Birds, Bells, Drums, and More in Historical Italian Organs, Part 2

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Photo 7. The 18th-century organ, modified by Quirico Gennari in 1842, in the church of S. Benedetto at Faiano (Salerno). Gennari, while retaining the original windchests and classical stops, introduced a number of "new" effects, among which were the percussions. The instrument was restored by Fratelli Ruffatti in 2007.

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The "Turkish" Percussions

Between the first and the second decades of the 18th century (available documents do not agree on the exact timing) the Ottoman Sultan Ahmed III sent as a gift to the Polish King a complete Turkish military band. Such type of musical band was already known in Europe, both because the Turkish diplomatic delegations were accompanied by such bands, and also for having been heard during the wars against the Turks. In 1683, the Austrian troops and population, during the siege of Vienna, were psychologically troubled by a Turkish musical band that was playing after prayer times during the day, and at sunrise and sunset.

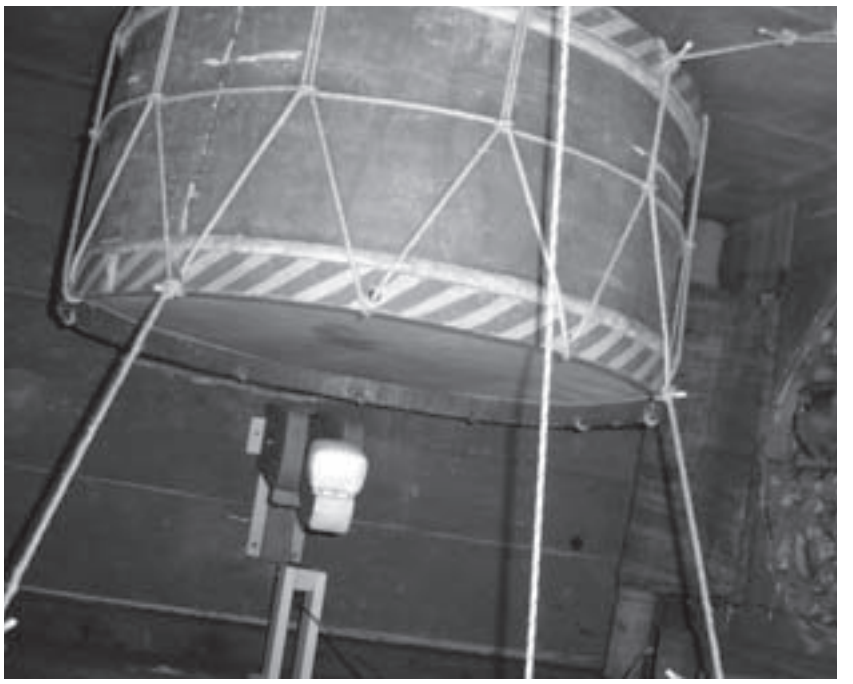


Photo 8. The bass drum of the organ at Faiano (Salerno), dating from 1842.

One of the peculiarities of the "Turkish" music was the great importance (and loudness) of the percussions. The bass drum (Photos 7 and 8), the crash cymbals (Photo 9), the "Sistro" or "Chinese hat" (Turkish crescent or Jingling Johnny[54]) (Photo 10), and the triangle impressed and captivated European musicians, who, starting from the second half of 1700, adopted them in their musical creations. One of the first to utilize them was Gluck (probably on that occasion, but even in prior performances of his works, like the *Cadi Dupé*, in 1761, by hiring Turkish musicians who lived in Vienna at the time) for his opera *La rencontre imprévue ou Les Pèlerins de Mecque* (1764). It was an opera that even Mozart likely heard and appreciated, to the point that he wrote the twelve variations in G major, K. 455, on the theme from an aria of *La rencontre*. Since then, many musicians have adopted both the style and the instrumentation of Turkish music. Mozart, in 1775, wrote a concerto for violin (no. 5 in A major, K. 219) sometimes named "Turkish" for the peculiar structure of the last tempo; in 1778, the piano sonata in A major, K. 331, with the famous rondo "Alla turca" ("in Turkish style"); and, in 1782, the opera *Die Entführung aus dem Serail*. But even Haydn (for example in the symphonies 63, 69, and 100) and then Beethoven (from *Die Ruinen von Athen* in 1812 until the last movement of the Ninth Symphony) and even the musicians of the Strauss dynasty adopted Turkish instrumentations and styles.[55] In a matter of a very few years, composers and orchestras throughout Europe adopted the exotic Viennese acquisitions.

Manufacturers of fortepianos were also fascinated by the instrumentation "in the Turkish style," and around the year 1800 they began to manufacture instruments that included a stop called "Turkish music"[56] or *Janitscharenzung*, consisting of a pedal-activated mechanism hitting the soundboard and also activating a sort of Chinese hat.

After the Congress of Vienna, most of northern Italy (the present regions of Lombardy, Veneto, Trentino, and Friuli-Venezia Giulia) fell under Austrian rule. This undoubtedly facilitated the transferring of ideas and merchandise between Italy and Austria. There are many Viennese-made fortepianos today in public and private collections, and many of them came to Italy during that period.

Photo 10. The "Chinese hat," one of the elements of the "Turkish band." This unit was manufactured by Fratelli Ruffatti as a copy in 1988 during the restoration of the Tronci organ, 1778, modified by Agati Tronci in 1898, in the church of S. Pietro at Casalguidi (Pistoia). The original had been removed and eliminated from the instrument during the 20th century.

The popularity of opera in the 18th and 19th centuries and at the beginning of the 20th in Italy is a phenomenon that is being studied from every possible angle. An interesting aspect is the great appreciation, almost a sort of fan-like exaltation, of the music of Verdi, which had a strong political connotation, being linked to a sort of underground rebellion against Austrian rule and against all other oppressors of the Italian people. Often, one could find "W VERDI" graffiti, not referring to composer Giuseppe Verdi, but instead an acronym of the phrase **V**iva (long life to) **V**ittorio **E**manuele **R**e (king) **D'** **I**talia (of Italy), the Savoy dynasty King of Piedmont, who was being encouraged by many patriots to free Italy from foreign rule and to unite it under one single reign. (Photo 11)

It was also common for the lower social class of people to attend the opera. Many travelers throughout Italy were impressed by the fact that operatic pieces were being played and sung everywhere, even in churches! Hector Berlioz, who was traveling in Italy between 1831 and 1832,

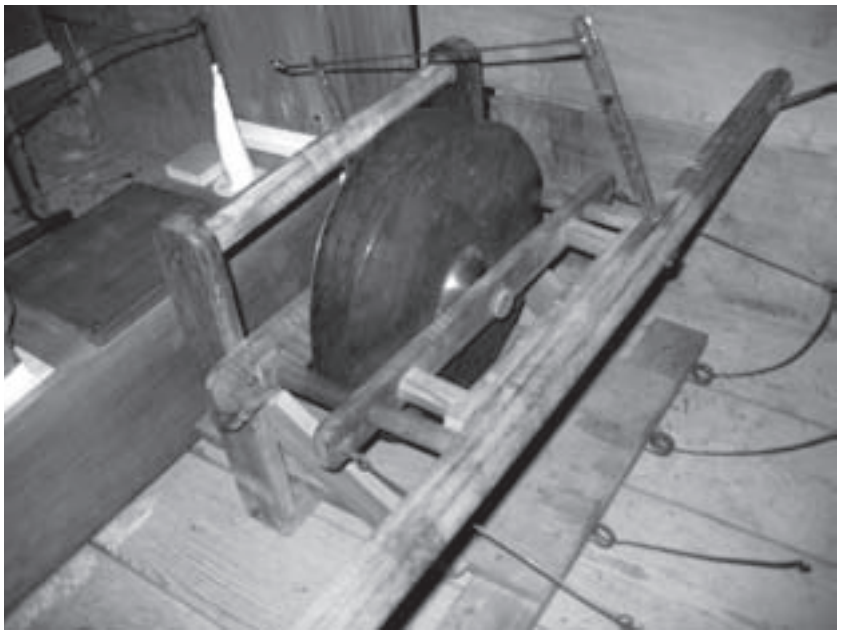


Photo 9. The crash cymbals in the Faiano organ, with their complicated mechanism.

Photo 11. Graffiti found over the balcony rail in the Church of S. Maria Assunta, called "dei Cancelli" in Senigallia. It was most likely made during the historical period of the Italian Insurgence (between the first and the second half of 1800). It was not intended so much to praise the famous composer, but instead to give honor to the Savoy dynasty King of Piedmont. The king was being encouraged by many patriots to free Italy from foreign and Vatican rule and to unite it under a single reign. In fact, W VERDI is the acronym of the phrase *Viva Vittorio Emanuele Re D'Italia* (long life to Vittorio Emanuele, King of Italy).

wrote: "I have often heard the overtures of the *Barbiere di Siviglia*, of *Cenerentola* and *Otello* [by Rossini]. Such pieces seemed to form the favorite repertoire of organists, who very pleasantly inserted them in the divine services."[57] The comment of Gaspare Spontini, as sent in an 1839 letter by Franz Liszt to the director of a magazine in Paris, is however of a very different note. The Italian musician was absolutely

> . . . shocked, scandalized, as are all those who unite the religious sentiment to the artistic one, when listening, during the religious services, and during the celebrations of the holy mysteries, to only ridiculous and indecent theatrical reminiscences, full of anger in seeing the organ, this majestic voice of the cathedrals, making its large pipes resonate only with cabalettas in fashion.[58]

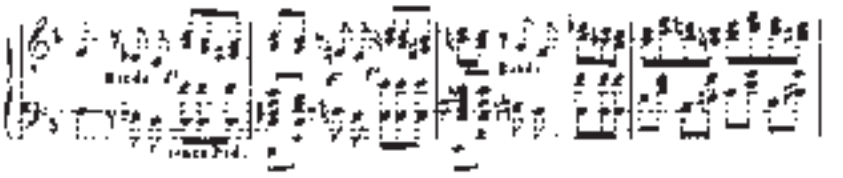
In such a musical climate it is very likely that the Italian organbuilders, in order to adapt operatic transcriptions for the organ in a more realistic way—possibly influenced by the effects introduced by the Austrian pianoforte, which was then in common use—may have begun to propose the introduction of Turkish instruments in their new organs, having been requested to do so by organists or even deciding to do so on their own.

References to such instruments start to appear around the second decade of the 19th century. Padre Davide da Bergamo[59] (one of the most important figures in Italian organ romanticism), organist at S. Maria di Campagna in Piacenza, wrote in 1822 to the Serassi Brothers about the organ that he wanted them to build for him, for which he requested ". . . the *tamburo reale*" [the real drum], and in another letter he specified "as *Tamburo reale* I mean properly the drum of natural leather . . . ."[60]

One of the first applications of the entire device subsequently referred to as "Turkish Band"[61] (consisting of bass drum, rolling drum, Chinese hat, and cymbals) by the Serassi Brothers is found in the organ of the Collegiate Church in Treviglio (Bergamo), built in 1816; however, there is evidence of the introduction of such a device in organs, even though possibly in part, around 1814: in the poem dedicated to the building of the organ of Revere (Mantova), the *Catuba* (bass drum)[62] is mentioned. Around that time and for about 50 years following, many organs were built throughout Italy equipped with this fantastic effect, which is found almost exclusively in the romantic Italian organ. In fact, it is not at all present in Austria, it sporadically appears in France in a few organs around the end of the 18th century that no longer exist today (in this case, however, limited to the drum only), and in a couple of English organs, but the extensive use during the 19th century is a typically Italian phenomenon.

As mentioned above, opera was very much loved, and piano transcriptions of operas were very common. The treatise by Calvi[63] features an entire chapter dedicated to the "Method to register several pieces transcribed for pianoforte," in which he explains in fairly good detail how to use the stops to play an opera's *sinfonia*, arias, or duets. This chapter follows a small paragraph dedicated to the "Method to imitate the arrival of a band," specifying that by following the suggestions in reverse order one can also imitate the departure of the band. It is clear that the use of the Turkish band was adding realism to symphonies or other orchestral pieces. In fact, in the conclusion of chapter five, where the stops are described, one can read that this true drum can only be used for the playing of a few marches, and in some chordal inserts of harmony in symphonies and largo movements, "always limiting the hit according to the force [meaning volume] of the parts." Immediately following, Calvi adds: "it is advisable not to use the Band too often and the *Campanelli* [Glockenspiel], particularly during the sacred functions."[64]

Example 1. Padre Davide da Bergamo, *Verset n. 3*,[94] for the use of the Turkish Band



The recommendations by Castelli, published thirty years later, are not much different. After stating that this effect is more in use in countryside churches and that the imitation "of the military and dance music is not fitting to the religious dignity of the sanctuary," he suggests "not to make too frequent use of it" and limiting its use either to a final march, or to a finale using the *fortissimo*, or to insert it when the rituals represent "a religious rejoicing."[65]

Castelli again provides a complete description of the mechanism and its use. He first explains that it is composed of the bass drum (or *leather drum*), the crash cymbals, *sistro* [Chinese hat], and a rolling drum [made with organ pipes], which is activated by a pedal similar to the one used for the *tutti*. He then describes a very imaginative use for this device:

By pushing down the pedal "gently and slowly" the sound of the rolling drum alone can be obtained (which can be used in the place of the one that he previously refers to as *Tremolo*, or even in tandem with it);

By hitting the pedal with a "sharp but light hit" the bass drum and the rolling drums can hardly be heard, but it is possible to obtain "the distinct sound of the cymbals and of the Chinese hat, which is useful in adding a special color to some brilliant passages even when *piano*."

As far as this special effect is concerned, in the performance of romantic Italian organ literature, we can find several instances in which composers—unlike those of previous times, who were very restrained in giving suggestions—do write rather precise indications for the registration of their pieces. Normally the Turkish Band is referred to in the music as "*Banda*" or "*B.da*", or even "*Con Banda*," "*B.a*" or simply "*B*".

In 1837, the Pistoia-born composer Luigi Gherardeschi called for the use of the Band in a section of his *Gran Marcia per Organo*, and the points for its use are indicated as "B".[66]

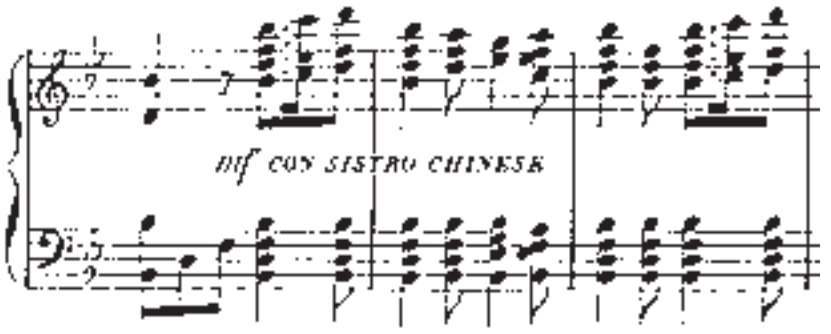
Padre Davide da Bergamo uses the device with great rationality and parsimony; here are some examples.[67]

- In the series *15 pezzi di musica pel nuovo e magnifico organo di S. Maria di Campagna in Piacenza* (15 pieces of music for the new and magnificent organ of S. Maria di Campagna in Piacenza), published in 1839, both at bar 153 of the *Polonese*[68] in D major and at the beginning of the "Presto" section, he indicates "*Con banda*."
- In a *Sonata Marziale*[69] in F major, he indicates first "*Banda*" (measure 3) and then "*B.a*" (measures 7, 11, 15), subsequently indicating "*F con banda*," five times in all within a rather long piece—by analyzing the piece, it seems there are other points at which to use it (for example, measure 87 and the Finale).
- In the third of a series of *Versetti*,[70] a piece of slightly more than 50 measures, he requests the "Banda" to be used ten times! (Example 1)
- In a *Suonata*[71] in B-flat major, he specifically requests "*Con sistro Cinese*" (with Chinese hat), then simply "*Sistro*," three times in all (measures 8, 16, and 27). Evidently he refers to the use with "sharp but light hit" as described by Castelli in his book, which allows the activation of only one part of the *Banda*; the special effect is requested in its totality in a following section of the piece (mm. 45, 102). (Example 2, on page 24)

These few indications in almost 60 organ pieces show us that Padre Davide was convinced of the need to not abuse this effect, as indicated by Castelli. It is very likely, in fact, that Castelli was influenced by the indications of this ingenious composer, given P. Davide's close contacts with the Serassi family, and consequently with Castelli himself.

In spite of the recommendations of various composers and writers to use restraint with such effects as the *Banda*, and to perform pieces in keeping with "the holiness of the site and the religious majesty with which the sacred services are to be accompanied,"[72] a bit of everything was performed in Italian churches. A clear picture of what Ital-

Example 2. Padre Davide da Bergamo, *Sonata in B-flat Major*.[95] Evidently the composer in this case refers to the use of the Band "with sharp but light hit" as specified by Castelli in his treatise, which activates only the Chinese hat.



ian organists played during the second half of the 19th century—besides the testimonials by Berlioz and Liszt as previously described—is offered by a list of "forbidden music," published by the Catholic Church in 1884, which forbids in a church

> even the smallest part or reminiscence of theatrical operas, of dance pieces of any kind such as Polka, Walzer, Mazurkas, Minuets, Rondo, Schottish, Varsoriennes, Quadriglias . . . National hymns, Popular, erotic or comic songs, Romanzas . . .[73]

This excessive freedom in the choice of repertoire, together with the new organbuilding ideas coming, once again, from across the Alps, produced towards the end of the 19th century a reaction against the shining sonorities of the romantic Italian organ, which led to the modification of many instruments by means of the suppression of reed stops and cornets, the reduction in number of the Ripieno ranks, and the dismantling of the most characteristic effects[74] in favor of strings. This change produced a modification of the music being performed, which became surely more severe and solemn, but also more boring!

Photo 12. Church of S. Michele Arcangelo, Vignole (Pistoia); organ by Pietro, Giustina and Giosuè Agati, 1979, restored by Fratelli Ruffatti in 1990. Tuscan organs of this period normally incorporated a number of special effects for the performance of opera-style music.

The *Campanelli* (Bells, Glockenspiel)

The Venetian organbuilder Gaetano Callido, between the 18th and 19th centuries, never failed to include, among the registrations suggested for his instruments, the one "*ad imitazione dei campanelli*" ("to imitate the Campanelli"), which could be obtained by registering the Principale over the entire keyboard compass, the Voce Umana and one Ripieno rank (the Vigesimanona) of ½′, and by playing "*spiccato*" or "*arpeggiato nel basso.*"[75]

Giovanni Morandi (1777–1856), a composer of the Marche region whose compositions were entirely written for the type of organ built by Gaetano Callido or, more generally, for the type of organ built in the late 18th-century Venetian style, also wrote a *Rondò con imitazione dei Campanelli*.

In various organs built from the end of 1700, however, the real *Campanelli* appear among the special effects, sometimes also called *Gariglione* (a term that comes from the Italianization of "Carillon"). It is a stop limited to the treble portion of the keyboard, and is made up of a series of tuned bells in the form of small bronze "cups," featuring a very bright sound. (Photos 12, 13, and 14)

Back in 1589, Emilio de' Cavalieri had a series of 36 bells made for him, which were likely connected to an organ, even though this is not absolutely certain. In such a case, the stop extension would have been much greater than the one in use between the 18th and 19th centuries: from A1 to A4 or from F♯1 to F4, depending upon the keyboard's compass.[76]

Photo 13. Vignole (Pistoia). The organbuilder's name chart, glued inside the pallet box of the main windchest. It contains a most unusual citation for the time: the name of a female organbuilder, Pietro's wife Giustina.

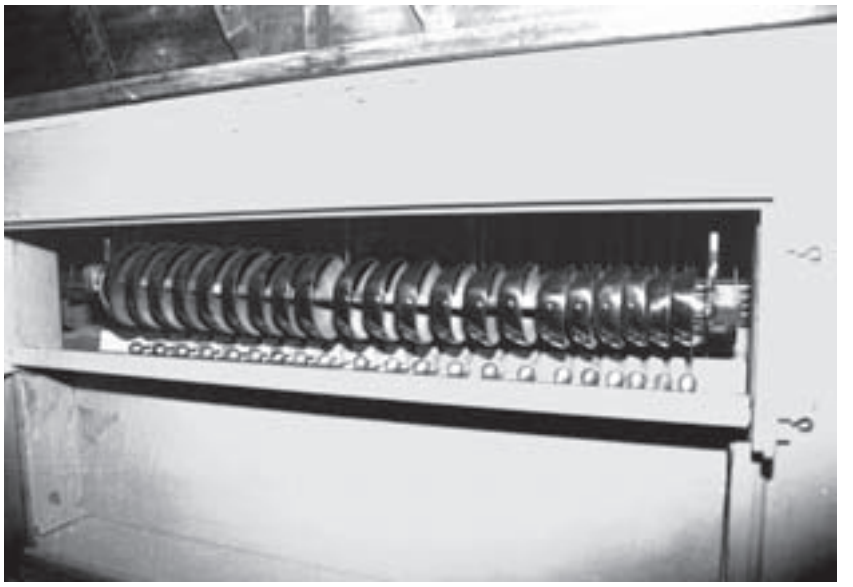


Photo 14. The *Campanelli* (Glockenspiel) in the Vignole organ. They were reconstructed by Fratelli Ruffatti during restoration. The original set had been removed and eliminated at the beginning of the 20th century.

Between 1591 and 1600, we find another piece of evidence in the *sonaglini* (small bells) by Fulgenzi for the Orvieto organ,[77] but it is only during the end of the 18th through nearly the entire 19th century that the *Campanelli* were included in new organs or added to existing instruments.

Luigi Gherardeschi from Pistoia used them in a section of the *Gran Marcia per Organo* of 1837, by adding the *Gariglione* (bells) together with the Cornet, to a registration formed of Principale basso, Bordone basso and Bordone soprano, Flauto, Tromba, and Decimino (1⅗′).[78]

In his manual dealing with the *Campanelli*, Calvi states that "a good effect can be obtained by playing them with the Flauto in Ottava alone, and by accompanying them with Fagotto and Ottavino [2′ flute] with arpeggiato passages in the bass." He suggests their use even in conjunction with the Cornetto. He also includes the possibility of their use in "*mezzoforte* and *forte*" movements, suggesting not to play chords without accompaniment.[79]

A few years later, Castelli included them in the specifications for his "middle size organ" and the "large size organ" (*Massimo*), among the three versions that he considers possible, but he does not talk about their use, as he had done for other effects or accessories.[80] However, in the *Prontuario di registrazione* (registration instruction manual), he suggests three registrations that utilize them:

The first (to be used in *staccato* or *puntato* passages) includes the Campanelli, Traverse Flute, Octavin, Octave and Viola in the bass;

The second (for fast and virtuoso passages, to imitate a carillon) consists of Flute in XII, the Second Principal in the treble, and again the Octave and the Viola in the bass;

The third registration (for marches) includes the Tromba, Traverse Flute, Octavin, Fagotto and Octave in the bass.[81]

The *Terza Mano* ("Third Hand" or super coupler)

The "Third Hand" was an accessory that gained a great deal of popularity during the romantic Italian organbuilding period, and consists of a super coupler for the upper part of the keyboard. It was invented around 1816 by Giuseppe II Serassi (1750–1817), an ingenious organbuilder. The *Quarta Mano* (Fourth Hand) (the sub coupler in the first half of the keyboard)[82] was invented along with it, but will not be dealt with here, since this device was much less common in the Italian organs of that period. (Photo 15) The Third Hand was highly successful, however, and it was adopted in new organs throughout Italy, as well as being added to existing instruments. It can be operated by a pedal, by a stop le-

Photo 15. The intricate mechanical connections and mechanisms in the organ by Adeodato Bossi Urbani, 1851, in the Basilica of S. Domenico, Bologna. Immediately above the keyboard, right side: the mechanism for the "third hand" (super coupler). At the left side, the "fourth hand" (sub coupler). Above: the rollerboard for the *Campanelli*.

ver, or by both controls within the same organ. The most predictable and trivial use is surely that of utilizing it in octave passages, where, rather than going to the trouble of playing two notes at once, one can activate the device and simply play the lower note on the keyboard; it is quite obvious that, by doing so, speed and accuracy of playing increases.

Castelli, however, gives us a very detailed account of the less-obvious use for this device in a special chapter of his treatise.[83] He suggests using it to reinforce the soprano line in theme repetitions, in order to create a crescendo effect, but he also states that it is effective even in *piano* passages. It is useful, he assures us, in making "more brilliant and marked" a passage that is written in a low tessitura. Furthermore, in the case of notes or chords held in the central part of the keyboard, it is possible to hit the corresponding pedal in a *staccato* manner, thereby underlining those notes or those chords.

Calvi, in 1833, stated that the Third Hand is very useful "in the ripienos, the crescendos, as well as in syncopated passages."[84] He also suggested a specific sequence of stops to imitate the "messa di voce"[85]: starting with the "Principale in the bass, and the Voce Umana alone," going further by adding ". . . Principale primo and the Crescendo will be obtained, then with the Third Hand more *forte* will be obtained."[86] Calvi again suggested imitating the Clarinet by using the Traverse flute together with the Third Hand.[87]

Padre Davide da Bergamo, as in the case of the Band, limits the use of this device to specific instances:

- For crescendos (example: *Suonata*[88] in B-flat major, bar 171), in which the section with the Third Hand precedes the *forte*;
- To slightly increase the volume without making stop changes in a *piano* section (example: *Sinfonia*[89] in C, bars 110 and 212);
- To highlight a theme in its *ripresa variata* (example: *Pastorale*[90] in A major, in the last section, Allegro, bar 192);
- To make a theme that is played in the middle section of the keyboard "more brilliant and marked," as Castelli says (example: *Sinfonia*[91] in D major, bar 234). (Example 3)

As with other effects, it is possible to record a very limited and careful use of the Third Hand by Padre Davide, who suggests its use only in the few examples shown and in an extremely limited number of other instances throughout the sixty pieces that I have analyzed.

The *Combinazione Preparabile "Alla Lombarda"* (Adjustable Combination in the Lombard Style)

Another invention, introduced by Andrea Luigi Serassi[92] around 1776, gained great success: a mechanism by which a combination of stops could be prepared in advance, which Castelli called *Tiratutto preparato* (pre-arranged tutti). It was later adopted by many organbuilders with the name *Combinazione alla Lombarda* (Combination in the Lombard style). This mechanism allows the organist to add a series of previously "prepared" (by the organist) stops to a registration. It is activated by a pedal protruding from the casework located at the right side of the pedalboard.

For this mechanism, Castelli again illustrated an original use, which was later exemplified in one of the Petrali compositions attached to his treatise (number 21). The more common use is that of adding a registration to another one to form a crescendo. Another, more interesting use is by means of small percussive taps of the pedal, for example on the weak beats of the measure, while chords are being held, to imitate the orchestral effect of the introduction of new instruments that start playing while other instruments are already playing *tenuto* harmonies.[93]

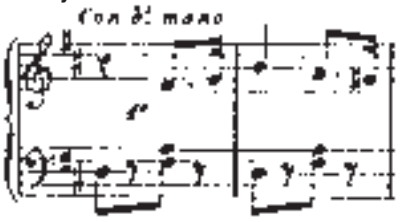
This is also a case where a careful analysis of the piece to be played, and the choice of performing it in orchestral style, can greatly help the player in utilizing the possibilities offered by instruments with the "Combinazione alla Lombarda."

Conclusion

Through the centuries, the Italian organ, far from being limited in its expressive possibilities, was influenced by changes in musical taste and was in turn effective in influencing them. Even within the context of its rather simple tonal structure, by incorporating effects and accessories it has taken up new sounds and new dimensions. The cooperation between organbuilders and organists has never ceased to be fruitful for both, producing masterpieces of great quality and musical wisdom.

In many instances, for the performance of Italian organ music, performers fail to use simple expressive means that have been a part of the musical palette of Italian musicians since the Renaissance. I believe that an historically informed and philologically coherent performance can give the player, even within rigorous boundaries, many more expressive and varied performance possibilities than a quick and unscrupulous reading of a piece, based on superficial knowledge and arbitrary decisions. ■

Example 3. Padre Davide da Bergamo, *Sinfonia in D Major*.[96] The use of the Third Hand is shown here, to make more "brilliant and marked" a theme that is being played in the middle section of the keyboard.



Notes

54. This type of percussion was strangely characteristic only of a few bands, and not in the known form, which was adopted in the 19th century by the Ottomans, who became impressed by the European version. See M. Pirker, "Janissary music," *The New Grove Dictionary of Music and Musicians*, vol. 12 (London, second edition), pp. 801–804.
55. H.G. Farmer, J. Blades, "Janissary music," *The New Grove Dictionary of Music and Musicians*, vol. 9 (London, 1995), pp. 496–498.
56. E. Badura-Skoda, "Alla Turca," *The New Grove Dictionary of Music and Musicians*, vol. 19 (London, 1995), p. 258.
57. H. Berlioz, *Mémoires* (Paris, 1991, Pierre Citron), chapter XXXIX.
58. F. Liszt, "Lettre d'un bachelier ès-musique à M. le directeur de la Gazette Musicale. De l'état de la musique en Italie," in *Revue musicale. Journal des artistes, des amateurs et des Théâtres*, n. 13, 28 mars, VI (1839); in *Artiste et société*, by Rémy Stricker (Flammarion, Paris, 1995), p. 153.
59. Felice Moretti, born at Zanica (Bergamo) in 1791, studied music with organist Davide Bianchi; he had contacts with Gaetano Donizetti and Johann Simon Mayr. In 1818 he entered the Franciscan order of the Minori Riformati and took up the name "Davide da Bergamo"; he was ordained in 1819 and died in 1863.
60. Mischiati, *L'organo di Santa Maria*, p. 211.
61. Sometimes the version "Albanian band" can also be found.
62. Information kindly supplied by Maestro Giosuè Berbenni.
63. Calvi, *Istruzioni*, chapter VII, pp. 14–16.
64. Ibid., pp. 12–13.
65. Castelli, *Norme generali*, p. 17.
66. Pineschi, "L'uso dei registri," p. 11 (n. 13).
67. Since a complete edition of his many works does not yet exist, I have limited the examples to pieces that have been recently published and are readily available in the market.
68. Modern edition, Armelin, Padova, 2003, vol. 1, p. 32; from this point on abbreviated as *15 pezzi*.
69. Padre Davide da Bergamo, *Grande Antologia Organistica* (Armelin, Padova, 2001), p. 47; from this point on abbreviated as *GAO*.
70. Ibid., p. 157.
71. Ibid., p. 194.
72. Castelli, *Norme generali*, p. 32.
73. S.C.R., *Ordinatio quoad sacram musicam*, 25 settembre 1884, art. 11.
74. Under Article 12 of the Order by the Holy Roman Church, the use in churches of too-loud instruments such as the drum, the bass drum, crash cymbals, etc., as well as the instruments used by the jesters, was also forbidden.
75. Parish Church of San Mauro in Izola, built in 1796, San Servolo martire, op. 287, built in 1791, Buje. See G. Radole, "L'arte organaria in Istria," in *L'Organo* VI (1968), n. 1, pp. 56 and 94. Pieve di S. Maria Assunta, Candide (Belluno), op. 367, built in 1797–1799. See V. Giacobbi, O. Mischiati, "Gli antichi organi del Cadore," in *L'Organo* III (1962), p. 54 (n. 9).
76. P.P. Donati, "Emilio dei Cavalieri organologo," in *Informazione Organistica*, New Series, Year XIV (2002), n. 3, pp. 201–202.
77. B. Brumana, G. Ciliberti, *Orvieto, una cattedrale e la sua musica (1450–1610)* (Firenze, 1990, Olschki), p. 81.
78. Pineschi, "L'uso dei registri," p. 11 (n. 13).
79. Calvi, *Istruzioni*, p. 12.
80. Castelli, *Norme generali*, pp. 5–6.
81. Ibid., pp. 22–23.
82. G. Berbenni, "Le officine Serassi. Le maestranze. I miglioramenti e le invenzioni," in *I Serassi. Nella cultura organaria e musicale dell'Ottocento* (Atti della giornata di studio nel trentennale del restauro dello storico organo Serassi di Santa Maria di Campagna in Piacenza, 7 giugno 2008) (Piacenza, 2009, Tip.Le.Co.), p. 80.
83. Castelli, *Norme generali*, p. 12.
84. Calvi, *Istruzioni*, p. 12.
85. The *messa di voce* is an embellishment, used by instrumentalists but mostly by singers, consisting of a crescendo on a single held note, starting from *pianissimo*.
86. Calvi, *Istruzioni*, p. 11.
87. Calvi, *Istruzioni*, p. 9, nota 1.
88. Padre Davide da Bergamo, *15 pezzi*, p. 20.
89. Ibid., p. 41.
90. Padre Davide da Bergamo, *GAO*, p. 6.
91. Ibid., p. 88.
92. G. Berbenni, "Tipologia ed evoluzione degli organi Serassi," in *I Serassi e l'arte organaria fra Sette e Ottocento* (Atti del Convegno internazionale di studi, Bergamo 21–23 aprile 1995) (Bergamo, 1999, Carrara), p. 136.
93. Castelli, *Norme generali*, pp. 14–15.
94. *GAO*, p. 157.
95. *GAO*, p. 194.
96. *GAO*, p. 88.

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