Also Available from Bloomsbury

Music, Text and Translation, edited by Helen Julia Minors
Theatre Translation, Massimiliano Morini
Sociologies of Poetry Translation, Jacob Blakesley
Celebrity Translation in British Theatre, Robert Stock
Translating For Singing, Ronnie Apter and Mark Herman
Music as Multimodal Discourse: Semiotics, Power and Protest, edited by Lyndon C. S. Way and Simon McKerrell

Music, Dance and Translation

Edited by Helen Julia Minors

BLOOMSBURY ACADEMIC
LONDON • NEW YORK • OXFORD • NEW DELHI • SYDNEY

BLOOMSBURY ACADEMIC
Bloomsbury Publishing Plc
50 Bedford Square, London, WC1B 3DP, UK
1385 Broadway, New York, NY 10018, USA
29 Earlsfort Terrace, Dublin 2, Ireland

BLOOMSBURY, BLOOMSBURY ACADEMIC and the Diana logo are trademarks of Bloomsbury Publishing Plc

First published in Great Britain 2023

Cover design: Elena Durey
Cover image © Georgii Boronin/istock

A catalogue record for this book is available from the British Library.

A catalogue record for this book is available from the Library of Congress.

ISBN: HB: 978-1-3501-7573-0
ePDF: 978-1-3501-7574-7
eBook: 978-1-3501-7575-4

Typeset by RefineCatch Limited, Bungay, Suffolk

To find out more about our authors and books visit www.bloomsbury.com and sign up for our newsletters.

Contents

Figures

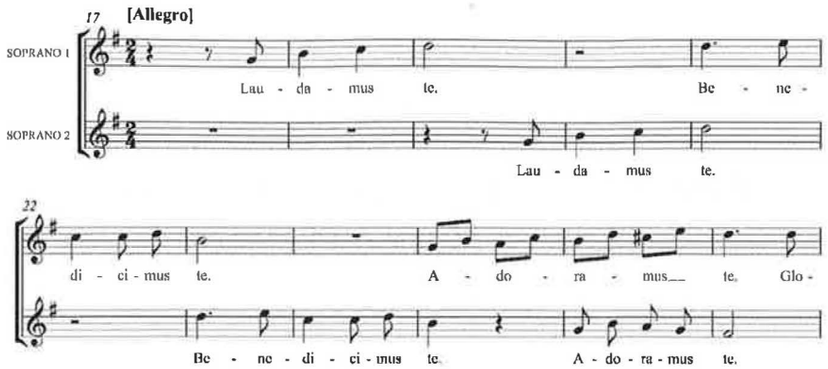
3

Points of Contact: Bases for Translations between Music and Dance

Lawrence M. Zbikowski

Let me begin with an example that will illustrate some important points about music, dance and translation: the 'Laudamus te' section of Mark Morris' *Gloria* (first performed in 1981 and revised in 1984). Morris' choreography is often marked by a close correlation between music and movement, with the result that the dance appears to be a visualization of the music. As others have observed, the choreography for 'Laudamus te' practices music visualization on a number of levels (Acocella 1993; Damsholt 2006; Jordan 2015). The most obvious of these is at the level of basic design: two dancers are paired with the music of the two sopranos who sing in this portion of Antonio Vivaldi's composition, and another two dancers are paired with the music of the orchestra that accompanies the singers. There is also music visualization on a much more local level. For instance, when the two dancers who are paired with the sopranos enter to the music shown in Example 3.1, they do so in canon just as do the singers, entering one after the other. More importantly, the dancers match their initial movements to the rhythmic design of the melody, taking a step with each successive note that sounds. As 'Laudamus te' continues, there are numerous instances in which the phrases of the dancers match the phrases of the singers, and in which the dancers describe movements that map smoothly onto the pitch contours sketched by the music. In the passage shown in Example 3.1, for instance, the dancers use sweeping gestures to capture the overall descent of the melody that sets 'Benedicimus de'.[1]

I would like to propose that both kinds of music visualization represent translations between music and dance, although the principles behind these translations are somewhat different. The sort of translation that occurs at the level of compositional design correlates important structural landmarks within the music (such as the return of a theme) with equally important landmarks



Example 3.1 Antonio Vivaldi, *Gloria* (RV 589), 'Laudamus te', bars 17–27, soprano 1 and 2. Text translation: 'We praise thee, we bless thee'.

within the choreography. This strategy can be seen in translations between music and other expressive media. For instance, Milan Kundera noted that his early novels *The Joke* and *Life is Elsewhere* replicate the overall structure of Beethoven's Opus 131 String Quartet (Kundera 1988: 91). The sort of translation that occurs with more specific music visualizations – when, for example, the movements of the dancers are closely correlated with the sequence of pitches sung by the sopranos – is subtly but importantly different. Here, translation relies on a close fit between the communicative resources exploited by each expressive medium: the fact that the events proper to both music and dance happen in time facilitates translating a sequence of events from one into the other.

As I shall explore further over the course of this chapter, both kinds of translation rely on humans' capacity for analogy. The capacity for analogy contributes much to the distinctiveness of human intelligence, and typically involves correlating structure from one domain – usually called the *source* – with another domain – the *target* – in order to structure the understanding of the second domain. This correlation can be thought of as mapping structure from the source onto the target. For example, translations between music and dance that involve basic design rely on mapping specific compositional strategies from music onto choreography. In 'Laudamus te', each time the orchestra plays the *ritornello* the dancers who are correlated with the orchestra enter and criss-cross the stage with a distinctive set of steps; each time the sopranos stop singing, the dancers who are paired with them momentarily halt their movements. As suggested by the design of Kundera's early novels, analogical mapping of this kind is relatively independent of medium and so could be thought of as comparatively abstract. Put more directly, mapping the basic design of a piece of

music onto the basic design of a choreography, novel or painting does not involve a fine-grained correlation of temporal events. To be sure, mapping the design from one expressive medium onto another will often involve some sense of 'before' and 'after', but the phenomena that realize the design need not be otherwise constrained by temporal bounds. The translations between media that result will, in consequence, be quite approximate.

The analogical mapping that underpins the visualization of specific musical passages engages more directly with the temporal dimensions and thus the substance of music and dance. Let us return to Example 3.1 to explore this in more detail. As can be seen, the first soprano's melody for 'Lau-da-mus te' opens with a leap from G4 to B4 and then continues in a scalar fashion, arriving on D5 and spanning in total a perfect fifth. When, in Morris' choreography, the first dancer enters, she takes three backward steps, in time with B4 ('da'), C5 ('mus') and D5 ('te'). She then holds, the pause in her movement matching the note sustained by the soprano. The second soprano and the second dancer follow in a similar fashion. With each entrance, the sequence of musical pitches – their initiation, progression and (temporary) conclusion – is directly correlated with a sequence of dance steps. There is, however, one feature of the music that is *not* correlated with the dance: although the music of this short passage ascends to conclude on its highest pitch, each dancer concludes with a dip, momentarily lowering herself toward the floor. Although this might at first seem counterintuitive – surely an ascending movement should be matched with an ascending gesture – what is important here is less the sense of direction and more that of arrival. Within the G major tonality that dominates this section of 'Laudamus te', the arrival on D5 in bar 19 is a moment of temporary repose, one that presages the continuation of the melody in bars 21 and following. In a similar fashion, the dancer's dip toward the floor is a moment of temporary repose that serves as a point of departure for the continuation of her movements in the succeeding steps of the choreography. The translation of music into dance at this moment in Morris' 'Laudamus te' thus involves an incredibly close analogical mapping not simply between isolated events (like the D5 of bar 19 and the step that concludes the dancer's first step-unit) but between entire *sequences* of events.[2] Put another way, the translation relies on correlating the dynamic process proper to the musical phrase with the dynamic process proper to the sequence of dance steps.

The view of translation between music and dance that I would like to develop in this chapter relies in part on a fuller understanding of humans' capacity for analogy and the role this plays in our understanding of music and dance. I also

aim to take the idea of translation seriously: as the music and movement for Example 3.1 shows, translations between music and dance have the potential to go beyond straightforward aspects of design and into the substance of each as communicative media.

While the resources for communication offered by music and dance are certainly different from those offered by language, they are no less important within human cultural interactions. To explore these resources, I will draw on my work on musical grammar, which sets out the principles for what cognitive linguistics call a construction grammar. According to this approach to grammar, the basic elements of a communicative medium – called constructions – combine features of both syntax and semantics. In at least some instances, the basic elements of musical grammar have correlates in the basic elements of dance, correlates that represent points of contact between the design features of music and dance, and that thus provide the basis for meaningful translations between the two.

Analogy will be key to this approach, and in the first section that follows I will offer a brief review of recent research on analogy, a description of analogical reference and a sketch of musical grammar that connects with dance practice. The whole will be illustrated with an analysis of a portion of an air and chorus from Georg Friedrich Handel's 1740 secular oratorio *L'Allegro, il Penseroso ed il Moderato*, a work choreographed by Morris in 1988. What emerges from this analysis is not so much translations between music and dance (although there are clear correlations between the two) but instead a more detailed understanding of the role analogy plays in the ways each medium constructs meaning. The second section that follows will turn to Morris' 2006 *Mozart Dances* to explore a moment in which music is translated into dance and to consider some of the consequences such translations have for the construction of meaning. The third, and concluding, section will summarize the overall approach I develop here and endeavour to draw further conclusions about music, dance and translation.

Analogy and Analogical Reference

Analogy

Most discussions of analogy begin with similarity, since it is the similarity of one thing to another that is the point of departure for any analogy. For instance, a pencil and a pen are similar to each other both in appearance and in function,

although the kind of marks these tools make on a writing surface (permanent or impermanent; of relatively consistent colouration or subject to gradation) are different. Analogy takes as its point of departure similarity judgements of a more abstract sort. For instance, a finger is analogous to a pen in that it is an approximately cylindrical structure that ends in a point; unlike a pen or pencil, however, the finger leaves no discernible marks on the writing surface and its 'cylinder' is firmly attached to the larger structure of the hand. Making the analogy between a pen and a finger, then, involves drawing structural correlations between the two: the cylindrical shape of the pen maps on to the shape of the digits of the finger, and the point of the pen maps on to the tip of the finger. With the analogy in place, we can imagine using a finger to 'write', or a pen as an extension of our hand. More generally, analogies involve mapping systematic structural relationships between a source domain (such as that which includes writing instruments) and a target domain (such as that which includes bodily appendages) for the purpose of extending knowledge from the source to the target, and – in at least some instances – from the target back to the source (Gentner 1983: 155–70; Gentner and Kurtz 2006: 609–42; Holyoak and Thagard 1995: chapter 2; Holyoak 2005; 117–42).

It bears emphasis that analogy is not simply about correlating elements from one domain with elements in another domain but about mapping relationships between these domains as part of a process of inferential reasoning. It is thus often described as concerned with relations among relations (or 'second-order' relations): in the analogy between a pen and a finger, for instance, the relationship between *pen* and *finely tapered device for delivering ink* (that is, the business-end of the tool) is correlated with the relationship between *finger* and *tapered appendage for guiding communication*.[3] In the case of the brief passage from Morris' choreography for 'Laudamus te ' discussed above, then, it is not simply that the steps of the dancers are similar to the progression of musical events. There is instead a close correlation of elements and relations between music and dance. Specific musical pitches are correlated with specific dance steps, and relationships among the pitches (which set out a purposive trajectory from G4 to D5) are correlated with the overall step-unit performed by the dancer (which brings her onto the stage and culminates in her brief downward dip).

Based on the knowledge we currently have humans are the only species that have such a robust capacity for analogical thought. Although other species are able to make some very sophisticated similarity judgments – there is research, for instance, suggesting that chimpanzees can understand the second-order relations basic to analogy (especially for spatial reasoning) and that bottlenose

dolphins can perform rather involved body-mapping analogies – current evidence indicates that no other species comes close to making or using analogies with the facility and speed of humans (Call and Tomasello 2005; Herman 2002 275–83; Gentner 2003: 195–235). And this capacity is available from a very early age: children as young as ten months are able to solve problems by analogy (Chen, Sanchez and Campbell 1997: 790–801), and by the age of three years, analogical abilities are quite robust (Goswami 2001: 437–70; Gentner 2003: 195–235).

The ability to map systematic structural relationships between disparate domains bears witness to a capacity for abstract thought – for thinking about relations between relations – of enormous flexibility and wide application. Analogy has been recognized as a key factor in human creativity and has been linked to the conceptual flights of fancy and processes of meaning construction created through metaphor and metonymy (Fauconnier and Turner 2002: 14; Holyoak and Thagard 1995: 213–23). Given evidence of the capacity for analogy demonstrated by primates and pre-linguistic children, it also seems apparent that the conceptual domains involved in analogical mappings need not be restricted to those involving language. Perhaps more importantly, humans' capacity for analogy provides a resource for communication markedly different from that upon which language relies, a resource exploited in unique ways by music and dance: analogical reference.

Analogical reference

It is generally recognized that human language relies on a system of reference that employs what the late nineteenth-century semiotician C. S. Peirce called *symbols* (1955: 112–15). Symbolic reference involves various symbolic tokens – sounds, hand gestures, ink marks, or the like – that are systematically correlated with various referents. If I wish to refer to any one of the woody perennial plants with a single elongate main stem having few branches on its lower part that I see outside my window I could utter a sound, use the appropriate gesture from American Sign Language, or simply write 'tree'. None of these symbolic tokens need share any properties with the thing to which they refer: for example, there does not have to be any relationship between the token for 'tree' in American Sign Language and the shape of a tree. The fact that there *is* such a relationship in American Sign Language does not affect the way the token functions as a symbol, although it may help a user of the language to learn the connection between the token and its referent.

The inherent flexibility of symbolic reference makes it a powerful and versatile tool for communication. As the biologist Terry Deacon has observed in his work on language evolution, it is also a tool that is remarkably complex beneath its seemingly simple surface. Deacon, building on some of the key insights of Peirce's semiotic theory, shows that symbolic tokens can function only as part of a *system* of symbols. Within this system, symbols are connected not only to the things to which they refer but also to each other (Deacon 1997: chapter 3; Deacon 2003: 111–39; Deacon 2006: 21–53). The management of these manifold interconnections places considerable demands on cognitive resources, and Deacon argues that it is for this reason that no other species has been able to make use of symbolic reference with anything like the speed, flexibility, or sophistication typical of humans.

In contrast to this, music, dance and a variety of other non-linguistic communicative media make use of analogical reference. Analogical reference obtains when a token shares structural features with some other entity or phenomenon – this sort of token is what Peirce called an *icon* (Peirce 1955: 104–7). These shared features can then be exploited in the process of human communication, such that the token serves to refer to the other entity or phenomenon.[4] This is, of course, what happens in the brief moment from Morris' choreography for 'Laudamus te' discussed above: the steps made by each dancer refer – through analogical correspondences – to the pitches sung by each soprano.[5]

In most cases, the tokens of analogical reference do not connect with one another (although they may succeed or be juxtaposed with one another), and systems of analogical reference rarely achieve the sophistication and flexibility that typify systems of symbolic representation. When comparing these systems of reference, however, it is important to keep two things in mind. First, each system has its advantages and disadvantages. Because practically anything can serve as a symbolic token, such tokens are fairly easy to produce; the dense systems of reference of which such tokens are a part, however, require considerable effort to establish and learn. By comparison, analogical tokens require rather more effort to produce (to ensure that they have the structural features they share with their referents) but make far fewer demands on interpretation. There is also a contrast between the ways in which each system of reference tends to be used. Symbolic tokens are very useful for picking out objects and events, as well as for characterizing relationships between them. Analogical tokens are less useful in this regard, but they are very good at representing complex spatial relationships and summoning dynamic processes

that unfold over time. The second thing that should be kept in mind about these systems of reference is that, while language most typically relies on symbolic reference and non-linguistic media rely on analogical reference, the employment of either system need not be exclusive. Language can quite readily make use of analogical reference (as onomatopoeia and, more generally, work on sound symbolism suggest (Hinton, Nickols and Ohala 1994: 1–12; Anderson 1998), and non-linguistic media can, in at least some cases, make use of the networks of interrelated tokens that underpin symbolic reference.

The communicative resources offered by analogical reference have been of central importance to the theory of musical construction grammar I have developed over the past few years. Again, this perspective supposes that grammatical units combine form and function. Musicians have long recognized that certain arrangements of musical materials – that is, musical materials with a particular *form* – are basic to the production of coherent musical utterances.[6] A straightforward example, ubiquitous in Western music of the sixteenth through nineteenth centuries, is the cadence, which is used to mark the temporary or final close of a musical utterance. On the account I have developed, the *function* of a cadence is to serve as a sonic analogue for the process of arrival. Put another way, the contrapuntal, harmonic and rhythmic features of a properly constituted cadence refer, analogically, to the embodied experience of reaching a goal. More generally, the function of musical constructions is to provide sonic analogues for dynamic processes that have been important for human cultures, including analogues for emotion processes, physical gestures and the steps of social dances (Zbikowski 2017: chapter 1). Before continuing, I should note that I am concerned here with the *basic* functions of music within human cultures. To be sure, the functions of music can be much more complex than those I have identified here (as much of the music created over the past hundred years might suggest). That said, I would like to propose that even the most abstract and cerebral music can still tap in to the more concrete and worldly functions I have outlined here.

I have previously described close relationships between music and dance in the dance practice of the *ancien régime* and the early nineteenth-century Viennese waltz, but the emphasis in those cases was, for the most part, on how music could analogically refer to the steps of dance (Zbikowski 2008: 283–309; ibid., 2012: 147–65; ibid., 2014: 143–63; ibid., 2017: chapter 5; ibid., 2018b: 57–75). With music visualization of the sort evident in Morris' choreography in *Gloria*, of course, it is the dance that is referring analogically to the music. As a preliminary first approximation of how music can be translated into dance or dance into music, I would like to suggest that the direction of the reference matters less than

does the mechanism – namely, analogy – that is behind it. Relationships between music, dance and other media can, however, get rather complicated, and these complications are singularly instructive for understanding the role of analogical reference in music and dance. To explore such complications – and to illustrate more fully the notion of analogical reference – let me now turn to an air and chorus from Handel's *L'Allegro, il Penseroso ed il Moderato*, and to how music and dance can, independent of one another, visualize a text, and how each can make analogical reference to a separate, but related, dynamic process.

'Haste thee nymph'

In their adaptation of John Milton's youthful *L'Allegro* and *Il Penseroso*, Handel and his librettist Charles Jennens interleaved lines of the two poems to create a dialog between the contrasting personalities summoned by Milton. The text for 'Haste thee nymph' is taken from lines 25–32 of *L'Allegro* and expands on a pastoral scene inhabited by countless mythical personages, all disporting with mirthful abandon:

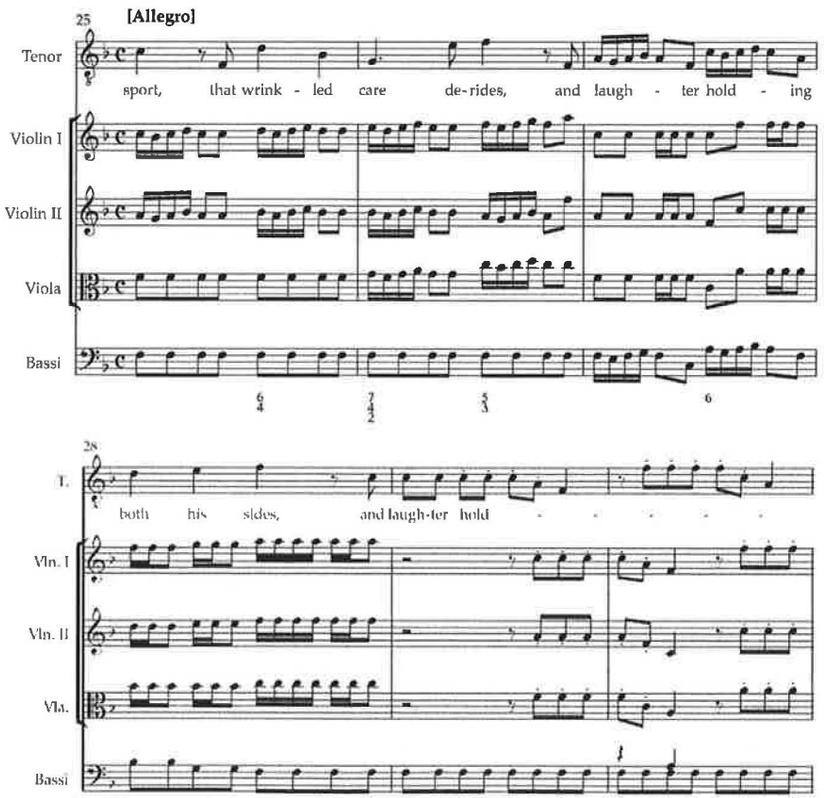
25 Haste thee nymph, and bring with thee
26 Jest and youthful Jollity,
27 Quips and Cranks, and wanton Wiles,
28 Nods, and Becks, and Wreathed Smiles,
29 Such as hang on *Hebe*'s cheek,
30 And love to live in dimple sleek;
31 Sport that wrincled care derides,
32 And Laughter holding both his sides.

Milton 2012: 28

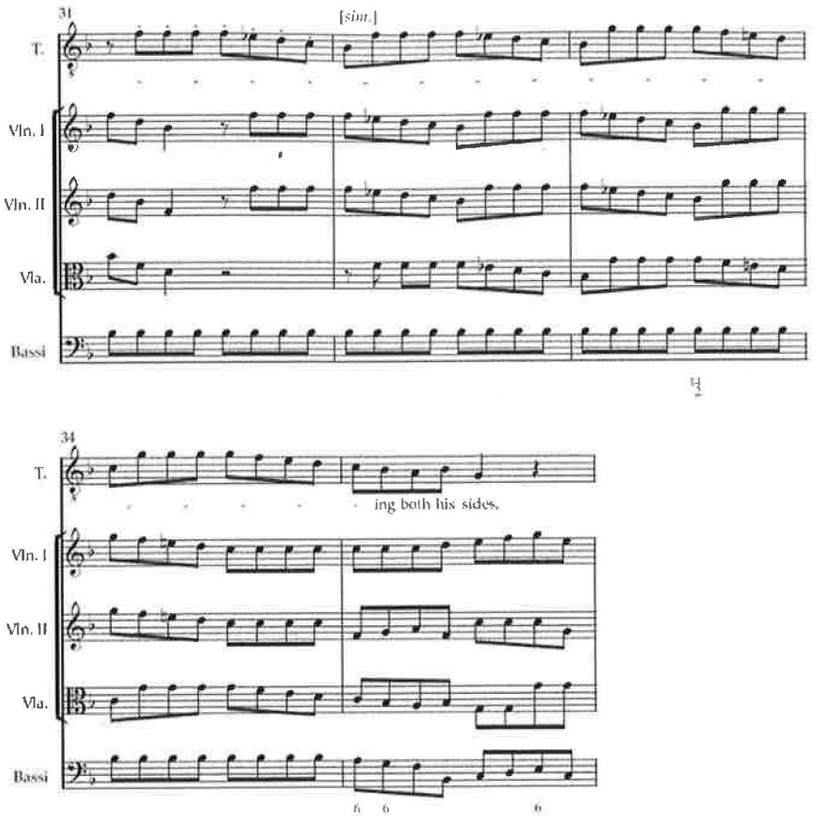
Handel sets these lines once for the tenor's air, and then uses lines 25–26 and 31–32 for the chorus that follows; the tempo is a bright allegro and the key is F major, the latter regularly affirmed by cadences that punctuate the text setting.

During the eighteenth century (and in other periods as well), composers would often arrange their musical materials to evoke a particularly resonant image in a text they were setting. In German-speaking countries, this technique was called *Tonmalerei* – 'tone painting' – and was both celebrated and derided as a means to make more immediately evident the meaning of a text.[7] Handel often made recourse to tone painting, and in 'Haste thee nymph', his focus was on the image Milton summoned in line 32 of *L'Allegro*: 'Laughter holding both his sides.' The device Handel used to evoke this image is immediately evident from a quick

survey of Example 3.2, which shows the relevant passage from the tenor's aria: there is a long melisma on 'holding' which, rendered staccato, creates a running series of 'ho-ho-ho's that provide a reasonable simulacrum of laughter. As with most cases of effective tone painting, however, there is more to the sonic imaged conjured by Handel than just this prolonged, idiosyncratic melisma. For instance, to support the first statement of 'Laughter holding both his sides' in bars 27–28 Handel introduces a novel rhythmic figure in the string accompaniment: two semiquavers followed by a quaver, a slightly unusual pattern that sounds somewhat like the start of a giggle. The figure, which invariably sets repeated pitches, first sounds only on beats 2 and 4 in bar 27 and then takes over almost all of bar 28, ending abruptly when the text repeats. The melisma that follows is framed by pedal points in the bass (first on F3 in bars 29–30, then on B-flat3 in



Example 3.2 Georg Friedrich Handel, *L'Allegro, il Penseroso ed il Moderato* (HWV 55): No. 6, 'Haste thee nymph', bars 25–35.



Example 3.2 continued.

bars 31–34) which join with canonic entries in the upper strings that redouble the running lines of the melisma. In addition to providing a simulacrum of the sound of laughing, then, Handel's setting creates a sonic analogue for the physical experience of laughing, with the high activation of the diaphragm and supporting musculature (the semiquaver figures and running quavers of the melisma) paired with overall immobility (harmonic progress having momentarily been suspended by the sustained pedal points).

In their commentaries on the choreography for this moment (which is replicated, in varied form, when these words are repeated by the chorus), both Stephanie Jordan and Rachel Duerden have noted Morris' use of the floor – the three male dancers, legs spread, roll on their bottoms in a slow circle while

holding their thighs – as well as the heel-clicking step with arms waving wildly that follows (Duerden 2010: 205–9; Jordan 2015: 197–99).[8] The result creates an effective embodied analogue for the image summoned by the text: rolling on the floor in the throes of mirth, then momentarily losing physical control (as happens when one is consumed by paroxysms of laughter).

Although Handel's music offers a representation of the sound and physical activity of laughing, and Morris' choreography offers an enactment of unbounded high spirits, it is not the case that the choreography is a straightforward visualization of the music. Instead, both music and dance refer to the text. There is nonetheless a connection between the music and the dance, one that becomes quite evident in Morris' replication of this choreography in the choral section that follows. For this section of the dance the three men leave the stage, replaced by the twelve women of the troupe, who are initially arranged in four ranks. At the point when, in bars 66–76 of this number, Handel gives 'Laughter holding both his sides' its most extensive treatment, these ranks break down and the dancers, arrayed across the stage, perform the heel-clicking step in place, flinging their arms about with abandon as they do so. In consequence, there is now a clear connection between music and movement. The music, for its part, combines incredible activity – the choral voices cascade over one another, and the rhythmic figure of two semiquavers and a quaver (which I likened to the start of a giggle) has returned in force in the orchestral accompaniment – with pedal points that, as before, suspend harmonic motion. Similarly, the dance combines wildly gesticulating figures who nonetheless remain more or less in place. Both music and dance thus yield analogues – one in sound, the other in movement – for a process of active stasis, a compositional strategy that is often used by composers to focus the attention and increase tension immediately before an important musical arrival.

On the analysis I offer here, then, there are three different instances of analogical reference in play within 'Haste thee nymph'. The first involves tone painting, which Handel achieved by arranging his musical materials to create a sonic analogue for the sound and physical activity of laughing. The second involves Morris' choreography, which produces a physical analogue for behaviour and events associated with jollity, witty sayings, carefree jesting and laughter. The third, which appears toward the end of the number, involves a simultaneous reference by music and dance to a dynamic process not directly mentioned in or summoned by the text: active stasis.

Again, relationships between music, dance and other media can get rather complicated. That said, as the music and dance for 'Haste thee nymph' demonstrates,

analogical reference can provide a significant resource for the construction of meaning that is immediate, temporally extended and thoroughly embodied.

Summary

The capacity for analogy is, on the best evidence we currently have, a truly unique aspect of human cognition – in the words of Douglas Hofstadter and Emmanuel Sander, analogy is the fuel and fire of thinking (Hofstadter and Sander 2013). I have proposed that one way in which humans exploit this capacity is through analogical reference, which obtains when a token used in communication shares structural features with some other entity or phenomenon. Although there is incredible power in communicative media that are based around symbolic reference – language being the example *par excellence* – through analogical reference spatial and temporal relationships can be summoned to mind with an immediacy of considerable force.

In my work on musical construction grammar (based on the idea that grammatical units are form-function pairs), analogical reference has provided the means to explain the basic function of music within human cultures, which is to provide sonic analogues for dynamic processes. I believe an argument can be made that the basic units of dance can similarly serve as analogues for dynamic processes. Having not worked on dance grammar to any extent, this is speculation on my part, but let me offer three examples of dance steps that might support such an approach. First, in the brief portion of the choreography for 'Laudamus te' that I discussed (and setting aside, for the moment, its connection to the music), the initial steps the dancer takes can serve as an analogue for setting up a frame for discourse: with these steps, she enters the stage in an orderly, directed fashion, and then pauses, poised to continue.[9] Second, within the practice of French noble dance specific step-units were often (although not invariably) used to mark cadences; as with musical cadences, such step units serve as analogues for the process of arrival (Zbikowski 2017: 143; Pharo 1997: 305–10). Third, as I noted in my analysis of the choreography for 'Haste thee nymph', the combination of the heel-clicking step (done in place) with the 'do-what-you-want' arms (following Jordan's description) serves as an analogue for a process of active stasis.

The potential for sequences of musical events and for dance steps to serve as analogues for dynamic processes is a point of contact between these two expressive media as well as a basis for translations between them. Through analogical correspondences, music can be translated into dance (as occurs in

'Laudamus te' and similar choreographies), dance steps can be translated into music (as occurs in French noble dance and the Viennese waltz), and each can translate a dynamic image prompted by words (as occurs in the music and the dance for 'Laughter holding both his sides').

Before proceeding, I should note that analogical reference is an approximate rather than an exact affair. For example, the combination of the heel-clicking step with the 'do-what-you-want' arms in the choreography for 'Haste thee nymph' *could* provide an analogue for the sort of active stasis that builds tension. Were it to follow even more frenetic movement, however, it could provide an analogue for a *release* of tension. As with any process of constructing meaning, context is important; equally important, in the case of analogical reference, are the structural mappings between source and target. Where these mappings are many, the analogy that is produced will be robust; where these mappings are few, the analogy may be difficult to appreciate. As an example of the latter, consider Morris' choreography for the very beginning of 'Haste thee nymph'. As the initial fanfare of Handel's music sounds, two male dancers stand on either side of the stage, their arms raised. At bar 4 the music arrives on the dominant and a new musical idea is introduced – a brisk sequence of repeated pitches that leads to a descending scale – and with this idea the dancers shift to a running-in-place step, vigorously swinging their arms back and forth. They continue this step until the conclusion of the introduction in bar 8, after which they leave the stage and two other dancers (quickly followed by a third) enter for the tenor's aria. Although there is an obvious structural mapping between the rushing lines that begin in bar 4 and the rapid steps of the dancers, there is no obvious mapping between the *progress* suggested by the music – those rushing lines are first presented by one set of orchestral voices and then quickly imitated by another set of orchestral voices, and the successive statements of these lines traverse a tonal span that ultimately comes back to tonic – and the lack of forward motion created by the dancers' vigorous actions. Put another way, the dancers' movements in this opening portion of the number present an analogue for a process of active stasis that has few correlates in the music.

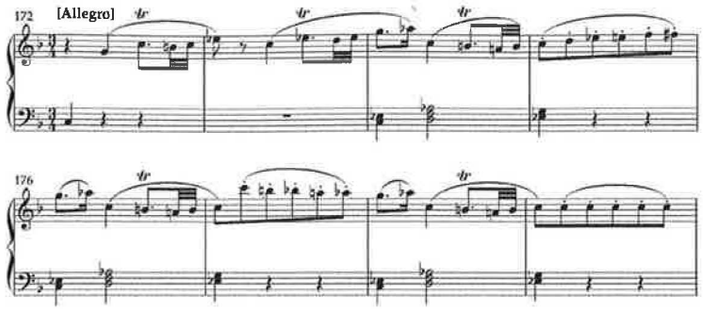
While I do not find that there is a direct translation between music and dance in the musical and choreographic settings of 'Laughter holding both his sides,' it is nonetheless evident that both media make recourse to analogical reference to construct meaning. Let me now turn to an example of a more direct translation between music and dance from Morris' *Mozart Dances* that demonstrates the unique species of meaning such translations make possible.

Translations between Music and Dance in *Mozart Dances*

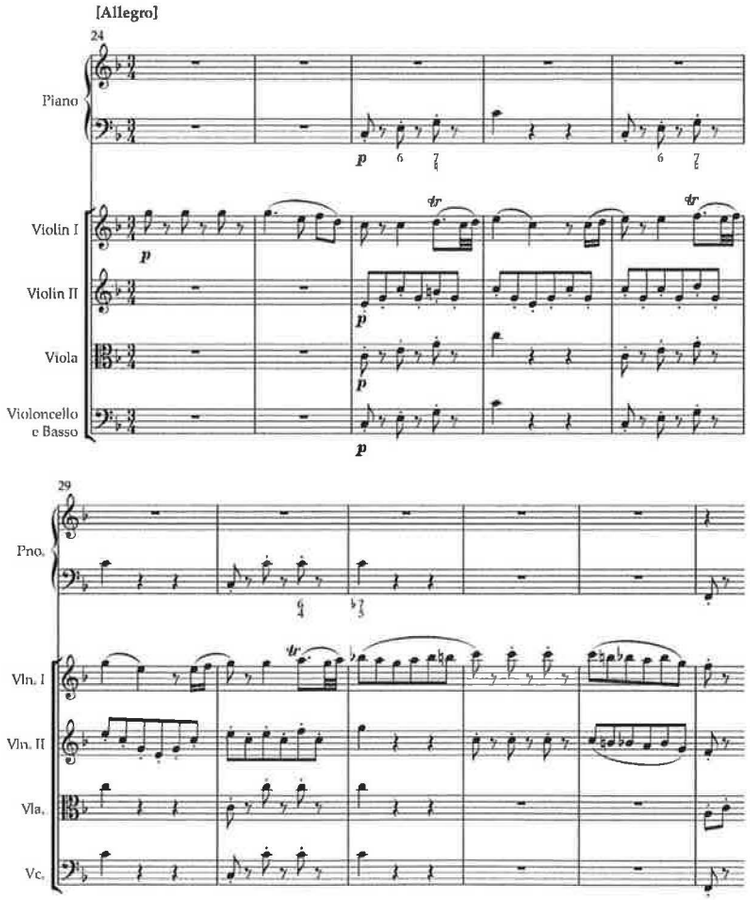
Mozart Dances is an extended and ambitious work that sets dance to three large-scale works for piano: Mozart's Piano Concerto No. 11 in F major (K. 413), Sonata in D major for Two Pianos (K. 448) and Piano Concerto No. 27 in B-flat major (K. 595). The connections between music and dance that I would like to focus on come from the choreography for the first movement of Piano Concerto No. 11 which, as Stephanie Jordan notes in her thorough analysis of *Mozart Dances*, is practically a textbook example of music visualization (Jordan 2015: 451). Although there are, in consequence, numerous opportunities to study translations between music and dance within this portion of 'Eleven' (as the dance set to the concerto was known), I would like to concentrate on one particular moment in which both music and dance bring forth new meanings.

The moment that is of interest occurs at the beginning of the development section. The orchestra has just closed the exposition with an arrival on C major (the dominant) and, as shown in Example 3.3, the piano immediately shifts the discourse to C minor. The piano's musical material at this point is drawn from the second principal theme, and to understand how it is transformed in the development we will first need to consider the initial occurrence of this material in the exposition. As shown in Example 3.4, the theme is introduced by the first violins and supported by the remainder of the strings, with the piano providing continuo accompaniment. Two features distinguish the theme: its neat two-bar construction, evocative of a minuet; and the trill-and-turn figure introduced in bar 26, which pulls the music from the third beat of one bar through to the second beat of the following bar.

Mozart changes this theme in several ways when he comes to use its material in the development. Perhaps most significantly, the trill-and-turn figure that pulls the music forward in the theme is extracted and used to drive forward motion. It is stated twice in quick succession in bars 172–174, a compression that disrupts the effortless elegance generated by the theme in the exposition and replaces it with a measure of intensity and urgency. The music then almost immediately gets stuck: beginning with the end of bar 174, the trill-and-turn figure is transformed into a bit of filigree, and there are two unsuccessful attempts (in bars 175–176 and 177–178) to move beyond the C5 reached by the melody in bar 174. The harmonies supporting the melody provide no help in all this, simply repeating the same succession of three chords again and again. Where the second theme had provided a sonic analogue for balance and easy grace, then, the return of its materials provides an analogue for darker emotions momentarily entrapped in a cycle of obsessive repetitions. The piano finally abandons these materials in bar 179 and, aided by new material and the entrance of the orchestra



Example 3.3 Wolfgang Amadeus Mozart, Piano Concerto No. 11 in F major (K. 413, first movement, bars 172–179.



Example 3.4 Wolfgang Amadeus Mozart, Piano Concerto No. 11 in F major (K. 413, first movement, bars 24–33.

in bars 180–183, moves on to G minor. This key having been confirmed, there is then a reprise of the material of bars 172–178, transposed down a fourth. The lower register together with the familiarity borne of the reprise of the material render the music somewhat less anxious, and yet forward motion is still impossible. For the transition that pulls away from this material Mozart transposes the music of bars 179–181 up a fifth, and it is this newly energized music that leads to a cadence on D minor and to the return of piano passagework that, in the exposition, provided a convincing analogue for forward motion.

As one might expect from Morris' close attention to musical organization, his choreography for the initial statement of the second principal theme is a model of poise and balance: while the seven women who will dance most of the movement stand with their backs to the audience, the seven men who dance the orchestra's opening material combine sweeping gestures with graceful turns, the steps conforming to the two-bar units that make up the theme. The situation is markedly different when the theme's materials return in the development: here, the principal dancer who has been associated with the piano part throughout this movement (Lauren Grant in the original production) enters with steps that bespeak effort and intensity.[10] Moving from the rear of the stage toward the front on a diagonal, she performs the same step-unit seven times (once each for bars 172–178): she steps forward into a plié on beat 2, pointing her right arm down, and then steps forward, bringing her left arm around in an arc to point upward, almost as though she were pulling herself up. This step-unit, comprised as it is of a series of short movements verging onto the abrupt that trace an effort-laden path across the stage, is not quite like anything else in her extensive choreography within the first movement of 'Eleven'. With the arrival on the repeated C5 of bar 179 she pauses, turns slightly to face the audience and then, with the shift to new melodic material that is supported by the orchestra's entrance, quickly performs three step-units, each of which has her lift her left leg on beat 1 to describe a quick circle and dip her head on beat 3. This sequence of step-units takes her toward the centre of the stage, where she pauses with the piano's arrival on G minor; the orchestra's confirmation of this arrival is emphasized by a quick return of the other women, who just as quickly leave. The principal dancer then performs those same effort-laden step-units to the piano's reprise of bars 172–178 (now in G minor), but this time in a large circle centre stage, and much more loosely correlated with the music. This is followed, finally, by the same head-dipping step-unit as before, and then the music and the choreography move on into the rest of the development section.

The sequence of step-units that opens the choreography for the development section of the first movement of 'Eleven' is, in many respects, a classic case of music visualization: each bar of music is rendered with a distinct step-unit. We can

nonetheless add depth to our understanding of this passage by considering the multiple layers of analogical reference that are involved. The sequence of step-units, for instance, provides a *physical* analogue for the sequence of ephemeral *sounds* that make up the passage. As I suggested earlier, the music of this passage is itself an analogue for emotion processes caught in a cycle of obsessive repetition. Given this, the choreography could also be regarded as providing a physical analogue for these same or similar emotions. There is also an interesting tension between the analogues offered by music and dance: where the music of bars 172–179 appears to have gotten stuck, unable to move beyond C5, the dancer is able to make her way – albeit with effort – across a considerable expanse of stage. In some respects, the situation is the reverse of what happens in the opening choreography of 'Haste thee nymph': there it was the music that projected progressive movement and the dance that embodied active stasis. Where this passage from 'Eleven' is different is in what the dance brings to the music. The sense of physical effort projected by the dancer as she moves across the stage draws our attention to the different strategies employed by the melody as it tries to move beyond that pesky C5. First the melody tries a chromatically inflected ascending scale (in bar 175), then a chromatically inflected descending scale (in bar 177), yet each time it is thwarted, its efforts bootless. It is only after these strategies have been abandoned – much as the dancer abandons the step-unit that has taken her across the stage – that it becomes possible for the melody to move on.

It is in situations like this that the metaphor of translation between music and dance may break down. As conventionally understood, a successful translation preserves the meaning of the original utterance while restating it in a new expressive medium. In the case of this passage, however, the dance has imbued the music with new meaning. As a result, the music becomes more than an analogue for emotion processes caught in a cycle of repetition, for it now offers a sonic instantiation of the efforts taken to escape this cycle. When we hear the music in this way – when we hear it with listening practices shaped by Morris' dancer – its meaning both deepens and broadens, taking on a corporeal aspect that we might have missed when only attending to the sounds.[11]

Music, Dance and Translation

As the contributions to this volume demonstrate, there is a wide array of ways to look at the issues circulating around music, dance and translation. By approaching these issues from the perspective provided by research on analogy, I hope to offer a methodology grounded in cognitive capacities that appear to be uniquely human – as, in their fullest expressions, are music and dance. As I noted in my introduction, analogical correspondences between music and dance can be seen at the level of large-scale design as well as at the level of individual passages. For my part, the more fine-grained analogies that obtain in the latter case have the potential to tell us much about how music and dance generate meaning, and how translation between the two can be aided and limited by mapping between disparate domains.

One important element of this methodology is the notion of analogical reference, through which a sequence of musical events or a series of dance steps can refer to a dynamic process that may not have any obvious sonic or embodied dimension. Another important element is the notion that sonic or physical analogues can support communicative exchanges of fundamental importance within human cultures. This latter notion is behind the theory of musical grammar I have sketched here, which proposes that one of the basic functions of music in human cultures is to provide sonic analogues for emotion processes, communicative gestures and the patterned movements of dance. I should like to entertain the idea that dance can provide physical analogues in a similar way, but for the present this must remain speculative: my work on musical grammar is only at a beginning, and while there are hints that this approach could be extended (gleaned in part from the work of dance scholars) the evidence at present is at best fragmentary and inconclusive.

As I have endeavoured to show, a methodology that draws on analogical reference can show how dance can translate ideas presented in a text as well as in music; it also shows how music and dance can refer to a dynamic process not explicitly mentioned in a text. This methodology further encourages us to think carefully about what is meant by 'translation': while the metaphor of translation is certainly useful for thinking about how the communicative resources of one medium might be realized anew in another, to the extent that the notion is shaped by the kinds of meaning that typify language it may be limited in its application to music and dance. As demonstrated by the rich array of music and dance practices across human cultures, these non-linguistic modes of communication offer resources that are simply beyond the scope of language, resources that are also central to what it means to be human.

Notes

1 In association with and support of Jordan's *Mark Morris*, the Mark Morris Dance Group has kindly made video clips available for a number of the choreographies that are discussed in the book at: https://markmorrisdancegroup.org/jordanbookclips/ (accessed 18 February 2023), indexed to individual chapters. There are video clips available for all of Morris' dances that I discuss in the present chapter; that for 'Laudamus te' is indexed to chapter 5 (clip 5-5); the section of the dance upon which I focus begins at 00:19 on that clip.

2 As I shall want to give close consideration to the relationship between specific musical events (or sequences of events) and specific dance movements (or sequences of dance movements), I shall adopt distinctions Wendy Hilton developed for discussing French noble dance. Hilton distinguishes between a step (a passage of the foot forward, backward or to the side), a step-unit (which is made up of a number of steps) and a step-sequence (a sequence of step-units that reaches a conclusion) (Hilton 1997: 73).

3 The notion that fingers provide a 'tapered end for guiding communication' reflects work by Michael Tomasello and others on the role of pointing – most typically, with individual fingers – in human communication (Tomasello 2006: 506–24; Tomasello 2008). The interested reader may also want to refer to Jordan's discussion of Morris' use of a finger-pointing motif in *Mozart Dances* (Jordan 2015: 456–8).

4 As Michael Tomasello has noted, human communication relies on an infrastructure for cooperation and for sharing knowledge and attitudes; my invocation of a 'process of human communication' assumes that such a process relies on this sort of infrastructure. For a full account, see Tomasello (2008) chapter 1.

5 In this and similar examples analogical reference, as distinct from basic correlation, emerges quite clearly if the video is viewed with the sound turned off.

6 I use 'musical utterances' as a covering term for the sound sequences produced by musicians, both singly and in ensembles.

7 For discussions of both the benefits and liabilities of tone painting from the late eighteenth and early nineteenth centuries, see Engel (1998), 954–65; and Weber (1825), 125–72. Tone painting is also known as 'text painting' and 'word painting'; my preference for 'tone painting' reflects an interest in using the term current in the eighteenth and nineteenth centuries, and in broadening the perspective on music's analogical representations beyond the text to include phenomena that are both extra-musical and nonlinguistic.

8 The clip for this number at https://markmorrisdancegroup.org/jordanbookclips/ (accessed 18 February 2023) is indexed to chapter 6 of Jordan's book (clip 6-3), and the passage discussed here begins at 00:42.

9 The effect of these steps is not unlike the beginning of many fairy tales: 'Once upon a time . . .' Within the theory of mental spaces developed by the linguist Gilles Fauconnier, such constructions are known as space builders, in that they open up a mental space that serves as a frame for the ensuing discourse (see Fauconnier 1994: 16–18).

10 The clip for the first movement of 'Eleven' at https://markmorrisdancegroup.org/jordanbookclips/ (accessed 18 February 2023) is indexed to chapter 13 of Jordan's book (clip 13-1). The passages discussed here begin at 00:28 (the second principal theme) and 03:36 the development.

11 A fuller account of the meaning construction that happens in this moment can be developed with recourse to the notion of conceptual blending, discussed by Jordan as an analytical technique that can be applied to combinations of music and dance (Jordan 2015: 95–101). On conceptual blending more generally, see Zbikowski (2018a), 6–23.

4

Interactions and Correspondences between Music/Sound and Dance/Movement as Permanent Negotiations of Translation Processes

Stephanie Schroedter

The analysis of translation processes has implicitly and/or explicitly pervaded all arts disciplines, considering aspects of theory and (perception) aesthetic, but also building a bridge to more practical fields of application as, for example, artistic research.[1] Such analysis becomes more urgent when interactions, or even close interweaving between different art forms, occurs, as is often the case in the performing arts.[2] Provided that such inter- and transdisciplinary working groups are not reduced to a counterproductive trial of strength – that is, a power struggle fought with the means of the arts or sciences – translation analysis initially aims at understanding each other's 'language' in order to find a common 'language'. The latter is by no means limited to words, but also includes barely verbalized performative qualities and the perception of those based on our senses – that is, the sources decisively nourishing artistic-creative thinking and acting, as well as reflections on artistic processes (Minors 2019: 161).

In the following paragraphs, I would like to elaborate on translation processes between two arts disciplines, the interplay of which is as old as it is perpetually fascinating and disputable. Music and dance. Or, put more generally, sound and movement.[3] They have been closely connected from the very beginning, but since the turn of the twentieth century, they have been developing particularly diverse frictions between each other, characterized by an abundance of productive tensions. In this context, the first question to consider is: in what way can the 'language' of music be comparable with that of dance (and vice versa). This question enables the discovery of common ground, which could ease the communication between representatives of the respective arts. Furthermore,