's discussion of *Ausweichung* in his principal treatise, *Die Kunst des reinen Satzes* (1771–79), begins with the requirement for key-orientation that, "One sings or plays in a certain key as long as no notes other than those contained in the diatonic scale of that key are sounded in the melody and harmony" (1968, 2:103; 1982:121).⁵ Vogler, in his *Handbuch zur Harmonielehre* (1802), defines the term diatonic as "the [scale] with 7 tones that has no more tones than the key itself has; there is no chromatic key, because not more than 7 tones can have a claim on the principal tone" (3).⁶

Both of these assertions point to a restricted notion of key. In a description of cadential progressions, Vogler explains that a (half) cadence from the second scale-degree with raised third (i.e., an augmented sixth chord) "takes place only in the minor key." In the major key, "as soon as one gives the second scale-degree its major third, it is no longer the second but quite definitely the fifth of another key. For example, D–F–A [is] II of C Major, while D–F \sharp –A [is] V of G Major" (48).⁷ This assertion indicates how easy it is to create an *Ausweichung* to another key within such a restricted notion of tonality. Sulzer, in the article "Scale" in the *Allgemeine Theorie* (1792), provides guidelines for preserving the sense of the original key in a composition, stating:

In the construction of a piece the principal scale and key in which it is to be set is the main object of the composer, because, if the ear is to be under the influence of the principal key, no tones can be heard other than those contained in its scale. The tones of this scale must predominate in the entire composition, particularly at the beginning and at the end. In the middle it is permitted for the

purpose of variety now and again to violate one of the tones of the scale and by this means diverge [*ausweichen*] into subsidiary keys whose scale, however, must differ from the scale of the principal key by only one tone, so that it is easy to return from it to the principal scale and the sense of the latter will not be lost. In this manner unity and variety are brought about in the tones of the piece. (1970, 4:550)

Information about the sense of tonality must be gleaned from many different areas in the treatises under consideration here. Among these areas are dictionary entries under such terms as *Ausweichung*, “key” (*Tonart*), “diatonic” (*diatonisch, leitereigen*), and “scale” (*Tonleiter*); discussions devoted exclusively to *Ausweichung*; and explanations of cadences and harmonic progression in general. An examination of analytical tables and essays is helpful in determining which harmonic events are considered to fall within a key and which initiate a change of key. In these sources, we find that a dominant seventh chord usually requires the designation of scale-degree V and a diminished seventh chord necessitates the designation VII, or perhaps V, if it is viewed as an incomplete dominant ninth chord. Therefore, a harmony taking on one of these forms through the introduction of non-diatonic pitches automatically refers to a new tonic.

These theorists, however, often permit one common alteration to the diatonic collection to be considered as within the realm of a key. This is the raised fourth scale-degree, especially in the minor mode, where it participates in the augmented sixth chord. Vogler goes the farthest to formalize the relation of this degree to the tonic, allowing it to occur in both major and minor, and allowing it to function as a chord root, a function it does not receive from any of the other theorists examined here. Nevertheless, when describing the raised fourth degree created by adding a major third to the chord on step 2 of the minor scale, Vogler calls the altered pitch “foreign to the scale.” Thus the integrity of the scale, and consequently of the tonality, is of great importance to these theorists.

As the above quotation from Sulzer has already suggested, some of these authors (Kirnberger, Sulzer, and Weber) represent the orientation to a key and the reorientation to a new key in the process of *Ausweichung* in terms of the mind’s cognitive apparatus, expressed as “the ear” (most often the German *das Gehör*, but occasionally *das Ohr*). Let us examine this representation more closely, beginning with statements from Kirnberger’s treatise. “Each key has its essential degrees which define it and its mode,” he states. “These essential degrees are contained in the tonic triad. Thus, when such a triad occurs at the beginning of a composition or a period, the ear is under the influence of that key” (1968, 2:104; 1982:122). After

the beginning of a composition or period, the procedure for orienting the ear to a key becomes more complex:

. . . the tonic triad is sufficient to announce the key only at the beginning of a piece, before the ear is under the influence of any scale. However, if one goes from one key to another, the triad in the new key must be preceded or immediately followed by a note foreign to the former key. This note, which is essential to the new key, erases, so to speak, the feeling of the old key.

In Kirnberger's view, a special key-sense arises in the listener after the music has remained in the key for some time: "When one has played for a while in the original key, the ear is so much under the influence of this key that it feels the entire diatonic scale to some extent on each chord" (1968, 2:105; 1982:123). In the case of *Ausweichung*, "if the harmony moves to a new key, the [listener's] ear attunes itself to the scale of this new key in the same way as it did with the preceding one." Kirnberger suggests that the ear actively searches for a stable position in its harmonic surroundings, changing that position only when events make it absolutely necessary.

Sulzer's description of *Ausweichung* is more detailed than that in Kirnberger's treatise, tracing the process from beginning to end. Sulzer states that:

One remains in a key as long as no tones are heard other than those which lie in that key's scale: however, as soon as another tone is heard, the ear receives a hint that one is leaving the previous key, and wishes to go to another. If one is playing in C Major, and allows F \sharp or G \sharp to be heard, then the ear feels that the previous key will be left . . . This mere hint however is still no real transition to another key; rather it announces the *Ausweichung*. This announcement must occur so that the key to which one wishes to go is indicated, or so that the ear expects it. If a chord that belongs to the new key follows this expectation, then the *Ausweichung* is complete. (1970, 1:283)

This quotation indicates the stages of the process that must occur in order for an *Ausweichung* to be completed. When tones foreign to the prevailing scale are introduced—giving the ear its first signal of a possible change to come—the original key must be considered still in effect, even though a movement to a new key has been initiated. If the foreign pitches are such that they indicate a particular goal, creating an expectation of the new key to follow, then the composer can confirm and fulfill that expectation or

deny it with subsequent harmonies.

Of the writers surveyed here, Gottfried Weber is the most explicit about the function of the cognitive apparatus in the formation of a sense of key. This approach is reflected in Weber's definition of key-orientation as "[t]he method in which the impression of a key is produced in the ear, especially now of this key, now of another; how the ear is attuned to such a key, and either remains in this attunement or is re-attuned from one key to another" (1830-32, 2:97).

Underlying Weber's concept of key is a natural tendency of the mind, using the ear as a conduit. He explains:

When our ear detects a progression of tones and harmonies, it strives, according to its nature, to find an inner coherence in this diversity, a relationship to a common center . . . The ear generally wants to feel one tone as [the] primary and central tone, one harmony as primary harmony, around which the others revolve as secondary objects around their primary object . . . (2:1)

Furthermore,

One often finds whole strings of harmonies, each of which causes a different key to be perceived; nevertheless the ear always strives to understand each of these different harmonies as belonging to some key. (2:1-2)

In his chapter on harmonic progression, Weber discusses how the ear actually understands different harmonies in the context of a key. This lengthy discussion, which includes a consideration of *Ausweichung*, proposes principles that predict how the ear will interpret harmonies (Saslaw 1991).

* * * * *

We may now look more closely at the range of meanings expressed by the term *Ausweichung*. Several of the writers under consideration here explicitly document this range. Heinrich Christoph Koch describes *Ausweichung* in Volume 2 of his *Versuch einer Anleitung zur Composition* (1782-93), arguing that the nature of an "*Ausweichung* from one key to another depends in particular on whether it is 1) only accidental, or 2) passing, or rather 3) formal" (1969, 2:188).⁸ In the previous volume of his treatise, Koch had already introduced the first of these types—accidental *Ausweichung*—in terms of setting a cantus firmus:

Example 2: Examples of accidental *Ausweichung*. H. C. Koch, *Versuch einer Anleitung zur Composition* (1:293–294).

The image displays five musical examples, labeled a) through e), each showing a four-note descending scale segment (E-D-C-B) in the upper voice. The lower voice provides a contrapuntal line. Example a) is in C Major. Example b) moves to A minor. Example c) moves to G Major. Example d) moves to A minor and then returns to C Major. Example e) moves to G Major and then returns to C Major.

If one gives to the succession of different tones in a cantus firmus the appearance of a tone-succession in another key by means of the added voice, a new diversity of setting arises. I wish to call this procedure an accidental or, even better, a brief intentional *Ausweichung*. (1:292)⁹

This kind of *Ausweichung* occurs only when it is not required by the nature of the cantus firmus itself. It is therefore an intentional choice of the composer devising the new voice, and is brought about to vary the setting. This method, in which certain tones of the key are arbitrarily raised or lowered in the added voice, has its foundation “not in the prevailing key itself, but rather in another related key” (1:296).¹⁰ Example 2 illustrates five different ways of adding a contrapuntal line to the descending scale-segment E–D–C–B in the upper voice, which appears in the first bar of each version. Example 2a begins and ends in C Major. Example 2b moves to A minor within the span of these four notes. Example 2c goes to G Major. Example 2d moves to A minor and then returns to C Major in the same span. Likewise, example 2e goes to G Major and back to C Major.

Passing *Ausweichung*, Koch’s second type, is described as follows:

I call a passing *Ausweichung*. . . that in which the entrance to the new key truly takes place by means of its characteristic tone. However, as in [ex. 3] the new key is not continued, but rather is led immediately back to the previous key . . . or, as is the case in [exx. 4 and 5], is followed immediately by one or several passing *Ausweichungen*, before either the previous principal key or one of

Example 3: Example of passing *Ausweichung*. H. C. Koch, *Versuch einer Anleitung zur Composition* (2:189).



Example 4: Example of passing *Ausweichung*. H. C. Koch, *Veersuch einer Anleitung zur Composition* (2:189).



Example 5: Example of passing *Ausweichung*. H. C. Koch, *Versuch einer Anleitung zur Composition* (2:189).



its subsidiary keys . . . is established (2:188).¹¹

Köch explains that in example 3, the dominant key of G Major is introduced, while in example 4 (m. 1), F# introduces the subdominant, C Major, on the last sixteenth. In the second bar of example 4, the pitch G# introduces A minor, the submediant of the previous C Major.¹² However, Koch asserts, none of these keys is formally established, as they are in example 6, by being extended and then confirmed by cadences. Passing *Ausweichungen* are often very appropriate, Koch claims, for avoiding the harshness common when moving to distant keys (2:189–91).

Koch asserts that formal *Ausweichung* may be initiated in three different ways:

- 1) the new key may be heard for some time, but without a cadence, [and then] the main key or one of its subsidiary keys returns and is closed with a cadence . . . [this method is] used only in the case where the new key is too distant from the principal key of the

Example 6: Examples of formal *Ausweichung*. H. C. Koch, *Versuch einer Anleitung zur Composition* (2:190).

The image contains three musical staves, labeled a), b), and c), each showing a melodic line in G major that modulates to D major. Staff a) shows a simple modulation with a cadence in the new key. Staff b) shows a more complex modulation with a cadence in the new key. Staff c) shows a complex modulation with a cadence in the new key.

passage to allow a formal close . . . 2) immediately after its entrance there is a cadence in the new key . . . [this is common] in short passages, such as dance melodies . . . 3) [the new key] is heard for some time, and then a cadence is effected . . . This last method of formal *Ausweichung* is common in long passages. (2:191–92).

Although Koch postulated three different degrees of *Ausweichung*, his statements suggest that he had only one definition: movement out of the prevailing key and into the new key, however briefly the latter is retained.¹³

Gottfried Weber provides the following delineation of two degrees of *Ausweichung*, written in 1832. “An *Ausweichung* either entirely erases the feeling of the previous key and impresses the new one on the ear—or not” (2:99–100). Immediately we see that Weber is expressing a different conception of *Ausweichung* from that of Koch. Weber describes the first of these degrees of *Ausweichung* in the following colorful manner:

If the feeling of the previous key in the ear is entirely destroyed, and the ear is so completely and overwhelmingly reattuned to the new key that it forgets the former completely and unmistakably embraces the latter; if the new key is introduced as a new principal character, which places the former completely in the shade, displaces and causes it to be forgotten, attracts the whole interest to itself, and established itself on the tonic throne;—then such an *Ausweichung* may properly be called complete, or whole . . .

On the other hand:

If it is rather of the type that does not completely erase the feeling of the previous key in the ear, if it does not impress on the ear

completely the attunement of the new key, but allows the feeling of the previous one back again; it allows the new key to enter, not so much as a principal character, but rather, so to speak, as subordinate character, to play a short scene,—then this *Ausweichung* is called properly incomplete or half. Such a progression seems less a real, unmistakable *Ausweichung* than an easy allusion to a foreign key . . .

About the effect of such an allusion to a foreign key, Weber states:

We will see . . . that many *Ausweichungen* are so transient that they hardly deserve the name, in that they digress, as it were, only quite fleetingly to a new key, so that the ear doesn't cease for a moment to feel the previous key as principal key.

At the end of this detailed description, Weber adds a final characterization of the relationship between his two degrees of *Ausweichung*. Although he has named them “whole” and “half,” these varieties cannot be so clearly distinguished:

By the way, a distinct boundary between whole and the so-called half *Ausweichungen* cannot be drawn, because the difference exists only in the more or less, which, according to its nature, is capable of an unending number of gradations, between which no positive boundary lies. (2:99–100)

During the course of his analysis of *Polimeter* (see ex. 1), Weber puts his view of *Ausweichung* into practice. He asserts:

From m. 21 through [m. 35] I have followed the thread of the progression with the greatest possible precision; nevertheless, it cannot be denied that the thread is often rather complicated, uncertain, and hard to follow, because of the frequently occurring chords with more than one meaning, the numerous half-*Ausweichungen*, and the like, so that the ear, in the process of listening, can easily lose sight of [the thread] at any moment, and does not find its way again for certain perhaps until m. 33, 34, or [even] 35. (2:180–81)

It is clear from this statement that many of the key-designations in this analysis do not represent modulations in the modern sense, but instead are half-*Ausweichungen*—that is, they only partly erase the sense of the pre-

Example 7: J. P. Kirnberger, *The Art of Strict Musical Composition* (1982:127).

A

C major G major A minor (E minor) F major D minor C

B

A minor E minor C major D minor F major G major A

vious key or keys. In this circumstance the accumulation of half-*Ausweichungen*, combined with ambiguous harmonic formations, results in the ear losing its tonal orientation.¹⁴

Kirnberger, in *Die Kunst des reinen Satzes* (1771), distinguishes types of *Ausweichung* by the degree of closeness of the new key. The first type, restricted to closely related keys, he calls “common” (1968, 2:107; 1982:125). In this variety of *Ausweichung*, he argues,

... it is a general rule to proceed in such a way that the main key, in which the piece begins and ends, is never completely erased. One should digress to another key only after the ear is almost satiated with the main key, and these secondary keys should not erase the main key to the extent that it is completely forgotten.

Kirnberger’s reason for restricting *Ausweichung* in this manner is that the ear has difficulty when it is forced to change keys. “It is easy to imagine and even easier to hear how difficult and unpleasant it is for the ear to attune itself suddenly to a scale that differs greatly from the one it has felt shortly before” (1968, 2:105; 1982:123). Because the main key must never be erased by any secondary keys in common *Ausweichung*, Kirnberger develops a set of rules and tables to guide the reader in this endeavor. He limits the keys suitable for *Ausweichung* to certain diatonic degrees of the main key, and limits the amount of time one can remain in them.¹⁵ Example 7 depicts the keys to which one can go from C Major and A minor, and the relative amounts of time one can remain in each. This example is also presented in Sulzer’s *Allgemeine Theorie*, in the article “*Ausweichung*” (1970, 1:283) which cites Jean-Jacques Rousseau as its source.¹⁶ By regulating the amount of time allotted to each key, Kirnberger implicitly allows the closer relations to be more firmly established than the more distant ones. Again, we see a contrast between Kirnberger’s sense of *Ausweichung* and that of Koch. For

Example 8: J. P. Kirnberger, *The Art of Strict Musical Composition* (1982:136).

a) Unmittelbare (Direct) Ausweichung



b) Mittelbare (Indirect) Ausweichung

1. Durch einen Zwischenton A mol oder D mol (through a passing key of A or D minor)



2. Durch mehrere Zwischentöne (through several passing keys)



Kirnberger, if the *Ausweichungen* in a composition are properly handled, the listener never completely loses a sense of the original tonic key.

Furthermore, Kirnberger distinguishes different degrees of *Ausweichung* in his discussion of “passing keys” or *Zwischentöne*, through which one may move indirectly from one key to another. In “indirect” (*mittelbare*) *Ausweichungen* one remains in these passing keys “only one or two measures.” Example 8 contrasts a “direct” (*unmittelbare*) *Ausweichung* to the dominant (ex. 8a) with an indirect *Ausweichung* through one or more passing keys (ex. 8b). According to Kirnberger:

The notes in the shape of breves indicate keys in which one remains for six, eight, or more measures; the half-notes indicate those which one touches on only in passing, without remaining there longer than one or at most two measures; the black note-heads indicate notes by which the cadence [to the following key] is prepared or where the actual shift to the new key occurs. (1968, 2:119; 1982:135)

In this way, Kirnberger distinguishes between the key that is the goal of the progression and those that are intermediate means to reaching it.

Unlike Koch, Weber, and Kirnberger, Vogler is not explicit about different degrees of *Ausweichung*. The reader must glean his views from scattered statements in his writings. Example 9 presents an excerpt from the slow movement of a symphony by the Mannheim composer Peter Winter, included in an analytical discussion by Vogler dating from 1780. In his

Symphony

Peter Winter

The image displays a musical score for a symphony, specifically measures 9 through 14. The score is arranged in two systems, each with four staves. The instruments are Violin I, Violin II, Viola, and Cello/Bass. The key signature is one flat (B-flat), and the time signature is 2/4. Measure 9 is marked with a '9' above the first staff. Measure 14 is marked with a '14' above the first staff. The score includes various musical notations such as notes, rests, slurs, and dynamic markings. In the Cello/Bass part, there are specific fingering or articulation markings: '6 4 3' and '7 3 4' in measure 10, and '6', '5', '5', '7 3 4', and '5' in measures 14 through 18. The Viola part features long, sustained notes in measures 9-13. The Violin I part has a melodic line with slurs and accents. The Violin II part plays a rhythmic accompaniment of eighth notes.

Example 10: G. Vogler, Thirty-Two Preludes, no. 8.

	21.	22.	23.	24.	25.	26.	27.	28.	29.
	4 3	4 3	5 \natural 4 7	6	6 \flat 3 \natural				
		6 \natural	6 5 \natural	5 4 6 \flat	6 \natural	4 3	4 3	5 \natural 4 7	
Fundamental	6 - 7 \natural	5 -	4 - 3 \sharp	2	4 \sharp	6 7 \natural	5 - 6 \natural	6 - 3 \sharp	3 \natural
voice or bass	C - G \sharp	A - D	E - -	F E \flat D	D -	C G \sharp	A - D	E - -	A
	13 12	5 \natural	7		5 7	13 12	11 10 5 \natural	7	
			9 \natural 8 3 \sharp	7 \flat	3 \natural			9 \natural 8 3 \sharp	
Primary triads	A -	B	A - E	F - B \flat	B \flat G \sharp	A -	A - B	A - E	
[a minor:]	I VII \sharp	I II	I V	VI V I	[a:]VII \sharp	I VII \sharp	[I] II	I V I	
				[B \flat]					

commentary, Vogler describes the harmonic plan of each period in the movement. The first period, mm. 1–8, begins and ends in F Major. It is Vogler’s discussion of the second period, mm. 9–16 (ex. 9), ending in G, that reveals his view of certain *Ausweichungen*. He gives the following statement about mm. 15 and 16:

The major third of D, F \sharp [m. 15, beat 4], and the G with major third B as first scale-degree [m. 16] must not be regarded as an aberration, as if this *Ausweichung* contradicted the tonal unity of F; because this momentary digression is sufficiently justified through the resolution of F[natural] as true [minor] seventh of G, the fifth scale-degree of C [Major]. (103)¹⁷

In other words, the brief *Ausweichung* to G Major does not disturb the sense of the prevailing key, F Major, because the pitch F \sharp is abandoned quickly for F \natural , a member of the dominant chord of C Major, which, in turn, is the dominant of the principal key of the composition. Although he does not use the same terms as Kirnberger and Weber, Vogler’s understanding of *Ausweichung* is, in this case, essentially in agreement with theirs.

Example 10 is from Vogler’s analysis of the eighth of his 32 Preludes for the Organ and Fortepiano (1806:23–24; see also Vogler 1986). Along with a graphic representation of the harmonic plan, of which this example is an excerpt, Vogler provides a lengthy discussion of rhetorical and aesthetic issues in this piece (1806:18–29; translated and discussed in Vogler 1994, 1:132–45). Each column in the graph depicts the contents of a single measure of the score. The upper portion of each system provides the actual bass notes and figures for the upper parts. The lower portion of each system presents the fundamental harmonies upon which the chords are based and the Roman numerals designating the chords’ scale-degree func-

tions in the prevailing key.¹⁸ In places where no fundamental bass is given, the sounding bass note is also the chord root. Since Vogler does not specify keys with his Roman numeral notation, I have added them in brackets.

Vogler's remarks in the accompanying text assert that, "A minor prevails throughout mm. 21–29" (1806:21; 1994:138). Yet in m. 24 an *Ausweichung* to B \flat Major is indicated by the Roman numerals V and I (the I extends into m. 25). The designation VII \sharp under the second half of m. 25 signifies a return to the context of A minor. Apparently, this brief *Ausweichung*—like that examined by Vogler in Winter's symphony—does not disturb the sense of the prevailing key. Later in this same analysis, Vogler recognizes that eight bars in E \flat Major in an overall context of D minor are analogous to what is today called the Neapolitan sixth chord, and that the former key is "reliant upon the principal tonic" (1994:143).¹⁹ It is unfortunate that Vogler did not devote more attention to this issue in his analyses.

* * * * *

In conclusion, this essay has been intended as a cautionary note against regarding late eighteenth- and early nineteenth-century notation as implying full modulations in the modern sense. However, we also must not regard the statements of the writers examined here as exhibiting a discrepancy between notation and conceptual foundation. Rather, as a result of subsequent developments in music and music theory, the significance of their notational conventions has changed. This essay draws attention to elements that contributed to the conception of tonality exhibited by these theorists: an acute sense of diatonicism; a continuum of extremely subtle gradations in the notion of *Ausweichung*, perhaps more subtle than that of modern-day theorists; and, in a few of these authors, a view of key-orientation that focuses on the mind's capacity for comprehending musical events.

The writings cited here make a larger point about reading historical documents as well. While many of the problems of interpreting documents from the past arise from unfamiliar terms or notational conventions, we must be careful not to take the familiar ones at face value. Unfortunately, there is no shortcut for understanding the work of authors such as Kirnberger, Koch, Sulzer, Vogler, and Weber. It is only through careful examination of an entire body of work that we can approximate what these writers were trying to communicate to their readers.

Notes

1. One could probably extend the examination with somewhat similar results to the French term *modulation*, and to other languages, since the conceptual ori-

entation suggested here would still apply to many other theorists of the time.

2. The older sense of the German (or French) *Modulation* comes from the Latin, *modulatio* (meaning "measurement, arrangement, regulation"), and was current in the early eighteenth century. Weber, for example, uses *Ausweichung* and *ausweichende Modulation* interchangeably. See *New Grove Dictionary of Music and Musicians*, 2nd ed., s.v. "Modulation" (by Janna Saslaw).

3. See *Handwörterbuch der musikalischen Terminologie*, s.v. "Modulation" (by Christoph von Blümröder).

4. The piano accompaniment is taken from the published score (Weber 1811). It is interesting to note that Weber's 1832 treatise contains B \sharp s in mm. 23–24 (Soprano II and piano accompaniment), while the 1811 score uses C \sharp s. I have used the former in the example, since it accords with the later version of the passage. It may be noted that B \sharp agrees with the C \sharp minor and F \sharp minor interpretations of the two bars, while C \sharp agrees with the E minor and G Major interpretations.

5. Johann Sulzer's article "Ausweichung" in the *Allgemeine Theorie der schönen Künste* of 1771 (1970, 1:282–87—this is a reprint of the second edition) contains a discussion of the topic similar to that in Kirnberger's *Die Kunst des reinen Satzes*, Vol. I, also from 1771. Both treatments result from the collaboration of Kirnberger and Sulzer, with the former sketching his theoretical ideas and the latter polishing them (see [Siegel 1960:18] and [Kirnberger 1982:xi]). Translations from Kirnberger (1968) included here draw upon those of the 1982 edition, but differ in some respects, in particular leaving *Ausweichung* untranslated, rather than rendering it as "modulation." All other translations in this essay are my own. For the purposes of simplicity in this essay, I shall use the name Sulzer when referring to Sulzer (1970) and Kirnberger when referring to Kirnberger (1968), as a shorthand for the combined efforts of the two writers.

6. "Diatonisch die einfache von 7 Tönen, die nicht mehr Töne als die Tonart selbst hat; denn es gibt keine chromatische Tonart, weil nicht mehr als 7 Töne Anspruch auf den Hauptton haben können . . ."

7. "Der Schlußfall vom zweiten in den fünften Ton findet nur im weichen Tonart statt . . . in der harten Tonart, sobald man dem zweiten Tone seine grosse Dritte beilegen wollte, er nicht mehr der zweite sondern ganz bestimmt der fünfte von einem andern Tone wäre, z. B. D f a[,] II von C; D fis a[,] V von G."

8. "Bey der Ausweichung einer Tonart in eine andere, kömmt es nun aber besonders darauf an, ob sie 1) nur eine zufällige, oder 2) eine durchgehende, oder aber 3) eine förmliche Ausweichung ist."

9. "Wenn man der Folge verschiedener Töne eines festen Gesanges durch die darzu gesetzte Stimme das Ansehen der Tonfolge einer andern Tonart giebt, so entsteht eine neue Mannigfaltigkeit des Satzes. Dieses Verfahren will ich eine zufällige oder noch besser eine kurze willkührliche Ausweichung nenne."

10. ". . . nicht in der zum Grunde liegenden Tonart selbst, sondern in andern ihr verwandten Tonarten ihren Grund haben."

11. "Eine durchgehende Ausweichung . . . nenne ich diejenige, bey welcher zwar der Eintritt in die neue Tonart vermittelst ihres characteristischen Tones wirklich vor sich gehet, bey welcher aber in dieser neu eingetretten Tonart mit der Tonführung nicht fortgefahren, sondern diese entweder sogleich zurück in die vorige Tonart geführt wird, wie bey fig. [3]; oder nach welcher sogleich noch

eine oder mehrere durchgehende Ausweichungen folgen, ehe entweder die vorhergehende Haupttonart, oder eine ihrer Nebentonarten, . . . fortgeführt wird; wie z. B. bey fig. [4 and 5].”

12. It is unfortunate that Koch does not comment on example 5, which is perhaps the most interesting of the three passages. Presumably the *Ausweichungen* are to C in mm. 1–2, to A minor in m. 2, B minor in m. 3, back to G Major or possibly E minor in mm. 3–4, and finally ending with D Major (although not with a full close).

13. Nancy Baker notes (pers. comm., October 1991) that Koch himself gets confused between his three gradations of *Ausweichung*. In one case (not discussed in this article), he designates an *Ausweichung* as passing and then also labels the same *Ausweichung* as incidental (1969, 2:204).

14. Whether or not this passage might be more profitably analyzed in voice-leading terms is another question. Here, we are dealing only with what Weber means by labelling these *Ausweichungen*.

15. See Brumbaloe (2001) for more on the proportions of time allotted to *Ausweichungen* by writers of this period.

16. Sulzer does not cite a specific source from Rousseau, but the example appears in *A Complete Dictionary of Music* (Rousseau 1975:252). Although the chart does have the different note values representing proportionate times allotted to each key, Rousseau's keys and their ordering differ slightly from those in example 7. From the key of C Major, Rousseau claims one can go to G Major, F Major, A minor, E minor, and D minor, in that order. In A minor one can go to C Major, E minor, D minor, and F Major only. The earliest appearance of this chart is in Rousseau (1751–65). A modern edition of the article's text may be found in Rousseau (1985). The musical plates are in Vol. 4. Rousseau (1978) is an edition of the plates alone. The chart in question is in Vol. 3, plate 1779, figs. 6–7.

17. See also commentary on this passage in Grave and Grave (1987:58–64).

18. Vogler had invented the use of Roman numerals to represent scale degrees in 1776 in the monograph *Tonwissenschaft und Tonsetzkunst* (Vogler 1970). He used uppercase Roman numerals for all chord qualities.

19. Ian Bent claims that in this discussion “at one stroke [Vogler] identifies without name the Neapolitan sixth chord, tonicization and prolongation!” (Vogler 1994:134). Nevertheless, Vogler still must label the passage as oriented toward E \flat as I (not as bII). We may certainly regard Vogler's analysis as a first step in recognizing the modern concept of tonicization, even though the notation cannot yet reflect this.

References

- Brumbaloe, Joseph. 2001. Implication of Modulation for Temporal Organization in Selected Eighteenth-Century Theoretical Sources. *Theoria* 9: 65–87.
- Damschroder, David A. and David R. Williams. 1990. *Music Theory from Zarlino to Schenker: A Bibliography and Guide*. Harmonologia No. 4. Stuyvesant, NY: Pendragon Press.
- Grave, Floyd K. and Margaret K. Grave. 1987. *In Praise of Harmony: The Teachings of Abbé Georg Vogler*. Lincoln, NE: University of Nebraska Press.
- Kirnberger, Johann Phillip. 1968. *Die Kunst des reinen Satzes*. 2 vols. Hildesheim:

- Georg Olms Verlagsbuchhandlung. (Orig. pub. 1771–79.)
- . 1982. *The Art of Strict Musical Composition*, translated by D. Beach and J. Thym. New Haven and London: Yale University Press.
- Koch, Heinrich Christoph. 1969. *Versuch einer Anleitung zur Composition*. 2 vols. Hildesheim: Georg Olms Verlagsbuchhandlung. (Orig. pub. 1782–93.)
- Rousseau, Jean-Jacques. 1751–65. Modulation. In *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers, par une société de gens de lettres*. Paris: Chez Briasson: David l'aîné: Le Breton, imprimeur ordinaire du roy: Durand.
- . 1975. Modulation. In *A Complete Dictionary of Music*, translated by W. Waring. New York: AMS Press. (Orig. pub. 1779.)
- . 1978. Plate 1779. *Diderot Encyclopedia: The Complete Illustrations 1762–1777*. New York: Harry N. Abrams.
- . 1985. Modulation. In *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers*. Elmsford, NY and Paris: Pergamon Press. (Orig. pub. 1751–65)
- Saslaw, Janna K. 1991. Gottfried Weber's Cognitive Theory of Harmonic Progression. *Studies in Music from the University of Western Ontario* 13: 121–44.
- Schoenberg, Arnold. 1968. *Structural Functions of Harmony*, rev. ed., edited by L. Stein. New York: W. W. Norton.
- Siegel, Hedi M. 1960. *Johann Georg Sulzer's Allgemeine Theorie der schönen Künste: an Examination of the Articles of Music Theory*. Masters Thesis. Columbia University.
- Sulzer, Johann Georg. 1970. *Allgemeine Theorie der schönen Künste*. 2nd ed. Hildesheim: Georg Olms Verlagsbuchhandlung. (Orig. pub. 1792.)
- Vogler, Georg. 1802. *Handbuch zur Harmonielehre und für den Generalbaß, nach Grundsätzen der Mannheimer Tonschule zum Behuf der öffentlichen Vorlesungen im Orchestrions-Saale auf der K. K. Karl-Ferdinandeischen Universität zu Prag*. Prague: K. Barth.
- . 1806. *Zwei und dreisig Präludien für die Orgel und für das Fortepiano nebst einer Zergliederung in ästhetischer, rhetorischer und harmonischer Rücksicht, mit praktischem Bezug auf das Handbuch der Tonlehre vom Abt Vogler*. Munich: Falter.
- . 1970. *Tonwissenschaft und Tonsetzkunst*. Hildesheim: Georg Olms Verlag. (Orig. pub. 1776.)
- . 1974. *Betrachtungen der Mannheimer Tonschule* 1:4 (September 15). Hildesheim: Georg Olms Verlagsbuchhandlung. (Orig. pub. 1780.)
- . 1986. *Pièces de Clavecin (1798) and Zwei und dreisig Präludien (1806)*, edited by F. K. Grave. Recent Researches in the Music of the Classical Era, Vol. 24. Middleton, WI: A-R Editions, Inc.
- . 1994. [Prelude] Nr. 8 [in D minor from Vogler's Thirty-two Preludes]. In *Music Analysis in the Nineteenth Century*. Vol. 1: *Fugue, Form, and Style*, edited by Ian Bent. New York and Cambridge: Cambridge University Press.
- Weber, Gottfried. 1811. *Zwölf vierstimmige Gesänge*, Op. 16. Augsburg: Gombart.
- . 1830–1832. *Versuch einer geordneten Theorie der Tonsetzkunst*. 3rd rev. ed. 2 vols. Mainz: B. Schott's Söhne.