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About this newsletter

The theme of this issue is *Semiramide* (ossia “cuts and historical instruments”) inspired by the recording of the opera by Opera Rara. In addition to the *Semiramide*-specific articles we bring you two related to historical instruments, including our featured article noted below.

It is perhaps reasonable to call Opera Rara’s recording “historic” already now as it is the first of the uncut version performed with period instruments. The recording recently received the “Complete Opera Recording of the Year” award from the Opera Awards Foundation.

It is also a studio recording and in Richard Osborne’s words: “It’s a bespoke studio recording, of course; expensive to produce but, my goodness, what a difference that makes.”

Before the recording was made, Sir Mark Elder gave a delightful talk about the opera: its recording history, cuts, historical instruments, and the challenges of performing Rossini. Some changes in cast were made between the time he gave this presentation and the recording was made, but we encourage you to set the time aside to watch and listen. Elder’s presentation is long but like the recording, worth every minute of one’s time.

<https://vimeo.com/179028442>

Elder observes that cuts are often necessary (as it was for the Proms performance in connection with the recording) but that care must be taken: “We don’t want to ruin it so that it becomes a wounded building instead of a cathedral.”

He concludes with what surely is music to every Rossini lover’s ears:

“We are going to record every blooming note!”

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Feature article

Last summer, Hilary Metzger played continuo and led the cello section in Teatro Nuovo’s production of *Tancredi*, under the direction of Will Crutchfield (at the keyboard) and Jakob Lehman (as concertmaster). She’ll be back for this summer’s upcoming production of *La gazza ladra*, for which the orchestra will again be playing on period instruments and experimenting with historical performance practices and orchestral seating plans. Here, she reflects on the issues raised by such performances of Rossini’s operas in the light of the historical evidence.

Feature article by cellist Hilary Metzger

“Touches of sweet harmony” : orchestral cello and bass playing in Rossini’s day

Orchestral string playing in the early to mid-nineteenth century is a relatively neglected field of research, in part because of a perceived lack of good evidence. Instrumental methods, our most significant source of information, are both descriptive and prescriptive, and thus must be read critically. Many cello methods were written by soloists, and the relevance of their fingerings and bowings in solo and chamber music parts is debatable for orchestral performance. Surviving orchestral parts were usually reused for so many years that the players’ penciled-in markings are hard to date. And until recently, much of the historical research on orchestral playing has focused on German, French or Viennese ensembles, not Italian ones.

But information is out there if you know where to find it, and how to evaluate it when you do! Most nineteenth-century Italian cello methods were written by the first cellists in opera orchestras. Even when these musicians merely translated existing works into Italian it is interesting to observe what they decided to leave out or change. They also wrote pieces for their instruments—often based on thematic material from the operas they played—in which they indicated fingerings and bowings and made other technical suggestions.

This article will examine the historical evidence for orchestral cellists and double bass playing during the Rossinian era. What type of instruments and bows did these players use? What instrumental techniques did they prefer? And what were the differences between the French and Italian bass string instruments that Rossini knew? I will also consider the vital question of how cellists, double bassists, and keyboard players executed the *continuo* part in *secco* recitatives, which were notated with a figured bassline indicating the harmonies.

The Instruments

String manufacture. String instruments during Rossini’s lifetime were strung with sheep or cattle gut. For cellists, this usually meant two pure gut strings for the higher pitched A and D strings and, for the G and C, two wound gut strings (a gut core tightly wound by a thin wire of silver, copper or other metal). Nowadays, strings are usually manufactured from metal (steel, aluminum, or tungsten). Gut is more elastic, so the bow engages the string differently, producing a warmer or darker sound.

Tension is created when the strings are stretched over the bridge, and this affects the sound at least as much as the materials themselves. String tension for a given string length is determined by the density of the material, the diameter of the string, and the pitch of the note. In modern instruments, the strings are thinner but much denser and usually tuned higher, resulting in significantly more tension along the string.

In order to accommodate this higher tension, the cello itself has been altered over the years. Today, the neck is slanted toward the back of the instrument, extending the length of the vibrating string; the sound post is slightly thicker; the bass bar (a thin, long piece of wood running parallel to the strings and attached to the table inside the instrument) is longer and higher; and the bridge is raised and reshaped. From a practical standpoint, all these changes mean that to make the strings vibrate, modern cellists must use more right-arm weight than a cellist in Rossini’s day, because the strings are so much more resistant. But once modern instruments are resonating, the sound is usually louder and more brilliant than that of a cello with a period set-up.

The distribution of tension among the four strings makes yet another difference to the sound. String players during the Renaissance, the baroque, and (often) the classical eras aimed for equal tension among the four strings (or at least the feel of it) (Peruffo 1997, sec. 8). Today’s cellists choose string tension that is applied unequally: the higher the string, the greater the tension. A “typical” modern set-up might have 17,5 kg of tension generated by the A string, but only 13,5 kg by the C string, for example. Unequal string tension was almost certainly used during the nineteenth century too; however Guglielmo Quarenghi (1826–1882), for many mid-century years the first cellist at La Scala, wrote that he preferred equal tension on each string, at 13 kg per string. This would have made his bass strings feel as though they needed proportionally more arm weight in order to sound (Quarenghi 1877, 10).

It may surprise many current opera-goers that most cellists kept using gut strings far into the mid-twentieth century, and well after their violinist colleagues started using a steel E string. Pablo Casals always played on gut strings and at the Paris Conservatoire some cello students were still using pure gut higher strings in the 1970s (Petit 2015, 51-57).

Endpins. Endpins are the metal or wooden pins that attach to the bottom of the cello and touch the floor. Adrien François Servais, who was reportedly the mature Rossini's favorite virtuoso cellist (François 2016), started using an endpin probably around 1847 (Blanchard 1847). He is generally considered to be the first virtuoso cellist to do so. Virtually all other professional cellists in Rossini's day held the cello between their calves. The endpin was prohibited at the Paris Conservatoire until 1884, when a new cello professor suddenly required them for all students. (Woe to those poor cellists preparing an entrance exam that year!) Some early nineteenth-century French cello methods tell us that certain opera cellists would instead place the instrument on their left foot and place the right leg in front of the instrument to take up less room in the pit.

The addition of an endpin didn't immediately change the cellist's technique, because initially these pins were so short that the angle of the instrument with respect to the cellist's body stayed the same. Nowadays, cellists use longer endpins or even bent endpins, which place the cello in a more horizontal position and do require changes in technique. But all endpins transmit vibrations to the floor, increasing an instrument's volume. Many of the greatest cellists from the nineteenth century (including the cellist who premiered the Brahms Double Concerto and the intended soloist of the Dvořák Cello Concerto) played without endpins throughout their careers. It became customary to perform with an endpin only at the very end of the nineteenth century. Some musicologists believe this was partly due to the growing number of female cellists who were obliged to hold the instrument without "opening" their legs.

Bows. Bows were subject to much experimentation in Rossini's day. Some of the swan-tipped models made from snakewood in the eighteenth century were probably still used by some cellists in Italy well into the next. But most were replaced, first by heavier bows with squarer heads often played with the hair parallel to the stick, and then by bows made after the models of Nicolas Pierre Tourte and his sons. The later Tourte model bows are very similar to what cellists use today. They were made from pernambucco wood and designed to keep the bow stick curved and closer to the hairs at the middle of bow than at the ends. The elasticity of the stick and its concave shape allowed for a variety of springing bow strokes and made it easier to play long, sustained notes.

Italian cello methods provide helpful information here. Vincenzo Merighi (1795–1849), principal cellist at La Scala, faithfully translates all the advice given in the famous method published in 1826 by J. J. F. Dotzauer, including Dotzauer's observation that the bows of orchestral cellists must be tighter than those of soloists (Merighi 1838, 7). The added tightness was supposed to produce a more precise and louder attack and help clarify the bassline played an octave lower by the double basses. Tighter orchestral bows were also advocated in the much looser "translation" of Dotzauer's text published in 1873 by Gaetano Braga (1829–1907), whose bow weighed fully eighty grams and whose playing inspired Rossini to compose music for him (Braga 1873, 8). All three cellists seem to have taken seriously the instrument's role as an executant of strong and precise bass lines.

Merighi and Pietro Rachelle, first cellist in the orchestra of the ducal court at Parma, had the cellist hold the bow along the stick, several inches away from the frog, with the tips of his fingers far from the bow hairs (Rachelle ca. 1820, 6). This bow grip, which is more typical of seventeenth- or eighteenth-century players, would have prevented some of the natural weight of the bow from going into the strings, perhaps explaining why Merighi then advised lowering and straightening his first finger along the stick when playing on the C string. Interestingly, Dotzauer himself had shown the cellist holding the bow at the frog, much as modern cellists do (Dotzauer ca. 1826):

TAV. II.

Fig.^a 1.^a

Fig.^a 2.^a



FIGURE 1. Merighi at his cello.

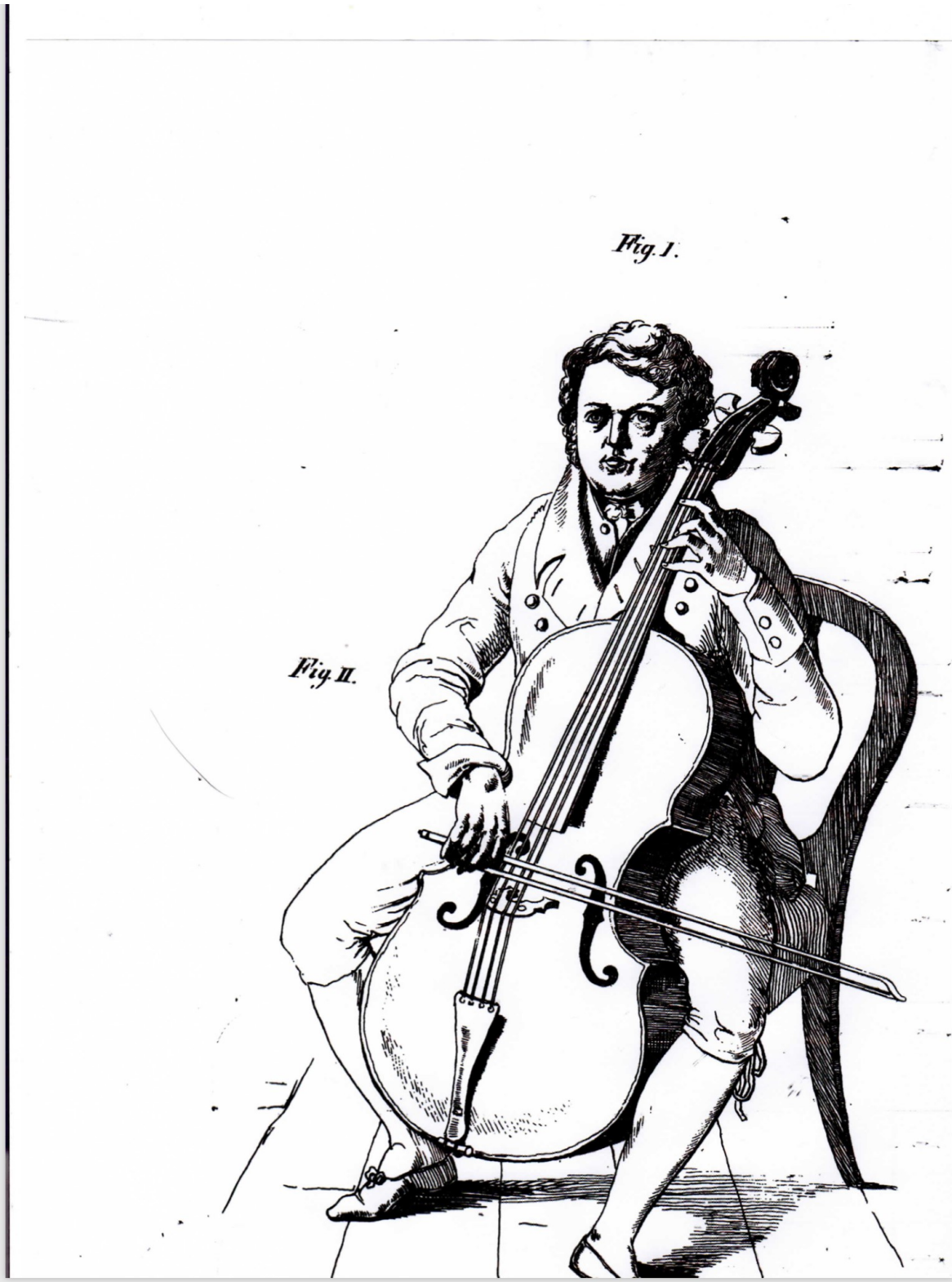


FIGURE 2. Dotzauer at his cello.

The Double Bass

The double bass played an important role in the Italian musical scene. Italian orchestras in Rossini's day frequently had twice as many double basses as cellos, whereas cellos significantly outnumbered double basses in French orchestras of that time. But the orchestra of the Théâtre Italien (where Rossini served for more than a dozen years in the 1820s and 1830s as music director or artistic advisor) was an exception to this French tendency. The larger ratio of double basses to cellos there is further proof that Italian opera was thought to need a strong 16-foot presence.

The orchestral double bass in both countries had only three strings. In Italy, the instruments were tuned in fourths: A¹ – D – G. But in Paris, at precisely the period that Rossini was living and working there, the double basses, like cellos, were tuned in fifths, G¹ – D – A (with the lowest note sometimes tuned to a F[#]). This fifth tuning was possibly due to the fact that most of the double bass players in Paris during the early nineteenth century were trained as cellists, the Conservatoire having disbanded its double bass class in 1798 due to a lack of applicants. Only by 1832 were French basses tuned in fourths and equipped with a fourth (low E) string (Greenberg 2000, 134).

In fact, Rossini played a critical role in the process of reopening the double bass class at the Conservatoire in 1827. The growing difficulty of orchestral parts for the instrument (thanks partly to Rossini himself) had made audiences demand better-trained double bass players. Rossini was invited to serve on the committee established to recruit a new bass professor and to decide what type of instruments and bows should be adopted. Some double bass players provided testimony to this committee, but the fact that these decisions concerning the double bass class were made by a committee of non-bass players demonstrates the instrument's lack of status in France at this time. In Italy, not only did orchestras employ more bassists, but the players themselves commanded more prestige. The international reputations of Domenico Dragonetti (1763–1846) and Giovanni Bottesini (1821–1889) probably helped. Thus the name of the first bassist figures prominently in libretti for new operas published in Italy, sometimes appearing before that of the first cellist.

Rossini recommended Dragonetti for the post of professor in Paris. The musician declined the offer but sent a copy of his famous bow to Paris for the French to emulate. The Dragonetti or "Italian" bowstick is convex, longer, more rigid, and particularly high from the bowhair as compared to French bows of the same time.

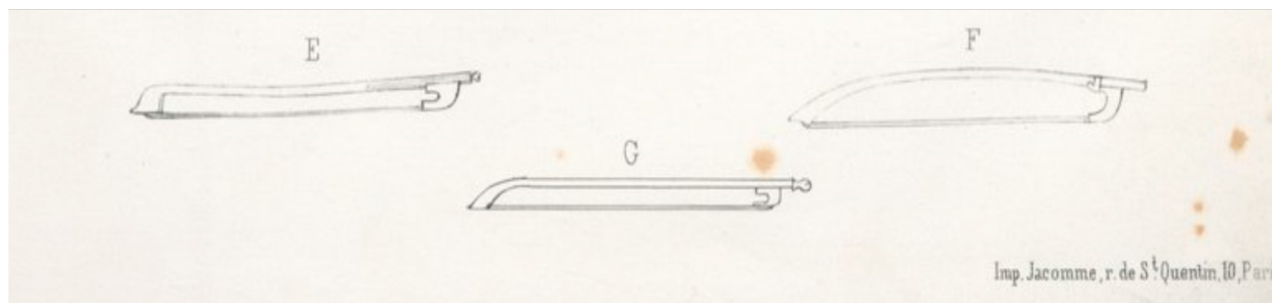


Fig 3. E = early nineteenth-century French double bass bow; F = Italian or "Dragonetti" model double bass bow from the same period, played underhand; G = a French "copy" of the "Dragonetti" model, ca. 1827, to be played overhand (Labro, 1860, 5).

It is also played underhand, like a viola da gamba. This was the model which bass players were required to use when the class at the Paris Conservatoire reopened in 1827. So although overhand Tourte double bass bows were also in use, the Dragonetti bow is a historically accurate option for both "French" and "Italian" Rossini double bassists (Greenberg 2000, 135)!

Cello Technique

But perhaps the instruments and bows are not as important to "historical" playing as the instrumental techniques that we adopt to play on them.

Portamento. One of the most common expressive devices used by singers and string players was *portamento*. This "carrying of the sound" refers to a very smooth connection between two distinct pitches, and the *glissando*-like sounding of the intermediate pitches it usually produces. Old recordings of singers and string players are full of examples of *portamento*, both ascending and descending. String and voice methods from the nineteenth century describe how quickly, at what

volume, and in what instances it should be used. But unlike singers, string players cannot always make a completely uninterrupted slide because we sometimes need to use one finger on the first note and a different finger on the second note. In this case, the sources of this time tell us to slide on the finger from the first note, which means there will be a slight articulation at the end of the slide made by placing the arriving finger on the string, similar perhaps to the singer's annunciation of a new syllable.

It is striking how parsimoniously Italian cellists used *portamento* in their solo compositions compared with contemporary German or Viennese cellists or with Italian violinists and singers: the technique was usually employed only in melodic passages where the required fingering would be easy to play in tune. The virtuosic Braga, who composed eight operas, disparages the overuse of *portamento*. Quarenghi similarly advocates shifting quickly to avoid "mioawling." The wavy line he writes between two distant pitches does not indicate *portamento* but rather a diatonic scale. A half-century earlier, Rachelle gave no indications of *portamento* whatsoever, aside from calling for the same finger for two successive notes in chromatic passages.

But Italian cellists did use left-hand "sliding" in one fascinating, significant way. Their methods are full of multi-voiced passages in which the cello plays both a melody and a bassline simultaneously. This counterpoint sometimes requires finger changes on held notes, which would have sounded much like a rapid *portamento*.

Of course, now that virtually all *portamento* is perceived as tasteless, even judicious instances of the technique sound to modern ears like a lot of sliding around!

Vibrato. No subject in historical performance elicits more heated rhetoric and debate than *vibrato*. How quickly, how widely, by what means and, most of all, how *often* to vibrate are subjects that inflame the souls of all performers. Often, our artistic identity and our choice of musical partners are defined by this issue above all others.

The subject of *vibrato* was not always so fraught. During the Renaissance and the baroque and classical eras, microtonal oscillations on certain held notes were produced in a variety of ways, but the discussion of these devices in written sources was usually factual and neutral in tone. Starting in the beginning of nineteenth century, however, language on the subject becomes highly judgmental. With the establishment of the Paris Conservatoire and then later German Hochschulen came a series of pedagogical works defining "good" musical execution. This period also coincided with the greater use of left-hand oscillations (and the lesser use of bow pressure) to produce added vibrations on string instruments, as well as the increasing use of breath (rather than added keys) to produce woodwind oscillations. Since then, "excessive" use of *vibrato* has frequently been attacked as immodest, nauseating, and paralytic, in both pedagogical sources and in concert reviews.

This anti-*vibrato* vitriol has inspired equally impassioned defenders of its use. They respond that instrumental *vibrato* is intended to imitate singing, which, at least at a certain volume, naturally causes some vibration or trembling of the vocal chords. They note that vocal *vibrato* is used in virtually all older recordings and is frequently very fast or highly audible. Furthermore, they note the hypocrisy of some early twentieth-century writers who denigrated *vibrato* in their writings but used it in their own recordings. Why wouldn't this also be the case in earlier times for which we have no recorded evidence? *Should we only "do as they say, not as they do"?* I will not take sides on this fascinating subject here, but I do want to establish what the written record says about the use of *vibrato* by string players in Rossini's day, and place these words in their historical context.

First, in virtually all nineteenth-century string methods, discussion of *portamento* comes before *vibrato* and is treated at greater length, suggesting that it was perceived as more important or used more frequently. Merighi's translation of Dotzauer is no exception: "*Dello strisciare*" (the sliding between notes) takes up an entire page and includes five musical examples (38), whereas *tremolo* (made by bending a finger of the left hand from one side to another) is allotted only one sentence and given no examples (39).

Many nineteenth-century cello methods do not discuss left-hand oscillation at all, but when *vibrato* is discussed, it appears in the chapter devoted to ornaments and never as part of basic sound production. Quarenghi, for example, in his 542-page, well-organized, and very thorough method, devotes only one sentence to *vibrato* (224) just after his description of *sul ponticello* (playing very close to the bridge) and before his discussion of *sordino* playing. (The "*sordino*," or mute, is placed on the bridge to dampen the sound.)

Some nineteenth-century sources, like Merighi's method, still refer to "bow *vibrato*," that is, to a regular pulsing motion from the bow arm resulting primarily in oscillations of volume. Left-hand *vibrato* was often excluded from orchestral playing. Even in solo playing, most sources demanded a "sparing" use of the device (whatever that advice may have meant to them). In Rossini's day, left-hand oscillations were created by movements of the finger (Dotzauer), the hand (Quarenghi), or occasionally the wrist, and thus the amplitude of the pitch change would have been narrow. No Italian cellist spoke about arm *vibrato*—the motion used by modern day players—until much later (Tunney 2002, 163-164).

These nineteenth-century Italian sources have one particularity related to *vibrato*: the added instruction of "*vibrate*" or "*vibrante*" in specific musical passages. Braga uses the word "*vibrante*" to define "good" cello playing (11) even though later he has very negative things to say about "incessant left-hand trembling" (107). Quarenghi, too,

though he advocates only sparing use of *vibrato* (224), sometimes writes the word “*vibrate*” under certain passages in his compositions. These words, most musicologists agree, do not necessarily refer to left-hand *vibrato*, though they could be interpreted that way in some instances. They refer more precisely to highly marked or “vibrant” playing.

Added passages, embellishments. One reason to be skeptical when these written sources tell us not to vibrate “too much,” however, is the example of embellishments, the notes routinely added by soloists to melodies written out by the composer. Here too methods often caution performers not to ornament excessively, but in this case methods often provide examples of embellishments their authors considered to be in good taste. And yet to modern-day musicians, these “simply embellished” solutions seem highly ornate indeed.

For example, Braga tells us to emulate Luigi Lablache, a great nineteenth-century bass known for his Rossini roles. In his own method, the singer provides the “good” examples of melodic alterations shown here (Lablache 1873, 96). Even his “light” version adds more notes than most performers not trained in the *bel canto* tradition would feel comfortable adding today, and the “brilliant” or “elegant” versions are unimaginable.

EXAMPLES FOR ILLUSTRATION.

The musical score illustrates five levels of ornamentation for two melodic phrases. The levels are labeled on the left: Simple Phrases, Light, Tender, Impassioned, Brilliant, and Elegant. The score is written in treble clef with a key signature of two sharps (F# and C#) and a time signature of 3/4. The first phrase is in C major and the second is in D major. The 'Simple Phrases' row shows the original melody. The 'Light' row adds some grace notes. The 'Tender' row adds more grace notes and slurs. The 'Impassioned' row adds more grace notes and slurs. The 'Brilliant' row adds many grace notes and slurs. The 'Elegant' row adds many grace notes and slurs.

Figure 4. Levels of ornamentation recommended by Lablache.

Yet Braga approved, deferring to a great singer in the matter of melodic ornamentation. He himself not only wrote a cello manual but composed eight operas, and would surely have been able to write tasteful variations. But in this domain he considered a singer's advice to be more trustworthy than a mere cellist's.

All the solo pieces published by the Italian cellists I studied include elaborate cadenzas and ornaments, often written out in smaller print to imply that other notes could be substituted in their place. It is highly likely that principal cellists added notes to the solo passages they played in operas as well, just as singers, solo woodwinds, and the first violinist would have done.

Secco recitative realization on the cello. These days, cellists usually play only the printed bass note when accompanying recitatives, but many eighteenth-century cello methods include instructions and exercises on how to realize figured basslines and play harmonic progressions in various keys. By the early nineteenth century, cello methods were providing examples of recitative realization on the cello since chordal recitative realization was considered an essential skill for the principal cellist of any opera orchestra.

In Rossini's day, when a keyboard instrument was in the pit the cellist would realize the harmonies along with the keyboard player, and a double bass would often play the written note as well. But we also know of instances when cellists realized the recitatives with a double bass and no keyboard instrument, a practice to which Quarenghi refers in his method (330). Cellist Robert Lindley and bassist Domenico Dragonetti were famous throughout Europe for accompanying recitatives as a duo in London.

Whether the keyboard was present or not, having a double bass ensure the lowest note in the chord allowed the cellist to play easier or better sounding notes. This made for fuller and more varied harmonies. The lower G#, G and

occasional F# notes available on French double basses at this time were noticed as being advantageous in this respect.

Sometimes methods instruct the cello and bass not to play together, and often the cellist is encouraged to reiterate the harmony during a rest in the singer's part, even if no new note is indicated in the bassline (Stiasny ca. 1829, 21-50). Some manuals instruct cellists to add notes and passages that were not part of the harmony, usually when a singer needed help finding the next pitch or for a new character or a set change. (Fröhlich ca. 1810, 89) Usually the cellist played the notes of the chord in one short stroke (Rachelle ca. 1820, 32). But we have evidence that Lindley and other English cellists availed themselves of arpeggiation (playing the notes of a chord individually and rapidly in various combinations and bowings). Quarenghi encourages the cellist to add extra notes to the harmonies and to take the written bass note down an octave for added fullness and resonance. Here is his example of what the cellist should play in a recitative from *Il barbiere di Siviglia*.

G. ROSSINI.

BARBIERE DI SIVIGLIA.

FIGARO

Parte cantante. *Ma bravi! ma be - no - ne! Ho inte - so tut - to. Ev -*

Modo d'accompagnare

Basso cifrato.

- viva il buon Dotto - re. Po - ve - ro babbu - i - no! tua spo - sa?... eh vi - al pu -

- li - sciti il bocchi - no. Or che stan - no la chiu - si Procuriam di par -

(*) Qualche volta sta bene far presentire la passata aggiungendo la settima producendo all'accordo in corso, anche se la cadenza è ingannata.

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ROSINA

- lare al la - ra - gaz - za Ec - cola appun - to Eb - be - ne Signor Fi - ga - ro? Gran

FIG.

ROS.

co - se si - gno - ri - na. Sì, dav - ve - ro? man - ge - rem de' confet - ti.

FIG.

FIGURE 5. Quarenghi's realization of part of a recitative from *Il barbiere di Siviglia*.

Conclusion. A study of the historical evidence shows that orchestral cellists in Rossini's day viewed their instrument as having a very important harmonic function. They tightened their bow hairs and lower strings in order to permit precise, loud bassline playing. *Portamento*, though certainly used in solo cello repertoire, was perhaps less important for Italian cellists than for other musicians of that time, and orchestral cello *vibrato* was rare if it existed at all. Instead, principal opera cellists placed much emphasis on learning double stops, chords, and contrapuntal playing—in other words, on understanding and executing the harmonies. These skills were necessary in role of *violoncello al cembalo*, who jointly accompanied the secco recitatives with the principal bass and the keyboardist using blocked chords, arpeggiation, different inversions and timings, added sevenths, and occasional melodic passage work to allow singers to convey the text and feel at ease.

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