10 | Dance topoi, sonic analogues and musical grammar: communicating with music in the eighteenth century

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For Etienne Bonnot de Condillac, music was a solution to a problem. The problem arose in connection with the radical empiricism he advocated in his 1746 *Essai sur l'origine des connaissances humaines*, which sought to derive all knowledge from sensation. Stated simply, the problem was one of explaining how such sensory information could be organized into knowledge. Music – and in particular the theoretical account of musical organization proposed by Jean-Philippe Rameau – offered a solution, for it provided a link to the passions that motivated the formation of knowledge as well as a rational structure through which knowledge could be organized.

As he surveyed the basic capacities upon which knowledge was grounded Condillac noted that humans shared most of them with brute animals. What humans had that animals did not was a memory guided and facilitated by what Condillac called instituted signs. The two other sorts of signs Condillac recognized, accidental signs and natural signs, were shared with animals: accidental signs are simply the perceptual traces of the objects we behold; natural signs are the involuntary cries associated with passions such as joy or grief. Instituted signs, by contrast, are wholly volitional: they are signs that we choose to represent some aspect of knowledge. Once knowledge is represented it can be remembered and made available for contemplation – it becomes truly knowledge, rather than transitory sensory information.

Condillac proposed that the establishment and organization of instituted signs – a process that led, ultimately, to language – proceeded gradually and over many human generations. At the beginning of this process was the natural sign, which was not limited to cries alone but included various gestures. The immediacy of these gestures stimulated an empathy between pre-linguistic individuals that led to a form of communication:

For example, he who suffered, by being deprived of an object which his wants had rendered necessary to him, did not confine himself to cries or sounds only; he used some endeavours to obtain it, he moved his head, his arms, and every part of his body. The other [person] struck with this sight, fixed his eye on the same object, and perceiving some inward emotions which he was not yet able to account for, he suffered in seeing his companion suffer.[1]

With repetition these gestures and actions became familiar and were remembered, giving rise to what Condillac called a *langage d'action*. Directly related to the passions, it had great power, but in its unrefined form there was good deal of variability among its signs and a consequent ambiguity about what they meant. Over time the gestures of the *langage d'action* were refined into dance, the inflections of its various sounds were refined into music, and the images and situations it called forth became the stuff of poetry. Key to the development of music and poetry (which Condillac believed were unified at this originary moment) was the discovery by our ancestors of the natural order of musical sounds. This order was none other than the one revealed by Rameau's theory of harmonic generation, and it led the ancients to organize the widely varying inflections of their proto-language in accordance with the *ut*, *mi*, *sol* and *ut* with which every sonorous body resounded. Once this was accomplished, the true expressive and rational potential of language could be realized.[2]

Connections between music and language of the sort entertained by Condillac have been remarked upon since antiquity. What was new in the eighteenth century was the exploration of this connection within the context of inquiries into what it meant to be human. As Downing Thomas has noted, music served as an anthropological 'missing link,' allowing Enlightenment writers such as Condillac 'to trace semiosis to its origin, to pinpoint the semiotic moment which separates culture from nature, and human beings from animals'.[3] There was also during this period a growing appreciation of the expressive potential of purely instrumental music, which theories like Rameau's helped to explain. As a consequence of these developments, music and language came to be seen as parts of a unified system of communication, striving toward the common goal of expressing uniquely human knowledge. This view is one that has survived, largely intact, to the present day: music is commonly regarded as a communicative medium that functions as a kind of language, a language that, on the one hand, is well adapted for the expression of emotions and, on the other hand, has a natural rational basis which is captured and studied by theories of music.

I would like to complicate this view substantially by proposing that language and music have *different* functions in human culture, that the function of music is reflected in its grammar, and that composers of the eighteenth century understood this. Where Condillac saw language as the successor to music, I suggest that the two are substantially independent, developed by humans for distinctly different communicative goals. More broadly, musical communication – whether in the eighteenth century or the twenty-first – is not like linguistic communication, but must be understood on its own terms.

My argument has two basic parts. In the first, I develop a theoretical approach to musical grammar based on research in cognitive linguistics and on nineteenth-century accounts of the proper way to compose dance music. The latter reflects the influence of Wye Allanbrook's pathbreaking work on rhythmic gesture and dance topoi – as does she, I propose that music for dance is crucial for understanding music of the late eighteenth century, although my approach is ultimately somewhat more prosaic than Allanbrook's. The second part of the argument involves an analysis of the Finale from Haydn's Op. 76 No. 4 quartet, which builds off Allanbrook's observation that the opening of this movement has many of the characteristics of a bourrée. My analysis suggests that not only was Haydn aware of the bourrée topic, but that he also drew on the musical grammar basic to the dance as a resource for shaping the tonal rhetoric of his Finale.

Musical grammar and composing for the dance

Function and form in language and music

The notion that music and language are different but related aspects of a single unified system of communication flows naturally from their shared features. Both are unique to the human species, both unfold over time, both have syntactic properties, and both make use of sound. There are also, however, a number of differences between music and language: musical meaning is on the whole much less precise than linguistic meaning; music often involves simultaneous events, where language does not; and there is more of a sense of play in ordinary music than there is in ordinary language.[4]

I propose that these differences reflect the different functions of music and language. Drawing on the work of the developmental psychologist Michael Tomasello, I take the position that the primary function of language within human culture is to direct the attention of another person to objects or concepts within a shared referential frame.[5] The primary function of music, by contrast, is to represent through patterned sound various dynamic processes that are common in human experience. Chief among these dynamic processes are those associated with the emotions (which, following recent work by Antonio Damasio, can be construed as sequences of physiological and psychological events that subtend feelings[6]) and the movements of bodies – including our own – through space.

The difference in function between these two media is matched by a difference in the forms through which the functions are realized. In the

case of language, these basic functions are realized through parts of speech. Edward Sapir, reflecting on the basic elements required for languages, wrote that in language

there must be something to talk about and something must be said about this subject of discourse once it is selected. The distinction is of such fundamental importance that the vast majority of languages have emphasized it by creating some sort of formal barrier between the two terms of the proposition. The subject of discourse is a noun. As the most common subject of discourse is either a person or a thing, the noun clusters about concrete concepts of that order. As the thing predicated of a subject is generally an activity in the widest sense of the word, a passage from one moment of existence to another, the form which has been set aside for the business of predicating, in other words, the verb, clusters about concepts of activity. No language wholly fails to distinguish noun and verb, though in particular cases the nature of the distinction may be an elusive one.[7]

The basic parts of speech, then, are symbolic units that correlate with functions such as those represented by nouns and verbs, as well as the many other parts of speech recognized by grammarians. In the case of music, the basic unit of grammar is what I call a sonic analogue, which represents through patterned sound the central features of some dynamic process.[8] One of the places sonic analogues are most evident is in music for dance.

Analogizing dance

Adolf Bernhard Marx, in his instructions to student composers on how to compose a waltz, provided insight into how music can analogize dynamic processes. Marx begins by describing the basic gestures of the dance: 'The waltz has two movements: first each pair of dancers turns itself in a circle around its own centre; second the pair progresses with these continuous turns in a greater circumference until it reaches its starting place and the circle is closed. Each little circle is performed in two-times-three steps and is, as it were, the motive of the dance'.[9] A diagram of the basic pattern described by Marx is given by Thomas Wilson in his 1816 treatise on the waltz, shown in Figure 10.1: here the small circles summarize the 'two-times-three steps' gesture noted by Marx, and the large circle shows the path the dancers take around the dance floor.[10] In truth, and as Sevin Yaraman has noted, the 'circles' described by Marx and diagrammed by Wilson are spirals, which connect to form the large circle shown in Figure 10.2.[11]

These circular motions are perhaps the most important feature of the dance, and one that Marx believes should be clearly supported by the music:
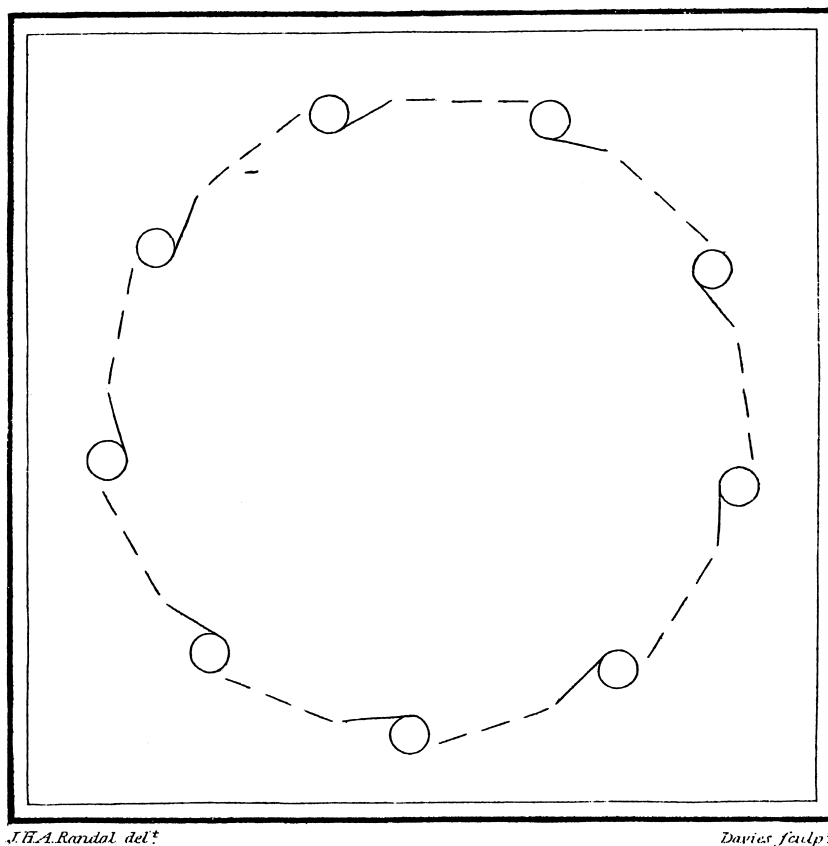
J.H.A.Randal del.ᵗ   *Davies sculp.ᵗ*

Figure 10.1 Diagram for waltzing, reproduced from Wilson, *A Description of the Correct Method of Waltzing*, facing page 46

'At the very least the waltz must bring into prominence this basic motive of movement. Each bar, or, better, each phrase of two bars, must answer to the dance motive marking the first step firmly, and also the swinging turn of the dance. Where the bars do not point it out they must still favour it, by a melody which spiritedly turns away from the first note'.[12] Having laid out these desiderata, Marx then provides two examples. The first, shown in Example 10.1, is a waltz from the first act of Carl Maria von Weber's *Der Freischütz*. The second, shown in Example 10.2, is his own confection; he remarks that the example demonstrates the three basic steps in a simpler but less swinging way. Marx then observes: 'we see in the above pieces auxiliary tones placed before the chord tones in the melody in order to set the first step in relief; every other melodic, harmonic and rhythmic sharpening – the
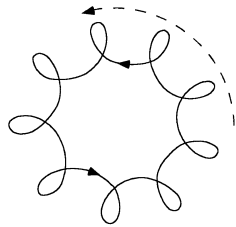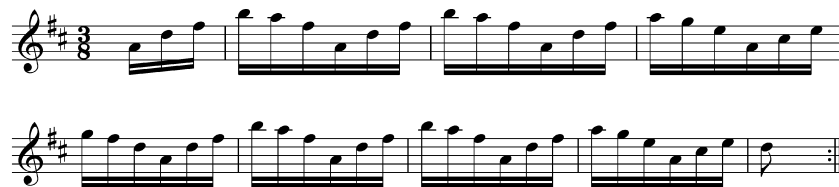
288   LAWRENCE M. ZBIKOWSKI

Figure 10.2 Diagram
showing the path of the
dancers in waltzing,
reproduced from
Yaraman, *Revolving
Embrace*, 19

Example 10.1 Waltz from C. M. von Weber's *Der Freischütz* (Marx, *Die Lehre von der
Musikalischen Komposition*, vol. 2, 56)

Example 10.2 A. B. Marx's fabricated waltz (*Die Lehre
von der Musikalischen Komposition*, vol. 2, 56)

assistance of a *forzato*, an accented first note in the bass [as shown in Example
10.3], and so forth – serves the same purpose'.[13] For Marx, then, the function
of waltz music is to support, as thoroughly as possible, the movements of
the dancers. The grammar of the waltz – that is, the way its materials are
organized – has to realize this function or, implicitly, there is no waltz.[14]

From the perspective of the early nineteenth century the music for a waltz
had to correlate with the steps and movements of the dance: it provided the
dancer with a sonic image of the various gestures required for the dance
as well as a series of sonic events onto which she could map specific bodily
motions. The music thus offered a sonic analogue for the dynamic process of
the dance. More specifically, regular repetitions of the two-bar waltz motive

Example 10.3 A. B. Marx's basic accompaniment pattern for the waltz (*Die Lehre von der Musikalischen Komposition*, vol. 2, 56)

are the basis for the structure of the dance as a whole (typically thirty-two bars long), which is divided at regular intervals by cadential gestures. Tonal syntax – which is often thought of as *the* syntax of music – provides a way to reinforce this grammar, but the grammar of the waltz is first and foremost about the dance, rather than about tonal organization.[15]

Musical construction grammar

The approach to grammar that I have adopted here, in which the form of a grammatical element is in an intimate relationship with its function, conforms with what cognitive linguists call construction grammar. In the case of language, constructions are defined as 'stored pairings of form and function, including morphemes, words, idioms, partially lexically filled and fully general linguistic patterns'.[16] In the case of music, constructions are in each case sonic analogues for dynamic processes. The most basic of these are immediate and of limited extent. Marx's waltz motive is one example; other examples are the basic-level musical categories I have discussed elsewhere.[17] As with linguistic constructions, musical constructions are stored pairings of form and function.

Basic constructions are organized into larger structures through syntactic processes. Repetition – which can be defined as successive occurrences of equivalent constructions, and to which I referred in my sketch of the grammar of the waltz – is one such process. Repetitions of the waltz motive create the larger structures associated with the dancers' movement through the large circle diagrammed by Wilson. Another process evident in Marx's examples is cadence. In Weber's waltz cadence is effected by an arrival on $\hat{1}$ in the melody on the first beat of bar 8, which coincides with a momentary cessation of the running quavers and the oom-pah-pah accompaniment (which is not included in Marx's citation). Cadence in the example formulated by Marx is much less marked: while there is an arrival on $\hat{1}$ in bar 4 the accompaniment pattern continues uninterrupted, suggesting that further bars of music are to follow.

In keeping with the construction grammar approach, in which *all* grammatical elements are pairings of form and function, syntactic processes are themselves sonic analogues for dynamic processes. Repetition is, in the first instance, an analogue for cyclic processes. Cyclic processes can suggest nested hierarchical structures but can also suggest staticity or stagnation – that is, the *negation* of process. Cadence is an analogue for the process of arrival, although there are elements within cadence that are akin to interruption, as is evident in the last bar of Weber's waltz. Either repetition or cadence can be applied recursively; although the former is quite apparent in Marx's examples (with repetitions of the waltz motive practically defining the dance), the latter is less obvious – indeed, even in the complete version of Weber's waltz the sense that there is a *final* cadence is thwarted when the music for the waltz melts into the continuation of the scene. In general, it is through the recursive application of syntactic processes, and the application of these processes at different levels of musical organization, that ever larger and more complex musical structures are created. (Further instances of syntactic processes will be discussed below in the analysis of Haydn's Finale.)

One consequence of this approach to musical grammar is a changed view of musical communication. 'Communication' is typically understood as having something to do with imparting knowledge to or sharing information with someone else. The framework of logic behind this intuition is what Michael Reddy called the conduit metaphor, according to which language functions like a conduit to transfer thoughts from one person to another.[18] While such a perspective works well for language, with its focus on objects or concepts within a shared referential frame, it works less well for music. Our first engagement with music is on the level of the dynamic processes analogized through music's patterned sound. Engagement of this sort, akin to empathy or sympathy, is not really captured by the idea of receiving something transferred through a conduit. Musical communication – if we even want to apply the term to the sort of engagement with dynamic processes with which I am concerned here – will in consequence be rather different from communication through language.

Two important qualifications of this view of musical communication are in order. First, the starting point for my characterization of musical grammar was what I took to be the *primary* function of music, which is to represent through patterned sound various dynamic processes common in human experience. The perspective is similar to that of Tomasello, who proposed that the *primary* function of language within human culture is to direct the attention of another person to objects or concepts within a shared referential frame. But these are not the only roles of music or language within human

culture. In the case of music, either musical or non-musical events can prompt us to step back from our engagement with the dynamic processes analogized through sound and become aware of the means through which this engagement is accomplished. In such cases, reflection on musical objects replaces engagement with musical processes and something closer to the sort of communication we associate with language commences.

The second qualification concerns the relative closeness of the relationship between music and dance. Although both Marx and Wilson, in their discussion of the waltz, emphasize the tightness of this connection, in most dances the relationship is much looser: gestures or steps of the dance may have no correlate in the music, and aspects of the music will not be represented in the dance.[19] This variability of correspondence suggests that the combination of music and dance is best thought of as what Nicholas Cook calls an instance of multimedia: the gestures of the dance are one medium, the patterned sound of music another. As Cook has observed, correlations between the constituent media of an instance of multimedia can be many or few. Where there are many correlations the media are conformant with one another; if there is absolute conformance the boundaries between media may disappear altogether. Where there are few correlations the media are in a state of contest; if there is absolute contest any sense that the media participate in a common communicative function may be lost.[20] Various dances could be situated along a continuum, the ends of which are marked by the two extremes of conformance and contest. Toward one end would be Marx's waltz and its brethren, distinguished by a tight correlation between dance and music; toward the other would be cases where dance and music are so dissimilar that each threatens to go its own way. For my part, I will assume that most social dances fall somewhere in the middle: the connection between the gestures of dance and the materials of music is not quite as tight as that described by Marx, but still close enough that the music serves as a sonic analogy for the movements essential to the dance.

Musical communication in the eighteenth century

Marx's teaching of how to write waltzes and other dances fell early in his overall course of instruction as part of a thorough treatment of what he called periodic forms. The assumption was that dances exemplified the regular building blocks of musical expression, and that these building blocks could be exploited in more advanced forms. A similar perspective, informed by the composition treatises of Joseph Riepel and Heinrich Christoph Koch, led Wolfgang Budday to propose that the formal principles evident in dance

forms like the minuet are the basis of Viennese classical style.[21] Musical composition in the latter half of the eighteenth century and first half of the nineteenth century involved more than simply the expansion or re-use of dance forms, but given the ubiquity of these forms in the social mileau inhabited by composers as well as the expectation that a well-trained *Kapellmeister* would be familiar with all the common dances of the court, it seems safe to say that a knowledge of dance forms was part of the basic equipment of a composer during this period.[22] This knowledge included not only the rhythmic characteristics typical of any given dance but also the actual steps of the dance, since it was upon these that the rhythmic organization was predicated. Even when the dances were no longer danced the choreography suggested by their rhythmic patterns provided an expressive resource for the composer: as Allanbrook has shown, dance forms could serve as topics around which musical discourse is organized.

In her exploration of Mozart's musical language Allanbrook was primarily interested in the way various topics derived from dance forms – topics that instantiate the rhythmic gestures of dance – are combined, juxtaposed and contrasted for expressive ends. My focus is on a more basic, and perhaps more mechanical, level: I propose that composers of the late eighteenth century could not only use dance forms for their topical associations but could also modify and subvert the grammar of dance to create new expressive possibilities.[23] Musical communication thus began with sonic analogies for familiar processes (such as the steps of a dance) but was developed through the introduction of new patterns or the modification of existing ones.

As I shall try to argue in the next section, it is this sort of development of compositional strategy that is evident in the Finale of Haydn's string quartet Op. 76 No. 4. Although Haydn begins the movement with an evocation of a bourrée, before half a minute is up he effects a reinterpretation of the gestures of the dance, transforming elegant choreography into the bumptious antics and pratfalls of comic theatre.

Joseph Haydn, String Quartet Op. 76 No. 4, Finale

The bourrée of the French court and eighteenth-century instrumental music

In a survey of French court dances of the seventeenth and eighteenth centuries, Meredith Little and Natalie Jenne begin with the bourrée, reckoning it to be among the least complex of French baroque dances. The bourrée

is a moderately fast dance in duple time, the affect of which is invariably described as easygoing and gay. Little and Jenne summarize the basic rhythmic structure of the bourrée as follows: 'In the bourrée dance rhythm the rhythmic–harmonic phrase is eight beats in length (four measures), preceded by an upbeat, usually two eighth notes or a quarter note. Beat 7 and the first half of 8 [which make up the fourth bar] constitute the primary repose, or thesis; beat 3 and the first half of 4 provide a preliminary resting point, or secondary thesis'.[24] One of the characteristic rhythmic figures of the bourrée is a quick anapestic rhythm of two quavers moving onto a strong beat (the same figure that Little and Jenne observe is often used for the upbeat to the dance). Another is a syncopated rhythm – crotchet/minim/crotchet – that typically appears coincident with the preliminary resting point associated with beats 3 and 4. The rhythmic instability of this syncopation tends to highlight the contingency of this resting point, since the rhythmic arrival on the second main beat of the bar is not correlated with a similar arrival in the music.

Pierre Rameau, in a dance tutor published in 1725, described the basic step of the bourrée as composed of two movements. The first is a *demi-coupé* (a *plié* – gently bending the knees – followed by an *élevé* – gently stretching the knees to rise) succeeded by a *pas marché sur la demi-pointe* (a simple step, but without lowering the heel); the second is a *demi-jeté* (a short hop).[25] Rameau notes that current fashion has replaced the *demi-jeté* with another plain step; this combination of a *demi-coupé* and two plain steps is generally known as the *pas de bourrée*. In either case the basic step divides the musical bar into four parts: parts 1 and 2 are taken up by the *plié* and *élevé* of the *demi-coupé*, and parts 3 and 4 with the two plain steps (or step and *demi-jeté*). The fall and rise of the *demi-coupé* suggest movement *through* parts 1 and 2; the second of the two plain steps that complete the dance figure suggests that part 4 marks a point of arrival. As conventionally rendered in musical notation, part 1 occupies an anacrusis, and part 2 begins with the downbeat of the bar; parts 2 and 4 thus correspond with the beginnings of minim durations. The dancers are consequently in motion through the first minim (the 'strong beat' of the bar) and arrive at the beginning of the second minim (the 'weak beat').

A richer sense of the relationship between the music and steps of the bourrée is provided by Little's analysis of a choreography published by Louis Pécour in 1700. Little uses five symbols for the steps specified by the Feuillet notation Pécour employed, which are shown in Figure 10.3: included are the *plié*, the *élevé*, the *jetté*, the plain step and the *glissé*; this last is a gradual sliding of the foot along the path of the step. In Little's transcription, which is

∨   *plié*

∧   *élevé*

⋔   *jetté*

〰   *glissé*

| plain step

Figure 10.3
Meredith Little's
notation for dance
steps ('The
Contribution of
Dance Steps', 112)

Example 10.4 Meredith Little's analysis of Pécour's choreography for a bourrée ('The Contribution of Dance Steps', 114–15)

given in Figure 10.3 together with the music supplied by Pécour, the brackets underneath these symbols show which steps were joined together in the original notation – that is, how the dancer was to group the steps – and the letters R and L above the symbols show which foot is being used.[26] As can be seen, both the music and the choreography are in two parts, corresponding to bars 1–8 and bars 9–16 of the score. In the music, the first and second part are very similar; what changes there are have to do with the process of ending on the dominant in bar 8 and that of ending on the tonic in bar 16. The choreography, however, changes not at all: the steps for bars 1–8 are the same as those for bars 9–16. Unadorned *pas de bourrée* can be seen in bars 2, 4 and 7 (and correspondingly in bars 10, 12 and 15). Interspersed between these are somewhat more complicated steps that involve either *jettés* or a

Example 10.5 J. S. Bach, Bourrée from Suite for Lute in E minor, ʙwv996, bars 1–8

decrease in the number of steps (something that can be seen in bars 5 and 6). But in every case the dance figure begins with a *plié* on the preceding crotchet upbeat which then entails a rise onto the downbeat, a movement that contributes much to the buoyancy associated with the dance.

Another thing that contributes to the gentle animation of the dance are syncopations of the sort that occur in bars 2 and 10. Here the music and choreography diverge, with the dancers marking the second beat with an arrival that is withheld by the music. A different sort of divergence occurs in bars 4 and 12, when the melody makes its arrival on the first beat and the dancers continue through to the second beat. Both sorts of divergence bear witness to contest between the medium of music and the medium of dance. That is, the non-alignment of music and dance make Pécour's bourrée a true instance of multimedia. This contest plays out, however, against a backdrop of conformance: the music is organized in a clear pattern of two bars plus two bars plus four bars, as is the dance; the four-bar unit is itself distinguished by a two-bar sequence (in bars 5 and 6) which accompanies the deceleration of steps noted earlier; and the termination of each eight-bar section is clearly marked by simultaneous arrivals by both the music and the dancers (with the arrival of the dancers sustained by the *glissé*). In sum, the overall effect of the dance is accomplished through the way each of its constituent media is set out: Pécour's bourrée is found *between* the choreography and the music.

A useful contrast to Pécour's bourrée, as well as a bridge to Haydn's Finale, is provided by a bourrée for the lute written by Johann Sebastian Bach, the first eight bars of which are given in Example 10.5. The date of the work is uncertain, but it is most likely from after 1712. This portion of the dance has an AA′ form similar to that of Pécour's bourrée, but the sections are four rather than eight bars long. One of the most prominent features of the dance is Bach's nearly relentless use of the anapestic figure of two quavers moving to a strong beat. This antic activity is articulated by harmonic arrivals at

regular two-bar intervals: on E minor in bars 2, 4 and 6, and on G major in bar 8. Indeed, Bach's bourrée has a far more regular rhythmic surface than does that of Pécour. I would like to suggest that, *pace* Marx, the dance owes its rhythmic regularity to the fact that it was *not* intended for dancing. It was instead meant to evoke, through a single medium, the multimedia of music and dance. To accomplish this, Bach restricted his materials to those that evoke the basic gesture of the dance: a lift onto the first beat of the bar, followed by a continuation that moves to and is concluded on the third crotchet of the bar. The fluidity accomplished in Pécour's dance by the non-alignment of music and choreography is accomplished by Bach through harmonic and rhythmic means: each successive two-bar unit enacts a motion from dominant to tonic, and the relatively strong arrival on E minor in bar 4 is undercut by the running quavers (first in the melody, then in the bass) that push the music ahead to the reprise of the A section initiated by bar 5.

Although the Finale of Haydn's Op. 76 No. 4 quartet dates from the end of the century (it was first published in 1799), its opening eight bars, which are given along with the rest of the first main section of the movement in Example 10.6, bear a striking number of similarities to Bach's bourrée. Within the framework of an AA′ form there is a predominance of the anapestic figure of two quavers moving to a strong beat, although here the figure is distributed among the members of the quartet. Haydn, with more expansive instrumental resources at his disposal, summons a sense of forward motion by somewhat more subtle means than does Bach: in bar 1 both Violin II and the Viola move in quavers onto the third beat; in bar 2 only Violin II moves onto the third beat in quavers but Violin I does its own version of a *jetté* with its turn around f^1; in bar 3 the third crotchet is approached through a wedge of contrary-motion in the upper and lower strings that pulls the music all the way through to the arrival on the dominant in bar 4; and in both bar 3 and bar 7 motion toward a strong beat is suggested by the accentual destabilization provided by the *forzato* marks on the preceding weak beat. Although not named a bourrée, the opening bars of Haydn's Finale do most of the things expected of an instrumental bourrée in the eighteenth century, not the least of which is to project in duple time the gay, lively affect of the dance.

In keeping with the basic perspective on dance music that I proposed above, the music for the seventeenth- and eighteenth-century bourrée serves as a sonic analogue for the steps of the dance. It does not, however, do so in a simple way: in the dance practice of the period, these sonic analogues

Example 10.6 Haydn, String Quartet in B flat major, Op. 76 No. 4/iv, bars 1–34

construct a framework for, rather than a simple mirror of, the choreography for the bourrée. The framework as a whole is an analogue for the dynamic shape of the dance, reckoned not only from the basic unit of the *pas de bourrée* but also in the way this figure is concatenated with others to create a larger pattern of eight- and sixteen-bar units. This dynamic shape informs the multimedia structure of the dance at every turn, to the extent that even when the music departs from the surface pattern of the *pas de bourrée* (departures we saw in the version of the dance that accompanied Pécour's choreography) it does so with the expectation that the dynamic shape continues in the steps of the dance. In instrumental forms intended to summon this multimedia structure, the dynamic shape is represented more explicitly – thus Bach and Haydn's more regular bourrées.

Having noted the similarities between the opening of Haydn's Finale and a bourrée, I should also want to note two important differences. First, each half

Example 10.6 (*cont.*)

of Haydn's opening eight-bar unit is stamped with a strong overall dynamic shape: there is no doubt that the downbeat of bar 4 and the downbeat of bar 8 are points of arrival for the melody, harmony and phrase. Second, these large-scale dynamic shapes inform relationships among statements of their constituent bourrée figures: in each half, the second statement of the figure carries more force than the first, and the third carries more force than the second. (The fourth statement carries rather less weight, owing to the effect of the cadence.) This kind of dynamic shaping is not a typical feature of the bourrée – the dance tends to be more about a subtle interplay of dynamic shapes rather than the projection of a single overarching shape. This departure suggests that the opening of Haydn's Finale is, at best, a not very typical bourrée; it also suggests that Haydn has found a way to redeploy the basic dynamic shape of the dance to create new possibilities for musical communication.

Haydn's Finale

As can be seen in Example 10.6, the orderly presentation of the bourrée begun in the opening eight bars continues through bar 12, only to be destabilized by the imitative entry of the Viola in the middle of bar 13. Even as Violin I and Violin II continue the basic *pas de bourrée*, moving from the fourth crotchet of the bar through to the third, the Viola enters out of step, its *pas de bourrée* moving from the second crotchet of the bar through to the first. The effect is somewhat comical, rather as though a pair of dancers lost the beat and got out of phase with the rest of the troupe. This bit of comedy, however, comes at a price, for it subverts the rhythmic and gestural frame of the dance. This threat of rhythmic ambiguity is answered in bar 16 with a brusque gesture that reasserts the bourrée figure and leads to a somewhat overemphatic cadence on the dominant in bars 17–18. Although this cadence restores order, it also disrupts the forward motion characteristic of the bourrée figure that was just recalled. The cadential disruption of the basic step of the bourrée is, of course, something that marks each of the main formal divisions of the dance. Nonetheless, coming so close on the heels of the rhythmic ambiguity presented by bars 13–15 and stated with such emphasis, the interruption seems less a matter of articulating the form of the dance and more about calling a halt to regroup forces and reassemble the rhythmic frame. The passage that follows the cadence begins this process with an attempt to recover the forward motion, first with the accentuated dominant ninths of bars 20 and 21, and then with a melodic figure that, in bars 22–4, spins itself into a frenzy before running headlong into the beginning of the bourrée.

The dynamic shape of the passage in bars 22–4 is worthy of a bit of comment, for it bears witness to Haydn's larger compositional strategy. These bars begin with a compression of the melodic figure of bars 20 and 21, which is then repeated in running quavers. As shown by the upper brackets of Example 10.7, were we to follow Haydn's bowings we could extract four patterns, each with a duration of three crotchets; together, these fill out the crotchet durations available in three bars of cut time. Ignoring the bowings and concentrating only on the basic figure (again, derived from the bars 20 and 21) would yield the eight patterns shown by the lower brackets, each with a duration of three quavers. The end of neither of these patterns coincides with the end of a bar until bar 24; either singly or together they thus lead to the downbeat of bar 25. Running quavers like these often serve as sonic analogues for forward motion – indeed, up to this point in Haydn's Finale that is just how they have operated. Here, however, they coalesce into

Example 10.7 Haydn, String Quartet in B flat major, Op. 76 No. 4/iv, bars 20–4

repeated figures that, for a brief bit of time, go nowhere. It is only when these figures finally align with the downbeat that the music moves forward once again, an event coincident with the return to the music of the opening bars.

Let me pause for a moment to consider the syntactic processes that shape Haydn's Finale up to bar 25. As was the case with Marx's examples of the waltz, the syntactic processes of repetition and cadence are important for Haydn's instrumental evocation of a bourrée. Repetition of the sonic analogue for the *pas de bourrée* creates the sense of forward motion, built up in hierarchical levels, that typifies these bars. Cadences (in bars 4 and 8) temporarily interrupt this forward motion, marking off main sections of the dance (which correspond with combinations of dance steps). These processes can, however, be used for other purposes. In bars 17–18, for instance, repeated statements of the arrival on the dominant create a comic effect: a harmony that has been, up to this point, a cooperative member of the ensemble suddenly pushes to the front of the stage and demands to be noticed. The result is a cadence, but one that marks not the completion of a sequence of dance steps but the end of a digression. Repetition plays a slightly different role in bars 22–24, for here it leads to a remarkable increase in tension as the forward motion of the anapestic figure is turned back on itself, hinting at a stasis broken only by the downbeat of bar 25.

Another syntactic process seen in these bars is imitation, through which materials that have appeared in one strand of music are restated, oftentimes with some modification, in another strand. It is imitation, of course, that disrupts the regular rhythms of the bourrée in bars 13–15. The subsequent return of the bourrée figure with the pickup to bar 16 manifests the syntactic process of displacement, in which an ongoing process is replaced by another contrasting process. Displacement can be regarded as a meta-syntactic process, in that it takes as its material other syntactic processes rather than sonic analogues proper.

One of the consequences of Haydn's employment of these various syntactic processes is a confirmation of the change in emphasis I observed in connection with bars 1–8: the listener's attention is shifted away from the dynamic shape associated with the *pas de bourrée* and redirected toward the rhetoric of tonal forms. Haydn will continue to revisit the bourrée figure

throughout the remainder of the Finale; with each subsequent appearance, however, its importance as a sonic analogue for the steps of the dance will diminish. What will remain, to be refracted through the whole of Haydn's discourse, are its broader attributes – its lively affect, its physicality, and its compelling sense of forward motion. In the following, I want to consider briefly three moments that illustrate this process and suggest that, for Haydn, musical communication was centred around the active shaping of dynamic processes such as that represented by the bourrée figure.

Bars 25–34 of the Finale

Bar 25 begins the formal reprise that concludes the first main section of the Finale. Accordingly, bars 25–8 are almost identical to bars 1–4; the most significant departure from the version heard earlier is the dominant pedal begun when the Cello holds on to the F of bar 28. What happens next, however, completely unseats the bourrée motive: the melody for the second four-bar unit, begun in Violin II and accompanied by the Viola, is imitated at the interval of a crotchet by Violin I beginning on the downbeat of bar 29. On the last beat of bar 30 (just prior to what would have been the beginning of the cadential pattern, had the pattern of bars 5–8 been followed) Violin II joins with the Cello for paired quavers of the sort that typically mark the upbeat. These quavers are immediately echoed on the downbeat of bar 31 by Violin I and the Viola, and then on the second beat by the Cello. This profusion of paired quavers is followed, beginning in the second half of bar 31, with a complete *absence* of quavers, a change of surface rhythm that brings the succession of harmonies (which give voice to an expanded cadential pattern) to the foreground. The Cello's pedal F has thus initiated an expansion of the dominant that reduces the nominal reprise of the tonic in bar 29 to a bit of idle chatter, the ineffectuality of which is emphasized by Violin I's equally vapid imitation. It is as though the dancers were thrown into disarray after having become caught on the obstinate F of the Cello, and are rescued only by the march-like cadence of bars 32–4.

Haydn's introduction of the pedal has the effect of once more bringing tonal rhetoric to the foreground. Because a pedal is a syntactic process in which rhythmic activity in one part of a musical texture ceases, giving way to a sustained note, while continuing in the remaining parts, Haydn's strategy also gives rise to a profusion of rhythmic activity (something emphasized by the close-order imitation of the bourrée figure by Violin I). Although the dynamic character of this rhythmic activity owes much to the bourrée figure, it no longer conforms to the grammar of the dance. It serves here

to contribute to an increasing sense of instability, which is then resolved through the cadential process of bars 32–4. It is just this process that provides a firm arrival on the tonic to answer the prolonged dominant initiated by the Cello's pedal F.

Bars 64–82 of the Finale

Although the contrasting music in B♭ minor that Haydn introduces in bar 35 owes something to the character and dynamic shape of the bourrée, he does not present the bourrée motive with anything like the clarity of bars 1–8. One could dance a bourrée to this section of the Finale, but it would be without much help from the music. Indeed, by the end of this section, the last bit of which is shown at the beginning of Example 10.8, Haydn seems to have lost his way. It is only after a succession of ever-more hesitant musings in Violin I that a return to the first main section and B♭ major is effected. These musings, which begin with the upbeat to bar 69, are cast in the shape of a bourrée figure, but without the melodic or harmonic progression that has typified Haydn's instrumental version of the dance. This is not music that dances, but music that is trying to *remember* how to dance. The solution comes only on the last beat of bar 74, when Violin I finally tries a different starting pitch that, with Violin II's help, recovers the bourrée once more.

The passage reveals the close relationship between the bourrée figure and the tonal process of the Finale. By itself, the figure only weakly suggests the forward motion that typifies the dance. Indeed, when it is repeated without alteration or accompaniment, as it is in bars 69–74, it can be used to summon a kind of frustrated stasis. In the present case, when the figure is finally fleshed out as it is in bars 75–8, it marks not only the return to the dance but also the reprise of B♭ major and the opening material of the movement. Its forward motion thus not only serves to summon the dance, but also the directed motion of tonal rhetoric. This is made all the more clear in bars 79–82 when the second phrase of the dance is embellished with running quavers over a syncopated accompaniment: here the overall motion of the four-bar unit toward the tonic becomes much more important than the succession of bourrée figures that, in bars 5–8, set out a sonic analogue for a sequence of dance steps.

Bars 106–132 of the Finale

Aspects of the compositional strategy manifest in bars 64–85 can be seen in the passage that leads to the final reappearance of the bourrée, which is

Example 10.8 Haydn, String Quartet in B flat major, Op. 76 No. 4/iv, bars 64–82

shown in Example 10.9. Just prior to bar 106 there was a reprise of the music of bars 29–31. As happened in bars 75–82, the second phrase of the bourrée is embellished with running quavers. In the case of bars 103–5 (which are analogous to bars 29–31), the effect of the running quavers is to mitigate the instability introduced by the dominant pedal, such that the commencement of the cadential process in bar 106 (which is a literal repetition of bar 32) makes for a somewhat less marked contrast. When the running quavers are picked up again in bar 110 (after the augmentation of the material of bar 33 into bars 107–9, and the consequent change of the perfect authentic cadence into a semi-cadence) they sound as a continuation of the forward-moving gesture that preceded the cadence, but now *più allegro*. Although this continuation, taken up only by Violin I, is at first somewhat tentative it is soon distributed throughout the various voices of the ensemble and

Example 10.9 Haydn, String Quartet in B flat major, Op. 76 No. 4/iv, bars 106–32

developed through sequence and inversion. The gesture – now only vaguely reminiscent of the bourrée figure – gradually gains energy, and then jumps forward with the Cello entrance and *forte* of bar 122. It gets momentarily stuck in bars 125–8, until the reprise of the bourrée (still embellished in running quavers, but now *più presto*) pushes the music toward the conclusion of the movement some forty-odd bars later.

There is, at the beginning of this passage, only a faint vestige of the dance that began the movement; by its end the dance has been turned in to a manic parody, rushing breathlessly forward.[27] The transformation culminated in these bars, but which began as early as the out-of-phase imitative entrance of the Viola in bar 13, has shifted the listener's attention away from the dynamic shape associated with the *pas de bourrée* and redirected it toward the rhetoric of tonal forms. It should be emphasized, however, that the sonic analogue for the steps of the dance is nonetheless of crucial importance for Haydn's Finale, for it provides the basic grammar upon which his musical communication is based.

Conclusion

Condillac was careful to insist that whatever the similarities between the *langage d'action* and music, there was a boundary between the two. Although the modulated pitches of the *langage d'action* bore a semblance to music, they were still too disorderly to constitute anything like a rational mode of communicating. Reflecting on the distinction between the two, Condillac wrote, 'It is not sufficient for music, that the sounds succeed each other by distinct degrees, they must likewise be sustained, so as to let their harmony be perceived, and the intervals must be such as can be measured'.[28] It was, of course, Rameau's theory of harmony that provided the means to make such measurements, and thereby establish the boundary between music and barely articulate expressions of the passions. Further refinement eventually led to language, but this refinement also represented a further distance from the basic passions that had motivated expression in the first place. The development of language was thus set within a context of loss, a context that came to be thematized in Jean-Jacques Rousseau's account of the relationship between music and language.[29] What was gained, however, was the possibility of rational discourse: in the case of language, this discourse was based on instituted signs; in the case of music, it was based on the natural principles set out in Rameau's theory.

Although it is still common to construe music and language as modes of discourse that are linked in some fundamental way, composers and theorists of the eighteenth century recognized the tenuousness of the connection. Heinrich Christoph Koch, for instance, after considering in some detail the notion of a musical grammar analogous to that of language, turned away from the idea, suggesting that music needed to be considered in its own terms.[30] The perspective is similar to the one I have adopted here: whatever their surface similarities, music and language have distinctly different functions in human culture, and these are reflected in their grammars. The primary function of music is to represent through patterned sound dynamic processes that are common in human experience, a type of representation that is accomplished through sonic analogues for these processes. My point of departure for this view of musical grammar has been the sonic structures that analogize dance steps for the waltz and the bourrée. These structures are organized into familiar dance forms through syntactic processes which, in conformance with the construction grammar approach I adopt, are also sonic analogues for dynamic processes.

It must be acknowledged that there is scant written documentation to support this perspective on eighteenth-century compositional practice. Although we know that dance forms were important to composers – as social structures, as models for composition, and as musical topoi – I am aware of no account from the period suggesting that anything like sonic analogues are at the centre of musical grammar. If, however, we turn to the music, we can see ample evidence for an exquisite attention to the details of dynamic process. It is this that I endeavoured to trace in my analysis of the Finale of Haydn's Op. 76 No. 4 string quartet. There, Haydn gradually reshaped an evocation of the bourrée by adapting the dynamic gestures basic to the dance to the requirements of tonal rhetoric. For Haydn, musical communication was about many things, but it was first and foremost a matter of creating a soundscape with which listeners could engage and, through a sympathy or empathy with the dynamic processes shaping that soundscape, be moved. So moved, they might recall emotions and feelings, but they might equally recall the motions of their bodies through space or the path of an object across their vision.

Gustave Flaubert, reflecting on the sometimes slender resources language offers for the expression of emotions, wrote that 'human language is like a cracked kettledrum on which we beat out tunes for bears to dance to, when what we long to do is make music that will move the stars to pity'.[31] Flaubert's analogy suggests the limitations of language, as well as the resources of music. These are not the resources of language, nor are they the resources of rational

discourse. They are resources felt rather than known, enacted rather than objectified; they are the resources that resonate deep within the heart of what it is to be human.

Notes

1 Etienne Bonnot de Condillac, *An Essay on the Origin of Human Knowledge*, trans. Thomas Nugent (London: J. Nourse, 1756). Reprinted with introduction by James H. Stam in the series Language, Man and Society (New York: AMS, 1974), 172.

2 Condillac, *An Essay on the Origin of Human Knowledge*, 209. Rameau's theory of harmonic generation was first stated in his *Génération harmonique ou traité de musique théorique et pratique* (Paris: Prault fils, 1737) reprinted in Monuments of Music and Music Literature in Facsimile. Second Series, Music Literature (New York: Broude Brothers, 1966).

3 Downing A. Thomas, *Music and the Origins of Language: Theories from the French Enlightenment* (Cambridge: Cambridge University Press, 1995), 9.

4 For a discussion see V. Kofi Agawu, 'The Challenge of Semiotics', in *Rethinking Music*, ed. Nicholas Cook and Mark Everist (Oxford: Oxford University Press, 1999), 138–60. A similar distinction between language and music can be seen in Susanne K. Langer, *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite, and Art* (Cambridge, MA: Harvard University Press, 1953), ch. 8.

5 Michael Tomasello, *The Cultural Origins of Human Cognition* (Cambridge, MA: Harvard University Press, 1999), ch. 5.

6 Antonio R. Damasio, *The Feeling of What Happens: Body and Emotion in the Making of Consciousness* (New York: Harcourt Brace, 1999); Antonio R. Damasio, *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain* (Orlando, FL: Harcourt, 2003).

7 Edward Sapir, *Language, an Introduction to the Study of Speech* (New York: Harcourt, Brace and Company, 1921), 126.

8 As I use the term, 'representation' does not have to entail a full semiotic system. This perspective is similar to that adopted by Naomi Cumming in *The Sonic Self: Musical Subjectivity and Signification* (Bloomington: Indiana University Press, 2000), ch. 3. A dynamic process may be provisionally defined as a coherent sequence of phenomena that is distributed over time and typified by parametric modulation or change.

9 Adolf Bernhard Marx, *Die Lehre von der musikalischen Komposition, praktisch theoretisch*, vol. 2 (Leipzig: Breitkopf und Härtel, 1838), 55.

10 Thomas Wilson, *A Description of the Correct Method of Waltzing, the Truly Fashionable Species of Dancing* (London: Printed for the author, published by Sherwood, Neely, and Jones, 1816), 46.

11 Sevin Yaraman, *Revolving Embrace: The Waltz as Sex, Steps, and Sound* (Hillsdale, NY: Pendragon, 2002), 18–19.

12 Marx, *Die Lehre von der Musikalischen Komposition*, vol. 2, 55.

13 Marx, *Die Lehre von der Musikalischen Komposition*, vol. 2, 56. See also Wilson, *A Description of the Correct Method of Waltzing*, lv–lvi.

14 The idea that more is required for a waltz than simply music in triple time is also emphasized by Wilson in his treatise on the dance, who observes that 'VERY FEW musical composers have a sufficient knowledge of DANCING, to enable them to understand the nature or composition of Waltzing; yet, their productions, if composed in three-eight or three-four, whether adapted to Waltzing or not, are almost invariably without hesitation denominated WALTZES'. Wilson, *A Description of the Correct Method of Waltzing*, lv.

15 This de-emphasis of tonal syntax can be seen in any number of the waltzes of Franz Schubert, which at times offer quite striking juxtapositions of key center in the two halves of the waltz. See for instance his *Sechzehn Ländler und zwei Ecossaisen (genannt 'Wiener Daimler-Ländler')*, Op. 67 (1822; D734): No. 1 (G major and E major), No. 6 (A major and F major), No. 8 (C major and A♭ major) and No. 14 (B major, cadencing on C♯ minor, followed by D major and concluding in B major).

16 Adele E. Goldberg, 'Constructions: A New Theoretical Approach to Language', *Trends in Cognitive Science* 7/5 (May 2003), 219.

17 Lawrence M. Zbikowski, *Conceptualizing Music: Cognitive Structure, Theory, and Analysis* (New York: Oxford University Press, 2002), ch. 1.

18 Michael J. Reddy, 'The Conduit Metaphor: A Case of Frame Conflict in Our Language About Language', in *Metaphor and Thought*, second edition, ed. Andrew Ortony (Cambridge: Cambridge University Press, 1993), 170.

19 Meredith Little and Natalie Jenne, writing about French dance of the seventeenth and early eighteenth centuries, observe that, 'In all choreographies, the rhythms of music and dance form counter-rhythms at least some of the time'. That is, the choreography will imply one set of rhythmic structures, and the music will imply another. While these structures will align at important points of articulation, at other points they may be at quite a variance. For further discussion see Little and Jenne, *Dance and the Music of J. S. Bach*, revised edition (Bloomington: Indiana University Press, 2001), 24–5.

20 Nicholas Cook, *Analysing Musical Multimedia* (Oxford: Clarendon, 1998), 98–104.

21 Wolfgang Budday, *Grundlagen musikalischer Formen der Wiener Klassik: An Hand der zeitgenössischen Theorie von Joseph Riepel und Heinrich Christoph Koch dargestellt an Menuetten und Sonatensätzen (1750–1790)* (Kassel: Bärenreiter, 1983).

22 Allanbrook makes just this argument with respect to Mozart; see her *Rhythmic Gesture in Mozart*: Le Nozze di Figaro *and* Don Giovanni (Chicago: University of Chicago Press, 1983), 32.

23 For a similar perspective, see David Lidov, *Is Language a Music? Writings on Musical Form and Signification* (Bloomington: Indiana University Press, 2005), ch. 8 and Cumming, *The Sonic Self*, ch. 5, especially 163–5.

24 Little and Jenne, *Dance and the Music of J. S. Bach*, 37. Little and Jenne's characterization is slightly inaccurate in that the gesture they call an upbeat occupies only one half a beat: where the beat is a minim, for instance, the 'upbeat' is a crotchet.

25 Pierre Rameau, *The Dancing Master*, trans. Cyril W. Beaumont (New York: Dance Horizons, 1970), 78. See also Wendy Hilton, *Dance of Court & Theater: The French Noble Style, 1690–1725*, ed. Caroline Gaynor (Princeton, NJ: Princeton Book Company, 1981), 183.

26 Meredith Ellis Little, 'The Contribution of Dance Steps to Musical Analysis and Performance: "La Bourgogne"', *Journal of the American Musicological Society* 28/1 (Spring 1975), 112–14.

27 To the extent that this parody is heard as comedic it conforms with the perspective on Haydn's compositional style presented in Gretchen A. Wheelock, *Haydn's Ingenious Jesting with Art: Contexts of Musical Wit and Humor* (New York: Schirmer Books, 1992).

28 Condillac, *An Essay on the Origin of Human Knowledge*, 181.

29 Rousseau's account of the development of language, and the relationship between music and language, is discussed in Thomas, *Music and the Origins of Language*, ch. 4.

30 Heinrich Christoph Koch, *Introductory Essay on Composition: The Mechanical Rules of Melody, Sections 3 and 4*, trans. Nancy Kovaleff Baker (New Haven: Yale University Press, 1983), 6.

31 Gustave Flaubert, *Madame Bovary: Provincial Manners*, trans. Margaret Mauldon, introduction by Malcom Bowie (Oxford: Oxford University Press, 2004), 170.