

Remnants of Some Late Sixteenth-Century Trumpet Ensemble Music

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Introduction

“Past ages,” Reinhard Strohm has written, “have left more riddles than evidence: the one-way communication between them and us, which we call ‘history,’ is interrupted by silences.”¹ The history of the trumpet ensemble before the seventeenth century is a particularly good example of this, since verifiable facts only occasionally punctuate its largely conjectural narrative. Although countless archival documents attest to the employment of groups of trumpeters throughout the Middle Ages and Renaissance, we cannot even be sure about basic organological issues, let alone more specific questions regarding their repertoire and its transmission. And while the earliest written sources, dating from the final quarter of the sixteenth century and into the seventeenth, provide us with some information, in many respects they pose as many questions as they answer. For example, we cannot say with any certainty when the tradition of ensemble performance represented by these sources first came into use, nor when it died out. Furthermore, owing to the incompleteness of its written form, most of this repertory can be reconstructed only conceptually, with but a handful of more completely notated examples permitting fuller realization. The purpose of this study, then, is to suggest some ways in which we might look *beyond* these written sources toward creating a more detailed picture of the ensemble’s musical activities.

The story so far

The main sources of information regarding the late sixteenth- and early seventeenth-century trumpet ensemble are the manuscript notebooks of Magnus Thomsen, Heinrich Lübeck, and Cesare Bendinelli (his *Volume di tutta l’arte della trombetta*).² The writings of Michael Praetorius and Marin Mersenne, along with Girolamo Fantini’s printed tutor *Modo per imparare a sonare di tromba* (1638), also provide us with some useful background information.³ Although a transcription and study of the Thomsen and Lübeck sources was published as long ago as 1936, it was not until relatively recently that their importance, together with that of Bendinelli’s book, has been realized. Prior to this, the triadic patterns⁴ that constitute most of these three sources’ contents were assumed to be monophonic signals.⁵ However, in the commentary that accompanied his facsimile edition of Bendinelli’s book, Edward Tarr outlined how this material actually represents the written foundations of a partially notated tradition of ensemble music.⁶ In the most extensive study of these sources to date, Peter Downey was able to show that they contain a good deal of common material, suggesting that these ensemble practices were widespread across Europe.⁷

To summarize briefly, the trumpet ensemble constructed its music from the single notated part, known as the *quinta* or *principale*, that formed the structural basis of each piece. This was sounded over two drone parts, one on the tonic and one on the dominant pitch. The *principale*, triadic in nature and generally employing only the fourth to eighth harmonics, was shadowed below by the *alto e basso* part at a distance of one harmonic. The ensemble was completed by an upper part known as the *clarino*, using largely the eighth to thirteenth harmonics, which either supplied pre-existing melodic material from memory or improvised diminutions according to well-known conventions.⁸

The fact that the predominant melodic part of this music was either improvised or memorized (apart from those examples notated by Thomsen and Bendinelli) obviously results in a thorny problem for the modern inquirer.⁹ So, given the limited textual evidence, how might one hope to gain further insights into such a repertory? The words of Howard Mayer Brown raise an important point:

We are tempted [. . .] to consider repertories for particular instruments quite separately from one another, without considering that they may all reflect common practices. The viol players among us, for example, seem only to want to look at music for viola da gamba, the lutenists at lute music and the recorder players at recorder music.¹⁰

This is perhaps something of an exaggeration; it is difficult to think of a scholar of lute music who is unaware of the vast overlap between his field and, say, the keyboard repertory. Nevertheless, such an attitude persists in some fields, and it is fair to say that trumpeters have tended to be excluded from accounts of more “mainstream” instrumental activity. Indeed, the trumpet ensemble sources discussed above are conspicuous in their absence from the “Sources of instrumental ensemble music to 1630” article in the latest edition of *The New Grove Dictionary of Music and Musicians*.¹¹ Such marginalization could have arisen for a number of reasons, perhaps stemming from the notion of the trumpet corps as a primarily military institution and hence segregated from other court musicians. Alternatively, it could be that the trumpeters’ (perceived) semi-literacy has afforded their music “lowbrow” status in the eyes of some scholars; the harmonic and melodic limitations of their musical idiom certainly do not help matters in this respect.¹² However, this is a much broader historiographical issue than can be satisfactorily addressed within the parameters of this study, so for now I will be content to tentatively identify points of intersection between other repertories and that of the trumpet ensemble.

Another approach to a partially lost tradition

Before discussing connections between supposedly disparate repertories, it is useful to summarize some of those already highlighted by Downey. For instance, he notes how a number of *principale* parts by Thomsen and Bendinelli are altered versions of popular melodies, with any pitch unobtainable in the lower climes of the harmonic series altered to its nearest viable alternative. Thus, the *principale* retained an allusive contour of its original

model while the melody was overlaid (from memory) by the clarinist (Example 1).¹³ Furthermore, Downey has identified one of Bendinelli's sonatas as having been designed for *alternatim* performance with the motet *Fit porta Christe* by Lassus, who was also employed at the Bavarian court. The *principale* of Bendinelli's sonata is a "natural-harmonics" version of the second-highest voice part, which occupies the equivalent position in the five-part texture of the motet.¹⁴ Downey also reveals a sonata commissioned for a wedding in 1584 to be a parody version of the somewhat Bacchanalian chanson *J'ai veu le cerf*.¹⁵



Example 1

- a. Melody to *Fux beiss mich nicht* (after Downey, *Trumpet*, 1:100)
- b. Excerpt from *Sonata von undten auf Fux beiss mich nit*
(Bendinelli, *Tutta l'arte della Trombetta*, f. 19)

In order to identify further crosscurrents, we must approach our problem from the opposite direction by considering instrumental music that could have been used by the trumpet ensemble. One interesting area of enquiry is the plethora of "battle" pieces dating from across the sixteenth and seventeenth centuries. Many of these make stylized references to the sound of trumpet, often during the course of a programmatic scheme. Such allusions tend to be triadic in nature, whereas the military signals preserved in extant notated sources use mainly the second to fourth harmonics, with the triadic register coming into use only in the later court signals. Exact quotation, at least so far as we would recognize it, is generally eschewed in favor of musical effect.¹⁶

Many of these "battles" also feature quotations of folksongs, something that Warren Kirkendale, in a fascinating study of two of these, describes as "an almost obligatory component [of the genre], representing the singing of the opposing troops on the march."¹⁷ I will focus here upon the regular quotations of *La Girometta*, since Gioseffo Zarlino includes a curious version of it in his *Sopplimenti musicale* (1588).¹⁸ His setting consists of a treble melody, featuring a xenophobic text worthy of any battlefield, which is superimposed over drone parts on *c*, *g*, and *c'* (Example 2). Notably, Zarlino includes *trombe militari* on a short list of instruments that might perform the song in this manner, raising the intriguing possibility that this material may have been adopted for use by the trumpet ensemble.



Example 2

Girometta melody (from Zarlino, *Sopplimenti musicale*, p. 284; barlines supplied editorially; text omitted)

Besides Zarlino's remarks, there are other reasons to suppose that this was the case. First, the same melody makes an appearance in a number of "trumpet" pieces, that is, pieces for other instruments that depict the sound of trumpets. These include a *Trombe* for violin preserved in a diatonic tablature manuscript (that is, one in which each number represents a degree of the diatonic scale rather than a chromatic step) of Italian provenance.¹⁹ Although the nature of this notation renders any attempt at transcription approximate at best, with a "trumpet" piece one at least has the luxury of opting for major-mode transcription over minor with a high degree of confidence. And, despite the vagaries of the notation, one can nevertheless discern the distinctive contour of the *Girometta* tune in the final section of the piece (Example 3).²⁰



Example 3

Trombe, D-Ngm Hs. 33748, fasc. 7, fl. 1v (rhythmic values omitted)

Another such piece, a keyboard *Trombetta* ascribed to Gio[vanni] Batt[ist]a Ferrini, employs a tonic-dominant ostinato throughout, presumably in reference to the lower parts of trumpet ensemble.²¹ The upper parts alternate between triadic "signaling" and more melodic material that is largely restricted to the notes of the harmonic series, except in the more florid divisions towards the end (we can permit Ferrini some compositional license!). A *Girometta* statement is woven into this tapestry between measures 28-37, presumably still accompanied by this tonic-dominant ostinato, although the left-hand part is unwritten after

the opening few bars (Example 4). Furthermore, the *La Trombeta* included in Gardano's lute collection *Balletti moderni facili per sonar sopra il liuto* (1611) contains a somewhat mangled version of the *Girometta* tune, among long stretches of triadic material and melodic figures generally typical of battle music (Example 5).²² Elsewhere, it is interesting to note an instance of a lute *barriera* entitled *La trombeta* which has a short setting of this tune (*La Girometa che segue doppo la Trombeta*) appended to it.²³

Example 4
Trombeta, I-Rvat Mus. 569 (excerpt)

Example 5
La Trombeta, from *Balletti moderni facili* ... , pp. 54-56
(rhythmic notation has required some editorial intervention)

Having considered the appearance of this melody during representations of the trumpet ensemble, it is pertinent to note that some of the *Girometta* quotations included in “battle” pieces display similar musical characteristics. While many settings use common root-position triads to form a simple accompaniment, there are also several examples in

which the tonic pedal so typical of the trumpet ensemble is retained; this results in the clashes between melodic supertonic and tonic in the bass commonly found in trumpet ensemble music. Examples of this include the *Battaglia* ascribed to Alfonso Ferrabosco in the Hainhofer lutebook²⁴ (ca. 1603-04), the *Girometta* section of an anonymous Italian keyboard *Battaglia*²⁵ and a *Battalia* in a lute manuscript now housed in Pesaro (Examples 6-8).²⁶ In the latter case, the *Ghirumetta* occurs immediately after (or perhaps as an extension of) the passage marked *Trombe*. Finally, there is a programmatic lute *Battalia* by Donino Garsi that features this melody accompanied by the rubric “La Girometta, fatta dalle Trombe e Tambure” (Example 9).²⁷

Example 6

La Battaglia Alf: Ferrabosco, D-W Guelf. 18.8, ff. 228r-230v, excerpt
(rhythmic notation has required some editorial intervention)

Example 7

Battaglia, I-Rvat Chigi Q. IV.28, ff. 59v-67v

Example 8

Battalia, I-PESc Rari MS b.10, ff. 27v-29r (small notes supplied editorially)

Example 9

Donino Garsi, *Battalia*, PL-Kj 40153, ff. 5v-7r

It would appear, then, that this song that originally graced the battlefield as a favorite of the troops eventually ended up as one of the trumpet ensemble's "greatest hits." This also seems to have been the case with the other folksong discussed by Kirkendale, *La bella Franceschina*. Famously quoted in Matthias Werrecore's *Battaglia taliana*, this song was later adapted as a trumpet ensemble sonata, the *principale* part of which is included in Cesare Bendinelli's collection.²⁸

Having dealt exclusively with Italian sources so far, it is interesting to find a close analogue of this feature among certain northern European battle pieces. In this instance, the popular melody is that of *Wilhelmus van Nassouwe*, a patriotic song later adopted as the Dutch national anthem, whose transmission has been studied by a number of scholars.²⁹ The quotation of this song in Nicolas Vallet's lute *Bataille* features a drone-like bass ostinato that stands out enough from other settings to have provoked comment from Frits Noske.³⁰ Even

more noteworthy is the previously noted Chigi Q.IV.28 *Battaglia*, in which the *Girometta* section continues by quoting an untitled version of *Wilhelmus*. Both songs (and all of the surrounding material) are set over incessant triadic drones (Example 10).

The image displays three systems of musical notation. Each system features a treble clef staff with a melodic line and a bass clef staff with a triadic drone accompaniment. The melody in the treble staff includes various rhythmic patterns, such as eighth and sixteenth notes, and rests. Some notes are marked with a trill symbol ('tr'). The bass staff shows a consistent pattern of triadic chords, likely representing the 'incessant triadic drones' mentioned in the text. The third system ends with '[etc.]' in the treble staff, indicating that the melody continues.

Example 10

Battaglia, I-Rvat Chigi Q.IV.28, ff. 59v-67v

From the above examples, however, it is obvious that the concluding phrase of this melody is unsuitable for performance on a natural trumpet, requiring an accented b^1 and a^1 unavailable on that instrument. However, the *Batali* included in the first volume of Van Eyck's *Der Fluyten Lust-Hof* (1649), written entirely in "trumpet style," features a form of this melody that uses only the notes of the harmonic series, the only version (to my knowledge) to do so.³¹ Given that Van Eyck uses a more conventional version of the melody elsewhere as the basis for a set of divisions (ff. 48v-49v), the *Batali* version perhaps offers us a glimpse of how a trumpeter might have reshaped pre-existing melodies to meet the

limitations of his instrument (Example 11). With this in mind, it may not be entirely coincidental that another song quoted later in the piece (“Ick wou wel dat den krygh an ginck,” on f. 51v) is also playable on a natural trumpet.

The image displays two systems of musical notation. Each system consists of two staves. The notation is primarily rhythmic, using stems and beams to indicate note values and rests. The first system includes a repeat sign (double bar line with two dots) in the middle of each staff. The second system also includes a repeat sign at the end of each staff. The notation is presented in a clear, black-and-white format on a white background.

Example 11

Upper staff: Van Eyck, *Wilhelmus van Nassouwen*, f. 48v

Lower staff: Van Eyck, *Batali*, f. 51r (rhythmic notation has required some editorial intervention; note values halved)

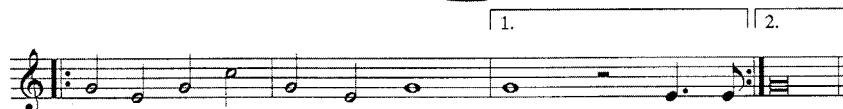
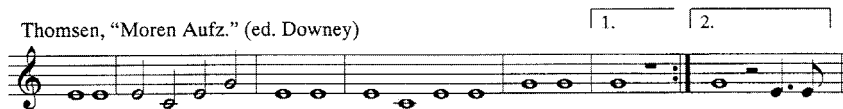
While on the subject of battle music, it is worth digressing to consider one of the few firm concordances noted between the trumpet repertoire and that of another instrument. Peter Downey has observed how the *principale* of the *Moren Aufz.* included in Thomsen's notebook appears to be a “natural-harmonics” version of the melody to *Der Mohren Aufzug* included in a mandora source dating from the 1580s (Example 12).³² This piece was evidently quite popular, since it also survives in versions for lute³³ and organ.³⁴ The adoption of this piece by the trumpet ensemble might not be as odd as it initially seems, however, for the “moresca” family of tunes (and related “Moorish” pieces) generally accompanied martial dances, often based on a mock-battle sequence between Moors and indigenous Christians.³⁵ The use of trumpets for the provision of this type of dance music is confirmed by Thoinot Arbeau, who wrote that “the instruments used for war dances are trumpets, bugles, horns and cornets; flutes, fifes, pipes, drums and others similar to the last named.”³⁶ Given these observations, it is interesting to note a keyboard *Aufzug* in D-ZW HS.42 (the opening thematic motif of which is used as a point of imitation in Scheidt's *Intrada Aethiopica*) that exhibits a melodic line restricted to the notes of the harmonic series and a very static, tonic-dominated harmonic foundation.³⁷ It is not difficult to imagine a piece such as this being adopted by the trumpet ensemble, in the same way that the previously discussed *Mohren Aufzug* was.³⁸

a



b

Thomsen, "Moren Aufz." (ed. Downey)

**Example 12**a. *Der Mohren Aufzug*, D-Dl Ms. J. 307mb. Thomsen, *Mohren Aufz.* (ed. Downey)

Having highlighted the adoption of other instruments' music by the trumpet ensemble, it is also worth asking whether material may have traveled in the opposite direction. Certainly, there are a number of pieces that display similar stylistic tendencies to trumpet ensemble music but for which no explicit connections with the trumpet repertoire have yet surfaced. The *Trombter aufzug* in the so-called "Dlugoraj lutebook" (ca. 1619), for example, features alternating passages of triadic and *clarino*-style material (although transposed into a lower octave to suit the lute) over an incessant tonic drone typical of the trumpet ensemble (see edition included as Appendix).³⁹ It is also interesting to note that this piece shares some melodic material with the *barriera*, some examples of which bear titles linking them to the image of trumpets.⁴⁰ But whether these pieces include transcriptions of

genuine trumpet material or merely stylized imitations of it is impossible to determine. Another case in point is a *Trommetter dantz* for violin which, if one were to transpose a short passage of melodic material into the upper octave, could quite conceivably pass as an example of the dance music supplied by the trumpet ensemble (Example 13).⁴¹ Besides these two examples, there are many other “trumpet” pieces (or parts thereof) that could represent genuine quotations rather than mere imitations.



Example 13

Trommetter dantz, D-Us Misc. 130b, no. 74 (key signature and barlines supplied editorially)

Having discussed various crosscurrents between instrumental repertoires, it would appear dangerous to place sole emphasis on the extant written sources when attempting to visualize trumpet ensemble practices. Similarly, it is unwise to assume that because trumpeters *could* play from notated music, that they always did; one only has to consider the manner in which some modern-day popular music ensembles write, rehearse, and perform their music to realize that this need not have necessarily been the case. If anything, the constricted harmonic boundaries of trumpet music would have meant that the transmission and performance of simple popular material did not necessarily require preservation in writing, since there was no need to coordinate harmonic changes between instrumentalists. Just as some trumpeters must have fallen short of the standards of, say, Bendinelli in terms of performing ability, it seems plausible that some also fell short of his level of literacy. Indeed, Praetorius implies that some trumpeters were illiterate and reliant on oral transmission:

Among the trumpeters there must be at least two—such as the one playing the *Quint* [= *principale*] and the one playing the second *clarino*—who know how to read music and thus can play from the notes as I wrote them. To be sure, the first *clarino* follows the chorale and can easily be played by anyone familiar with the tune.⁴²

Yet while it is important to recognize that the problematic sources of trumpet ensemble music cannot show us anything like the full picture, it is nevertheless important to glean as much information as we can from them. And in order to do this, we must heed Howard Mayer Brown's caveat and consider material from beyond our usual scope of enquiry.

Directions for future research

Of course, a broader approach to the study of instrumental music of this period is not without its obstacles. A huge amount of material remains very difficult to consult, with many sources remaining either unedited, unpublished, or even uncatalogued. The various idiomatic notations used in instrumental repertoires, such as lute and keyboard tablatures, can also create an imposing barrier to those unfamiliar with them (and without the time to become acquainted). It goes without saying that even if one is conversant with a notation in theoretical terms, paleographical complications can make it a lot more challenging to decipher in practice. Therefore, collaboration between scholars working in different fields is essential for progress to be made. Another way in which unfamiliar repertoires may be stored and consulted is through the further development of computer-based digitizing projects, especially now that the dissemination of such information via the worldwide web permits greater ease of access. Such databases offer the advantage of being able to present each individual piece in a number of different formats so that, if its original notation has been suitably encoded, a piece can also be displayed in modern staff notation, or accessed as a MIDI file, which would facilitate audio playback. Thus the obstruction posed by arcane notation is removed at a stroke.⁴³

Further research into the cross-repertorial transmission of musical material will also be greatly aided by the fact that a body of encoded data might be electronically searched for both exact and approximate matches. Assuming that individual databases use compatible (or perhaps, eventually, standardized) code formats for data storage, one should be able to execute a search request across several different instrumental repertoires. One might eventually be able to discover whether Fantini's *balletti* were absorbed from or into the dance repertoires of other instruments, whether the other *clarino*-like melodies in Gardano's *Trombeta* can be identified from elsewhere, or whether the *Aufzüge* whose melodies were notated by Thomsen survive in any other instrumental arrangements. Of course, such an investigation is not without complicating factors, since exact replication of musical material between sources is very rare indeed. Nevertheless, a good deal of research is currently underway into devising encoding systems that permit the effective identification of melodic similarity.⁴⁴ Besides searching for occurrences of notated *clarino* material in other instrumental music, a concordance recognition mechanism based primarily upon the linear contour of a melody⁴⁵ might help us to identify the models for those of Bordinelli's sonatas that seem to have had them.⁴⁶ We have already seen that some *principale* parts are "natural-harmonics" versions of popular melodies, sharing roughly the same outline. By mapping the linear shape of the *principale* parts against those of other instrumental melodies in the database, it may

be possible to recognize a probable model. Having said this, the occasional inconsistencies between the shapes of previously noted *principale* /melody pairs (see Example 1, for instance) suggest that such a technique would only assist empirical analysis, rather than supersede it.

This study has encompassed only a tiny sample of pieces from a handful of instrumental repertoires, often selected on grounds no stronger than that they bore a promising title. The possibilities posed by a larger, more comprehensive survey of instrumental repertoires are tantalizing; a huge number of quotations and concordances must lie concealed among the enormous number of untitled or generically titled pieces that remain unpublished, or languishing in little-known sources. During the course of this study, then, I hope to have shown that there may yet be a good deal we can learn about the practices and music of the late sixteenth-century trumpet ensemble, despite the problems posed by its written legacy.

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NOTES

¹ Reinhard Strohm, "Unwritten and Written Music," in *Companion to Medieval and Renaissance Music*, ed. Tess Knighton and David Fallows (London: J. M. Dent, 1992), p. 228.

² The *sigla* for these sources are DK-Kk Gl.kgl.Saml.1875a, 4°, DK-Kk Gl.kgl.Saml.1874, 4°, and I-VEaf Mus. 238 respectively. The books by Thomsen and Lübeck were compiled while they were serving at the Danish royal court during the 1590s. Bendinelli's tutor, dated 1614, contains pieces from as far back as the 1580s, when he was employed at the Bavarian court in Munich.

³ Michael Praetorius, *Syntagma musicum*, vol. 3 (Wolfenbüttel, 1619). The most relevant passages to this study are included in Hans Lampl, trans. and S.E. Plank, "Praetorius on Performance: Excerpts from *Syntagma Musicum* III," *Historic Brass Society Journal* 6 (1994): 244-68. See also Marin Mersenne, *Harmonie Universelle: The Books on the Instruments*, trans. Roger Chapman (The Hague: M. Nijhoff, 1957), pp. 330-41. Fantini's tutor is available in a facsimile edition by Edward Tarr (Nashville: The Brass Press, 1972).

⁴ Georg Schünemann, ed., *Trompeterfanfaren, Sonaten und Feldstücke*, in *Das Erbe deutscher Musik* 1/ vii, (Kassel: Bärenreiter, 1936); idem, "Sonaten und Feldstücke der Hoftrompeter," *Zeitschrift für Musikwissenschaft* 17 (1935): 147-70.

⁵ For example, see Don L. Smithers, *The Music and History of the Baroque Trumpet before 1721* (London: J. M. Dent, 1973), p. 132; and Anthony Baines, "The Evolution of Trumpet Music up to Fantini," *Proceedings of the Royal Musical Association* 101 (1974-75): 1.

⁶ Cesare Bendinelli, *Tutta l'arte della Trombetta: 1614*, Documenta Musicologica 2/V, ed. Edward H. Tarr (Kassel: Bärenreiter, 1975); English translation and commentary published as Cesare Bendinelli,

The Entire Art of Trumpet Playing 1614, trans. Edward Tarr (Nashville: The Brass Press, 1975).

⁷ Peter Downey, *The Trumpet and its Role in the Music of the Renaissance and Early Baroque*, 3 vols. (Ph.D. diss. The Queen's University of Belfast, 1983). Downey's editions of the works of Thomsen and Lübeck in vol. 2 have superseded the problematic transcriptions published by Schünemann.

⁸ See Downey, *Trumpet*, 1:80-83 for more details; also Praetorius' remarks in Lampl / Plank, "Praetorius on Performance," pp. 259-60.

⁹ Notated *clarino* parts can be found in Thomsen, ff. 183-84; and Bendinelli, ff. 53r-53v, 54v-57v.

¹⁰ Howard Mayer Brown, "The Instrumentalist's Repertory in the Sixteenth Century," in Jean-Michel Vaccaro, ed., *Le Concert des Voix et des Instruments a la Renaissance: Tours 1991* (Paris: CNRS, 1995), p. 21.

¹¹ In Stanley Sadie and John Tyrrell, eds., *The New Grove Dictionary of Music and Musicians*, 2nd edn. (London: Macmillan, 2001), s.v. "Sources of Instrumental Ensemble Music to 1630," by Warwick Edwards. Furthermore, the editorial team of *New Grove* commissioned articles on both the "aufzug" and "rotta" as forms of trumpet ensemble music (by Peter Downey), without any parallel article to expand upon the usage of these common generic terms in other instrumental repertoires.

¹² Downey, *Trumpet*, 1:166-69 lists numerous instances of trumpeters acting as music copyists, arrangers and composers; clearly some had achieved a high level of musical literacy.

¹³ The practice of notating an accompaniment and overlaying a melody from memory is not restricted to the trumpet repertory; see Carol MacClintock, "Notes on Four Tuscan Lutebooks," *Journal of the Lute Society of America* 4 (1969): 1-8, for a discussion of I-Fn Fondo Magliabechiano XIX. 109, in which only the accompaniments and texts to lute songs are notated.

¹⁴ f. 37v; Downey, *Trumpet*, 1:114-17.

¹⁵ f. 53; *ibid.*, 1:102.

¹⁶ For an extensive discussion of the various military signals, see *ibid.*, 1:209-49. Of course, there must have been other signals in addition to those for which we have written records; it is hardly sensible to announce tactical instructions using standardized signals that may be understood by one's enemies!

¹⁷ Warren Kirkendale, "Franceschina, Girometta, and their Companions in a Madrigal *a diversi linguaggi* by Luca Marenzio and Orazio Vecchi," *Acta Musicologica* 44 (1972): 207.

¹⁸ Gioseffo Zarlino, *Sopplimenti musicale* (Venice, 1588; repr. Ridgewood NJ: Gregg Press, 1966), p. 284.

¹⁹ D-Ngm Hs. 33748, fasc. 7, f. 1v. Much of this source, including the *Trombe*, lacks coherent rhythmic notation.

²⁰ It is odd that the section marked *trombe* in the *Battaglia* (ff. 12v-14) in this source does not cite this tune, given its frequent appearances within this genre.

²¹ I-Rvat Vat. Mus. 569, pp. 44-56; edition in Bengt Johnsson, ed., *Roman Keyboard Music of the Seventeenth Century: The Manuscript Vat. Mus. 569 from the Vatican Library* (Copenhagen: Edition Egtved, 1981), pp. 18-21.

²² *Balletti moderni facili per sonar sopra il liuto* (Venice: Gardano, 1611; repr. Geneva: Minkoff, 1980), pp. 54-56.

²³ A-KR Ms. L 81, ff. 142v-143v.

²⁴ D-W Ms. Codex Guelferbytanus 18.8. Augusteus 2°, ff. 228r-230v; edition in Nigel North, ed., *Alfonso Ferrabosco: Collected Works for Lute and Bandora*, vol. 2 (London: Oxford University Press, 1974), pp. 32-36.

²⁵ I-Rvat Chigi Q.IV.28, ff. 59v-67v; edition in Harry B. Lincoln, ed., *Seventeenth Century Keyboard Music in the Chigi Manuscripts of the Vatican Library*, Corpus of Early Keyboard Music 32/ii (n.p.: American Institute of Musicology, 1968), pp. 59-65.

²⁶ I-PESc Rari MS b.10., 27v-29r.

²⁷ PL-Kj Mus. ms. 40153, ff. 5v-7r; edition in Helmuth Osthoff, *Der Lautenist Santino Garsi da Parma* (Leipzig: Breitkopf & Härtel, 1926), pp. 166-68.

²⁸ *Sonatta sopra la Canzon della bella Franceschina*, ff. 53v-54. This song actually appears not as part of Werrecore's original *Schlacht von Pavia* (1544), but in the *villotta* appended to it in Antonio Gardane's reprint, published as *La battaglia taliana* (Venice, 1549).

²⁹ See Frits Noske, "Early Sources of the Dutch National Anthem (1574-1626)," *Fontes Artis Musicae* 13 (1966): 87-94. This article includes a useful bibliography of earlier studies of this song.

³⁰ Nicolas Vallet, *Les secret des muses*, second livre (Amsterdam, 1616); edition in André Souris, ed., *Oeuvres de Nicolas Vallet pour luth seul* (Paris: CNRS, 1989), pp. 245-54. Noske writes that "In the second and third phrase the bass has an *ostinato* figure in 6/4 time (F-c-f) which suggests a drum or a bagpipe" (p. 92).

³¹ Facs. edition, Kees Otten, ed. (Amsterdam: Muziekhandel Saul B. Groen, n.d.) A later version of this piece appears in vol. 11 of the early eighteenth-century Dutch collection *Oude en nieuwe Hollantse boerenlieties en contredansen* (no. 789, *De Slag van Pavië*); see facs. edition, Marie Veldhuijzen, ed. (Amsterdam: Frits Knuf, 1972).

³² The mandora source in question is D-Dl J.307^m; see Downey, *Trumpet*, 2:334. However, his coverage of this concordance is a little misleading, as he fails to mention that this is one of a handful of keyboard pieces contained within this mandora source. This information, along with a transcription, can be found in Franz Böhme, *Geschichte des Tanzes im Deutschland*, vol. 2 (Leipzig, 1886), p. 77.

³³ D-LEm MS II.6.15, p. 159.

³⁴ In the "Nörmiger" organ tablature, now at PL-Kj but *olim* D-B Mus. Ms. 40089; for an edition, see Wilhelm Merian, *Der Tanz in den deutschen Tabulaturbüchern* (Leipzig: Breitkopf & Härtel, 1927), p. 238.

³⁵ See Ingrid Brainard, "An Exotic Court Dance and Dance Spectacle of the Renaissance: *La Moresca*," in Daniel Heartz and Bonnie Wade, eds., *International Musicological Society: Report of the Twelfth Congress, Berkeley 1977* (Kassel, Basel and London: Bärenreiter, 1977), pp. 715-29.

³⁶ Thoinot Arbeau, *Orchesography: a Treatise in the Form of a Dialogue*, trans. Cyril W. Beaumont (London, C.W. Beaumont, 1925), p. 25.

³⁷ This piece is discussed and transcribed in Werner Braun, "Äthiopisches bei Scheidt (1621)," in Hermann Danuser [et al], ed., *Das musikalische Kunstwerk: Geschichte, Ästhetik, Theorie: Festschrift Carl Dahlhaus zum 60. Geburtstag* (Laaber: Laaber-Verlag, 1988), pp. 355-72. An elaborated version for violin, entitled *Moren auffzug*, survives in D-Us Misc. 130a, no. 67. Regrettably the bass part was in a portion of its partbook (D-Us Misc. 130b) that is now lost.

³⁸ Although the c^3 found in this piece (equivalent to the sixteenth harmonic) does not appear in a notated trumpet part until Schütz' *Symphoniae Sacrae* (1629), this does not necessarily mean that this pitch was unobtainable before this date. Indeed, Edward Tarr has described a mechanical organ of 1582, decorated with trumpeters, which reaches the sixteenth harmonic during its fanfare. See Edward Tarr, ed., *Aufzug des Ausburger Trompeterautomaten von 1582* (Cologne, 1992).

³⁹ D-LEm MS. II.6.15, pp. 164-65.

⁴⁰ E.g., *Drometer dantz*, D-W Guelf 18.8., f. 40r; *La Trombeta*, A-KR L 81 ff. 142v-43v.

⁴¹ D-Us Misc. 130a, no. 73. Perhaps unsurprisingly, this piece follows a *Schlacht von Pavia* in the source. Again, the bass part is lost.

⁴² Lampl / Plank, "Practorius in Performance," pp. 258-59.

⁴³ The relative inaccessibility of tablature notation was one of the primary instigatory factors behind the conception of the ECOLM (Electronic Corpus of Lute Music) project, currently based at King's

College London under the directorship of Tim Crawford. The principal goal of ECOLM is to store and make accessible (via the worldwide web) full-text encodings of sources of music for the Western European lute (and other instrumental and vocal sources insofar as they are relevant). These will be stored together with graphic images from manuscripts and printed music (subject, of course, to necessary permissions being granted), such codicological and paleographical detail as is helpful to the potential users, and bibliographical data. For further information, see <http://www.ecolm.org>

⁴⁴ For a good overview, see Eleanor Selfridge-Field, "Conceptual and Representational Issues in Melodic Comparison," *Computing in Musicology* 11 (1998-99): 3-64.

⁴⁵ On the various ways of mapping linear contour, see Charles R. Adams, "Melodic Contour Typology," *Ethnomusicology* 20 (1976): 179-215.

⁴⁶ For example, the *Sonatta al imitazione del ball'ongaro—auf ungrische Danz* (f. 18v) and *Sonatta fata il bal ongaro altro modo sonatta—Neue ungrische danz* (f. 37v).

APPENDIX

Trombter aufzugk, D-LEm II.6.15, pp. 164-65 (The rhythmic notation of this piece is very poor and has required a great deal of editorial intervention.)

The musical score consists of four systems of piano accompaniment, each with a grand staff (treble and bass clefs). The first system includes two performance instructions: "* MS: e?" above the first measure and "* MS: e?" above the eighth measure. The second system features a dynamic marking of "pp." above the final measure. The third system contains a repeat sign with first and second endings. The fourth system concludes with a dynamic marking of "p." above the final measure. The notation includes various rhythmic values, accidentals, and articulation marks.