

## CHAPTER FIVE

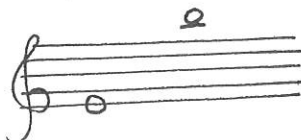
### LESS COMMON INSTRUMENTS

The instruments described in this chapter have not been widely discussed in published literature. All are of special interest to the period under review not simply because of their appearance in scores but because they were at critical stages of development as orchestral instruments. In the case of the tuba curva and buccin, the whole life-span of the instrument falls within the period. In each section below the part that each instrument played in French music will be considered, as well as its physical and aural characteristics.

#### (1) The Galoubet or [Petite] Flûte de Tambourin

This folk-instrument of the recorder family was one of the odder components of the Académie orchestra. It consisted of a very narrow cylindrical tube, probably about a foot in length; the narrow bore caused it to be able to produce no fundamentals at all, but only octaves and fifths. As a result it needed only three finger-holes. The player's alternative hand played a tabor (tambourin).<sup>1)</sup>

French late eighteenth-century sources agree that the instrument sounded two octaves above notated pitch,<sup>2)</sup> and that the written compass was



with the exclusion of b'' flat.

Nevertheless, Grétry wrote up to f''' sharp for the instrument, from which it may be assumed that he intended the galoubet to sound only a single octave above written.

1) Carse/MWI pp.116-117

2) Francoeur/TRAITE, Laborde/ESSAI

The galoubet appears in the following scores for the Académie:

1782	Colinette à la cour	Grétry
1782	L'embarras des richesses	Grétry
1785	Panurge	Grétry
1789	Les Prétendus	Lemoyne
1790	Louis IX	Lemoyne
1794	Toulon soumis	Rochefort
1794	La rosière républicaine	Grétry
1797	Anacréon chez Polycrate	Grétry

Its only appearance in another theatre at this period, so far as surviving scores indicate, was in Berton's Aline reine de Golconde (1803), Opéra-Comique.

The galoubet was chiefly used in instrumental dance movements as a straight-forward means of evoking the countryside; its combination with other instruments was, by contrast, frequently more complex. Grétry in particular scored variously for it, having evidently discovered that its tone could compete with a whole orchestra's if the writing were high. In the first three operas listed he used it sometimes as the only instrument above the oboe, or in conjunction with the flutes. He even doubled it with the piccolos. Les Prétendus continued the tradition of country dances in a "Ronde" of some popularity.<sup>1)</sup> Later operas used the instrument in smaller ensembles, where the tabor could also be employed. Lemoyne's "Ronde" is preceded by a few bars including the tabor, and the dance in Louis IX (act 2, f.124) could readily accommodate an unwritten tabor, being scored only for strings, piccolo, bassoon and trumpets. In Toulon soumis and Aline a tabor is also specified, although only notated in the latter (see example below); in Rochefort's work the galoubet solo forms a second introductory

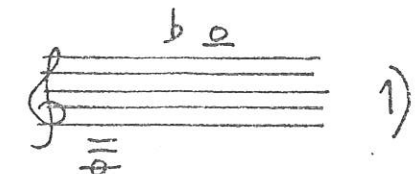
<sup>1)</sup> Clément/DICT

section of some length to the overture, accompanied only by strings.

Such prominence was exceptional, and in Aline the instrument reverted to its traditional place: a chorus (after p.129) of "Paysans joyeux" and the depiction of a shepherd.

## (2) The Cor Anglais

The early history of the cor anglais in Paris is shadowy. GROVE/V and Carse/MWI confirm that in the eighteenth century the cor anglais was fashioned with two keys, like the oboe, in order to supply the same notes, relative to the compass. The compass was smaller than the oboe's: Choron in 1813 gave a sounding range



and Reicha in 1816 gave:

Just as the oboe could obtain c' and d' sharp with the aid of keys, but not sound a satisfactory c' sharp, so the cor anglais possessed f natural and g sharp but not f sharp. This latter lacuna, mentioned by Reicha and Catrufo, is not stated by modern historians. Italian and German instruments were generally bow-shaped; no information has been found on the shape of French instruments of ca. 1800, probably because such did not exist: Triébert's instruments postdate 1812.

The earlier cor anglais was subject to inherent difficulties of intonation; since it was longer than the oboe, "the discrepancy between

1) Choron/TRAITE p.77; Reicha/COURS p.259

theoretical and practical placing of the finger-holes was greater even than the treble oboe",<sup>1)</sup> and therefore its key range was limited. Choron would admit only F, C and G major with their relative minors, but B flat and E flat major are found in the music.

Although one of Gluck's alterations to Orfeo was the substitution of clarinets for cors anglais in the air, "Plein de trouble et d'effroi" (Académie, 1774), the instrument was not unknown in eighteenth-century Paris. In ca.1772 Francoeur listed it without commentary,<sup>2)</sup> pleading lack of contemporary usage; both he and Laborde give it the old name "taille de hautbois",<sup>3)</sup> and indeed Francoeur academically couples it with the much rarer "Hautcontre" and "Basse de Hautbois". Yet, even if not widely known of, there were listed at Versailles in 1780 "Deux hautbois de forêt garnis en cuivre, ayant chacun trois corps, qui servent a hausser et baisser le ton".<sup>4)</sup> According to Marcuse these were "oboe da caccia", generally reckoned to be identical or almost so with the cor anglais.<sup>5)</sup> Laborde, who may have seen the Versailles pair, listed the "Hautbois de forêt" separately.<sup>6)</sup>

When the instruments of the émigrés were listed early in 1795 a cor anglais was found;<sup>7)</sup> I have not attempted to trace the owner. A cor de chasse anglais concerto was performed at the concert spirituel of 30 March 1782 by one Montzani.<sup>8)</sup> These were isolated appearances and the instrument is not even mentioned in Vandembroeck/TRAITE.

1) P. Bate in Grove/V, article, "Oboe", p.160

2) Francoeur/DIAPASON, introduction

3) Laborde/ESSAI, Vol.I p.275

4) Marcuse/VERSAILLES

5) Carse/MWI p.143; Forsyth/ORCH p.221

6) Laborde/ESSAI, Vol.I p.266

7) Bruni: "Inventaire des instruments saisis chez les émigrés", quoted in Pierre/FACTEURS p.398 footnote.

8) Pierre/FACTEURS p.398 footnote.



However, a few years later, a tutor appeared, written by Frédéric Chalon, "Musicien du Théâtre Feydeau et de la Garde des Consuls". Chalon had played oboe at the Feydeau since 1792. His publication contained only music, the usual fingering charts and an engraving of a bow-shaped cor anglais with two keys.<sup>1)</sup> By virtue of the publisher's address and the reference to the Consulate the tutor may be dated 1801-2. This is interesting because, as will be seen in a moment, public performance on the cor anglais has not been traced between 1789 and 1806. The only clue to the anomaly lies in the fact that one of the B.N. copies is headed, "Méthode pour le cor anglais ou Hautbois" whereas the others omit mention of the oboe. This transparent claim may well reflect the Parisian shortage of cors anglais, but such instruments were obviously available from abroad and must have been played.

Reicha was the first to write in French about the cor anglais didactically, when it was no longer rare.

"Il faut toujours le traiter en solo ... On emploie quelquefois deux Cors anglais au lieu de deux clarinettes ou de deux hautbois, mais c'est toujours dans les morceaux d'un genre calme ou religieux."<sup>2)</sup>

Both Reicha and Castil-Blaze (ten years later) confirmed that it was played by orchestral oboists.

The usual account of the hearing of the first orchestral cor anglais in Paris is that this took place in the performance of Catel's ballet Alexandre chez Apelles (Académie, 20 December 1808). The solo part in Cherubini's Anacréon (*idem*, 4 October 1803) is universally said to have been taken by a clarinet.<sup>3)</sup>

Music for the cor anglais had been appearing in Paris for some time before Anacréon in the operatic works of other Italian composers, particularly Paer, and in fact a solo for the instrument is reported to have been heard

- 
- 1) All four B.N. copies were checked. The copy with the odd title-page out is no. L.4967. The address of the publisher, Imbault, was Rue Honoré 200, qualified by "Péristile du Théâtre de l'Opéra Comique rue Favart No.461".
- 2) Reicha/COURS p.259
- 3) i.e. the obligato in Anacréon's air in B flat, "Je n'ai besoin", p.125.

almost two years before Alexandre in a solo in Spontini's cantata celebrating the victory of Austerlitz, L'eccelsa gara, given at the Théâtre Louvois, then home of the Italian opera troupe responsible for Paer's operas. The performance, on 8 February 1806, contained an air "avec accompagnement de cor anglais" which made a favourable impression.<sup>1)</sup>

Unfortunately it has not been possible to trace the player on this occasion: but the musician universally stated to have taken Catel's solo in 1808 was Auguste-Gustave Vogt, made joint oboe professor at the Conservatoire at the age of 21. Vogt, contrary to some statements, was not a member of the Académie in 1809, let alone its "first oboist".<sup>2)</sup> He is not listed there in ALMANACH/II, 1809; Carse, following Bechler/OBOE says that he joined in 1812.<sup>3)</sup> Since he was brought in, Vogt must have been known as a possessor and player of the cor anglais, and there is thus some reason to think that he had been playing it for some time.

Vogt's association with the Imperial circle was close, and it was this circle that promoted the Italian troupe, Paer and Spontini. He was noted as an oboist of the Imperial Chapel from its establishment early in 1806<sup>4)</sup> and was therefore a privileged performer not only for Napoleonic religious music but also for domestic music -- mostly Italian -- and for the music of the court theatre, which opened in the Tuileries in January 1808.

Before L'eccelsa gara the following works including cor anglais music had been performed in Paris:

15 March 1790	La grotta di Trofonio (Salieri)	Monsieur
18 June 1803	La Griselda (Paer)	Italiens (Opéra-Buffe)
4 October 1803	Anacréon (Cherubini)	Académie
5 November 1804 <sup>5)</sup>	Camilla (Paer)	Italiens

<sup>1)</sup> Jullien/PARIS p.272 (repeated in Bouvet/SPONTINI pp.27-8). The work has been lost. The present writer has attempted to trace the work through enquiries to libraries in Bologna, Florence, Milan, Pesaro, Rome and Turin, as well as personally in Paris. The Library of Congress, Washington, were unable to trace the music in any American or Canadian library, and I am most grateful to the Reference Section for their efforts on my behalf.

<sup>2)</sup> e.g. Forsyth/ORCH p.226

<sup>3)</sup> Carse/BB p.75

<sup>4)</sup> Castil-Blaze/CHAPELLE p.173

<sup>5)</sup> Lowenberg/ANNALS gives 15 September, but this is probably a slip or a mistake owing to the false rendering of Revolutionary into Gregorian dates in current numbers of Courrier des Spectacles. Other journals provide a corrective.

and there had probably been others which I have not discovered. It will be noted that as with other features, it was Cherubini who here again formed an effective creative bridge between French music and that of the rest of Europe.

The music in Trofonio is for two cors anglais and bassoon, the accompaniment to a cavatina for tenor. From its reproduction as Ex.40 may be seen the suitability of the cors anglais parts for, say, French horns in F, if not for clarinets. It is highly unlikely that cors anglais were themselves available.

Thanks to a detailed review of La Griselda in CAM, No. 31, 25 June 1803, it may be shown that the instrument substituted for the cor anglais in this piece was the cello. By comparing the items in this review with the score<sup>1)</sup> it is clear that Mme. Georgi sang the title-rôle. The principal instance of cor anglais writing is an obbligato solo to Griselda's act 1 scene and aria, "Quello sguardo". This scene begins with a short chorus, "Poveretta" (f. 133v in the B.M. copy). CAM wrote:

"Si le choeur poveretta la padrona a manqué d'ensemble, tout le reste de cette scène dans laquelle Mad. Georgi joue aussi bien qu'elle chante, a été couvert d'applaudissemens, dont M. Mailly a reçu sa part dans son solo de violoncelle". 2)

The cor anglais part being notated an octave below sounding pitch, in Italian fashion, the cellist would have had even less difficulty than otherwise in his usurping rôle. Two examples may show how well the part lay for such different instruments.

- 
- 1) B.M., Royal Manuscript 22.k. (I, II)
- 2) The reviewer did not mistake the instrument. Mailly was cellist at the Feydeau in 1801 and cellist "accompagnateur" at the Théâtre de l'Impératrice in 1809. (ALMANACH/II)

The image shows two staves of handwritten musical notation. The top staff is labeled 'Inglese Corneo' and 'Adagio'. It features a treble clef, a key signature of one flat (B-flat), and a 2/4 time signature. The music consists of several measures with various note values, including eighth and sixteenth notes, and rests. There are some markings above the notes, possibly indicating fingerings or dynamics. The bottom staff is labeled 'Strings' and shows a bass clef, a key signature of one flat, and a 2/4 time signature. It contains a few notes and rests, with some markings below the staff. Below the string staff, there are two empty staves. The word '[Continuation]' is written between the two staves. The bottom staff is labeled 'Solo' and features a treble clef, a key signature of one flat, and a 2/4 time signature. It contains several measures of music with many notes, including some with accidentals and slurs. There are some markings below the notes, possibly indicating fingerings or dynamics.

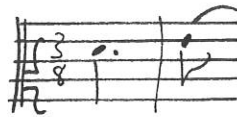
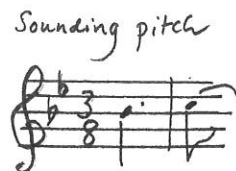
There is far less important music for cor anglais in the accompaniment to the first aria of act 2 (f.18 in the B.M. copy), in which this instrument plays no greater part than either the flutes or clarinets. The absence of written oboe parts in the aria means that these players could have substituted. CAM does not mention the aria at all.

In the case of Camilla no comparable substitution may be directly demonstrated; contemporary reviews make no mention of the orchestra.<sup>1)</sup> Nevertheless, the evidence suggests that the problem might have been avoided with even less trouble: Paer himself had provided an alternative aria to that containing the cor anglais. His autograph of portions of acts 1 and 3<sup>2)</sup> contains three versions of this aria, "Cava parse", from act 3. Only one uses the cor anglais. It is not this version but another, labelled "Renouvé pour Mme. Festa" which is found in a copy score<sup>3)</sup> and the printed German piano score by C. Cannabich dating from 1799.<sup>4)</sup>

- 1) i.e. CAM, COURRIER, JOURNAL/D
- 2) B.N. MS.8254
- 3) B.N. D.12031 (I-IV); appears to be French in origin
- 4) Bonn, Simrock: plate number 94. Date according to O. E. Deutch, Musikverlags Nummern, Berlin, 1961.

That the obligato in Cherubini's Anacréon was played on the clarinet seems likely; no separate orchestral material survives and the clarinet part-book contains the solo, albeit labelled "Cor anglais seul ou clarinette". But the curious notation of this part possibly indicates that the composer did seriously expect the desired instrument to be available before long. Whereas in every other number in the work the part-book indicates a clarinet in C, for "Je n'ai besoin" there is a B flat instrument. Flatness of tonality was not the criterion here, for the clarinet solo in G minor in the act 2 aria, "Ah, sois touché" and other music in B flat and E flat, is for clarinet in C.

Regarded as a notational problem this anomaly is explicable in terms of a part designed either for clarinet or for cor anglais. Notation for the latter was varied at the time, as Forsyth wrote.<sup>1)</sup> Italians often wrote the part an octave below sounding pitch, and the French used the mezzo-soprano clef, which the soloist read in the treble clef. Cherubini's device combined these conventions, as the opening notes of the solo may show.



Cherubini's part, as read by potential cor anglais player, but to be transposed up an octave

In considering the French writing for the cor anglais, a far greater concern for combining its particular tone with the orchestra is evident by comparison with either of the Italian examples. The chief works are Anacréon and Catel's Les Bayadères (Académie, 8 August 1810). Cherubini conceived the instrument as expressing most appropriately the greatest lyrical colour possible within <sup>a</sup> neo-classical language. The Greek lyric poet tastes the wine of Naxos; the song he is then inspired to sing is

<sup>1)</sup> "This perhaps explains what they did at rehearsals in those days." Forsyth/ORCH p.221. It may be mentioned here that the cor anglais in G reported by R. Meylan (AM XL II, 1970, Fasc. I-II, p.73) is not found in Paris before 1810.

that which contains the cor anglais, whose reedy quality evokes the aulos and whose timbre befits the ageing man. The richness of orchestral writing is shown in Ex. 42. Prominent are the complementary reed instruments, whose threads of sound intertwine to considerable effect with the principal soloist. The violas (rather than higher strings) play a complementary rôle to the harp, and are placed in the mellowest register. The whole ritornello is conceived as a tableau of sound, without any trace of soloistic figuration; that the clarinet would be a singularly inferior substitute is obvious.

The more straightforwardly mournful character of the cor anglais is exploited in similarly tableauesque manner in Les Bayadères, an oriental subject. <sup>(Ex. 43)</sup> A trio of womens' voices is doubled by the cor anglais and two clarinets; no soloistic treatment remains. Opposed to this is a broad but desolate counter-motive played in unison by cellos and violas, the oscillating motion of which seems to enchain the treble melody. If the model was Gluck's "O malheureuse Iphigénie", Catel saw the cor anglais not as corresponding to the 'visionary' oboe but paradoxically a far more classical outline.

Reicha's characterisation of "genre calme ou religieux" is clearly uppermost in these examples, but Alexandre chez Apelles makes the instrument convey romantic melancholy, although still in a classical setting. The scenario of the ballet <sup>1)</sup> reveals the author's and the composer's intentions:

"Apelles, resté seul, dévoile le portrait de Campaspe; l'amour l'a si bien gravé dans son coeur, que de mémoire il en a tracé tous les traits: il se laisse aller aux sensations qu'il éprouve, et fait voir la passion qu'il ressent ... " (Scene XI)

Ex. 41 shows the opening bars. Although containing none of the complexity

1) B. de l'Op., Rés. 821

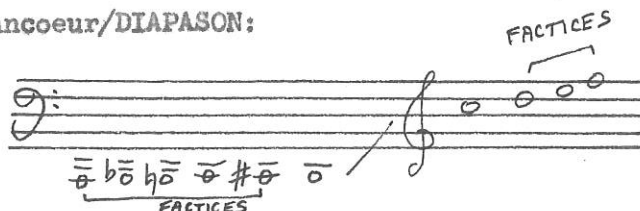


of Cherubini's setting, there is again no trace of fioriture but only the Flaxmanesque simplicity of a tableau in outline.

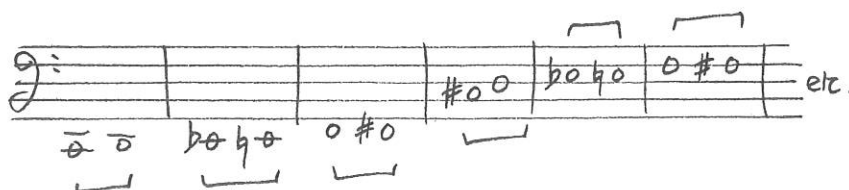
### (3) The Serpent

The serpent, as commonly used under Revolution and Empire, appears from the evidence of Hardy, ca. 1810,<sup>1)</sup> to have been used in its traditional form without keys. Although contemporary experiment made it inevitable that some serpents should be fitted with keys from the early 1800's<sup>2)</sup> the problems of intonation peculiar to the instrument remained equally unsolved after this time as before.

The serpent's true range was from D to around c''; the following table is given in Francoeur/DIAPASON:



Morley-Pegge pointed out that written authorities hardly ever agreed on either the range or the fingering of the serpent since so much depended on the player. Not only the partials of each series but even adjacent notes were played with the same fingering according to Hardy/METHODE:



The "tons factices" in Francoeur's table were likewise obtained by lip pressure alone. Some notes sounded louder than others and equality of tone was regarded as the player's aim.<sup>3)</sup>

- 1) Hardy/METHODE
- 2) GROVE/V, article "Serpent" by G. Morley-Pegge, p.716
- 3) Hardy/METHODE p.5

The sound of the serpent as played in the eighteenth century was said by Francoeur to be "nourris et volumineux ... dans les sons bas"<sup>1)</sup> and this agrees with modern devotees who have written on the subject. Morley-Pegge characterised the upper register as "weak and rather windy"<sup>2)</sup> and Baines has described the tone as "considerably louder than the bassoon's"; the present writer found it to be generally softer than this, even in ensemble work. The large numbers of serpents used in wind ensembles around 1794 do not suggest the possession of an extraordinarily large sound. Various types of bass-horn succeeded the serpent in the nineteenth century since the former possessed "plus d'intensité, se prolongent et se modifient plus facilement."<sup>4)</sup>

In the Diapason général Francoeur advocated the inclusion of the serpent in the concert or theatre orchestra, and Castil-Blaze thought that they were in the Académie by 1776<sup>5)</sup> but no modern writer has accepted this claim. There is no proof that they were played regularly elsewhere than in churches before 1791. As late as 1780 Laborde stated, "il est aujourd'hui relégué dans les Cathédrales".<sup>6)</sup> The first definite appearance of the serpent in a concert orchestra was in Rochefort's ballet, Bacchus et Ariane (Académie, 11 December 1791); it was also incorporated into the overture of Méreaux's Jocaste at the same theatre at the end of the same month. It is therefore probable that experimental inclusion of the serpent had taken place previously. It never appeared in the lists of the Concert Spirituel, but may well have been used in Désaugier's La prise de la Bastille in Notre-Dame, performed on Bastille day 1790 and 1791, and in Gossec's symphonic Invocation (P.9), 11 July 1791. Its part in the latter's Te Deum

- 
- 1) Francoeur/DIAPASON
  - 2) Baines/INSTRUMENTS p.304
  - 3) Baines/WOODWIND p.308
  - 4) Castil-Blaze/DICTIONNAIRE, article "Serpent".
  - 5) Castil-Blaze/ACADEMIE, Vol.II p.349
  - 6) Laborde/ESSAI, Vol.I p.274



(1790) has been mentioned in chapter 3.

The only other appearance of the serpent in the music of the Académie was in Candeille's La patrie reconnaissante (1793), but as two serpent players were listed for this theatre in SPECTACLES 1793 they were probably used in other works to assist the bass-line, the function that they exercised in the other Académie scores named above.<sup>1)</sup>

A serpent player was listed at the Théâtre des Palais-Variétés 1793-4, but no music survives from this period for this theatre. The only orchestral score from the end of the decade to specify a serpent was Berton's Montano et Stéphanie (Favart, 15 March 1799), in numbers 9, 11 and 12. There is evidence neither in ~~almanachs~~ nor in scores that the serpent was found in theatre orchestras between 1800 and 1810.<sup>2)</sup> They may have been, orchestrally speaking, a victim of the Concordat. No teacher of the serpent appears ever to have been employed at the Conservatoire.<sup>3)</sup> This is unexpected, but suggests that bassoonists could double without excessive difficulty and that opinion prevailed that the serpent was musically inadequate.<sup>4)</sup> Sarette's official speeches dwell on the development of new instruments and on improvements to others, but the serpent passes without mention.

After the period of use in wind ensembles and at the Académie, the part in Montano et Stéphanie raises different questions. Unless the serpent was being used at the Favart as an unwritten adjunct, Berton's composition was unconventional and indicative of new attitudes towards orchestration.

The operatic situation parallels the wedding rejection scene in Shakespeare's "Much Ado about Nothing". Berton employs the serpent in a "Marche religieuse" for the entry of the bride and her father, in a

- 
- 1) A serpent is also specified in act 1, scene II of Langlé's unperformed Soliman et Eronime, 1792.
- 2) Four were used in The Creation in 1800; Carse/BB, after Castil-Blaze/ACADEMIE
- 3) Pierre/CONSERVATOIRE p.407; but they were certainly envisaged in the draft plans; c.f. Pierre/SARRETTE p.118
- 4) Evidence for its misuse in France is provided in GROVE/V p.714

dramatically ironic chorus of joy, and in an ensemble with chorus incorporating Montano's refusal to accept Stéphanie's hand. The serpent was obviously intended to assist the musical evocation of a church ceremony, but the context demanded and received serious treatment.<sup>1)</sup>

In the choruses and ensemble the serpent is treated quite traditionally in acting as a support to the bass line, although even here Berton is occasionally prepared to give the true bass-line to the newcomer.

(p.147) vlc, cb

Serpent

This shows independence of treatment (the serpent has a staff to itself); but the preceding march is eccentric by comparison. Ex.29 shows part of this piece with its curious instrumentation and distribution. The regular phrasing and movement place it musically in the line of Gluck, but the quasi-academic counterpoint and slender texture show that Berton was aiming at a kind of musical primitivism. Instrumentation is the means by which this is made manifest, possibly incorporating an allusion to the sound of a church organ. The effect is quite different to that of the staged marches of five or six years before, which reflect the sonorous idiom of outdoor performances. Bassoon and clarinet tone is conspicuous by its absence; instead the hollowness of the double-bass and serpent is deliberately exploited, and uncertainties of intonation deliberately exposed. The result is a sophisticated use of instrumental suggestion.

<sup>1)</sup> We may note that the former climate of rigorous anti-clerical, anti-aristocratic artistic proscription had abated; Guérin's popular painting, "The return of Marcus Sextus" and Méhul's formerly prohibited Adrien both went before the public in 1799. See Rosenblum/ART p.90.

After 1799 the absence of the serpent from the massed forces at Napoleon's coronation and from the ensemble of the Imperial chapel suggests official dissuasion; evidence may yet come to light to verify the possibility.

#### The "Contra-bassoon"

The rarity of the true contra-bassoon in France was such that Francoeur/DIAPASON as well as Choron's revision of this specifically excluded it. There is no proof that some were used in the first Paris performance of The Creation.<sup>1)</sup> Only by 1825 were they used in military ensembles.<sup>2)</sup> Literary references to the contra-bassoon indicate straightened forms of the serpent, such as Frichot's bass-horn or the "Russian bassoon"; Castil-Blaze has in 1825, "Le contre-basson, ou serpent droit ..."<sup>3)</sup> and Kastner/MANUEL, 1848, portrays a bass-horn under the same heading.

#### The Bass-horn and Basse-trompette

Sarrette's speech at the Institut concert of 20 November 1793 mentioned a "contre-clairon" then in the process of development by (Jean-Marie) Hostié; but Hostié died in May 1794 and the project was seemingly abandoned. Gossec's Concertante (P.2279) or a similar work of the same period was said by the Journal de Paris to have incorporated this instrument.<sup>4)</sup> No music survives, but it is likely to have been for an early type of bass-horn.

L. A. Frichot's bass-horn of the early 1790's has not been traced in scores, and although his later "basse-trompette" was purchased by the Conservatoire between 1807 and 1811<sup>5)</sup> it received no official support at the time and is likewise not found in scores. Imperial military music

1) As stated in Bragard/INSTRUMENTS p.194

2) Langwill/BASSOON p.121

3) Castil-Blaze/DICTIONNAIRE, article "Serpent"

4) Pierre/HYMNES p.846

5) Pierre/CONSERVATOIRE p.465

appears to have been the testing-ground for these instruments and others similar.<sup>1)</sup>

(4) The Buccin and Tuba Curva

Literary descriptions<sup>2)</sup>

These instruments, of which no specimen survives, were constructed in order to assist popular festivals both visually by forming part of the neo-classical imagery of costumes and emblems, and aurally by providing increased volume in the treble and bass registers of wind ensembles. The buccin (called at first, "petite trompe antique" by Gossec) was the smaller of the two; its larger partner (similarly, "grande trompe antique") was generally known as both tuba "curva" and "corva". In Jocaste (Académie, 30 December 1791) Méreaux entitled the treble instrument "Buccin Trombe". More popular references are vague in terminology, such as that found in Chamfort/

TABLEAUX p.202:

"Une troupe de musiciens exécutoient sur divers instruments étrangers une marche religieuse".

The material of construction must have been an alloy. Both instruments were conical, without finger-holes or mechanisms. (Their exact shape is discussed fully below, page 240.)

The tuba curva had separate mouthpieces, probably of a trombone type, but probably not crooks. An invoice to the Institut of 22 July 1794 includes "2 embouchures de tuba corva".<sup>3)</sup> Jocaste omits trumpet parts from the score when the newer instruments play, so that it seems intended that trumpeters, in any case accustomed to doubling on trombones, should have played them.

- 
- 1) Such as the "Russian bassoon" and "Serpent Piffault"; GROVE/V, articles "Serpent", "Russian bassoon".
  - 2) It must be established that the "Buccina", as defined in GROVE/V, an instrument built as a trombone but with a dragon's head for a bell, is quite different from the original "Buccin". Already in 1813 Choron/TRAITÉ confuses the two, to be followed in this by Castil-Blaze/DICTIONNAIRE and most modern dictionaries.
  - 3) Pierre/CONSERVATOIRE p.113

The buccin had crooks for different keys, and so must also have had separate mouthpieces:

"Il n'a<sup>que</sup> trois notes, mais avec l'avantage d'une construction qui permet de changer de ton". 1)

The instruments were first heard publicly at the great ceremony of the re-burial of Voltaire in the Panthéon, 11 July 1791.<sup>2)</sup> The procession from the Champ de Mars, lasting many hours, was designed by J-L. David and became an archetype for such occasions. David himself has been credited with the design of both instruments<sup>3)</sup> but Sarrette, in the same speech, suggested that their creation was not effected by one man.

"Sa [i.e. the tuba curva] forme donnée et les dimensions calculées par les compositeurs et les facteurs réunis, on est parvenu à produire le son qui manquoit ... "

Both instruments are found extensively in wind ensemble music to at least 1796, but the engraving opposite page 244 unexpectedly depicts them as late as December 1804 in military music. Only five other uses are noted. Of the three works concerned by Méhul only Joseph (1807) has been generally mentioned; but there are tuba curva and buccin parts in the Chant National (1800) and a tuba curva part in the music for Chénier's Timoléon (1794). The first theatrical piece to include the two instruments (Jocaste) appears not to have been linked to published discussions of orchestral resources.<sup>4)</sup> Contemporary with Méreaux's opera and written for and accepted at the Académie was Candeille's Ladislav et Adélaïde. Although never performed it was copied and the orchestral parts prepared. A "tromba buccin" in E flat and "tromba curva" in C appear in the autograph of act 3, f.103.<sup>5)</sup>

The Chronique de Paris, 14 July 1791, reported that the larger instrument gave the sound of "six serpents", the smaller that of "quatre

- 
- 1) Sarrette's description, reported in the Journal de Paris: from Pierre/SARRETTE p.48.
  - 2) Pierre/HYMNES p.209
  - 3) Lindsay/HERO p.68
  - 4) B.N., M.S.2349 (autograph). The copy score of the B. de l'Op. omits them, but only examination of the part-books would conclude the question.
  - 5) The "tromba buccin" is actually noted in Lajarte/CATALOGUE, Vol.II p.270f; but I discovered the reference too late to analyse its music with the rest.

demi-cors".<sup>1)</sup> Sarrette in the same speech as previously quoted accredited the buccin with "un son absolument nouveau et terrible ... il peut s'entendre à un quart de lieue." The fact that he did not describe the tone of the tuba curva in comparable terms is perhaps significant. The buccin, a shorter and more narrowly conical instrument, may well have given a far more raucous tone. In the Chant National (written for indoor performance) Méhul differentiated between the sounds of the two instruments, including the buccins only briefly during a cumulative orchestral section (see Ex.49) but giving the tuba curva more extended music. Altogether more music survives for the tuba curva.

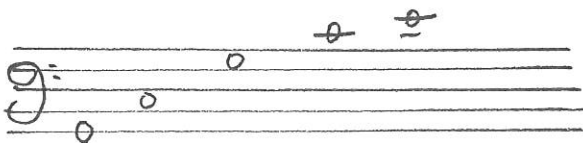
#### Capability and size

Although some speculation has taken place concerning the notes which the tuba curva and buccin produced, such attempts have remained inconsequential because based on historical inaccuracies in the form of instruments (see page 241) or engravings, I have therefore undertaken a survey of all the surviving music composed for each instrument. This was almost always written, like other brass music, in C. The musical context served to identify the key in which the tuba curva or buccin played.

Tuba curva: Eighteen pieces containing tuba curva music have survived, together with one part possibly from a now lost piece by Eler.<sup>2)</sup> Two of the pieces, Gossec's Marche lugubre (P.2270) and Méhul's wind Ouverture (P.2286)<sup>3)</sup> contain music for tuba curvas in three and two different keys respectively, so that in all we have 21 parts which may be set in context. Of the 21, 14 are for tuba curva in C, four for tuba curva in B flat, two in D and one in A.

The only notes written for the instrument in C were:

- 
- 1) Pierre/HYMNES p.212
  - 2) Included with the parts to Eler's only listed Ouverture for winds, P.2322, (B.N. H2 130A), and labelled "Ouverture d'Eller".
  - 3) Tuba curva and buccin parts first noted in Dudley/HARMONIE p.17



The minimum number of notes in any piece was one, the maximum four (one example of each case); the frequency of distribution of the different notes was as follows:

G	c	g	c'	e' 1)
1 piece	10 pieces	12 pieces	13 pieces	1 piece

This suggests that the fundamental was low C, and that the G above was situated below the second partial, being obtained through one of the commoner accidents of acoustics. The three most used notes may thus be seen as adjacent partials. Taking from chapter 2 the assumption that in 1790 Parisian a' equalled 415 cycles per second, it may be calculated that Parisian C equalled 61.7 cycles.

For an open pipe the length in feet may be expressed as  $\frac{1100}{2n}$  where n equals the vibrations per second.<sup>2)</sup> This gives a length in this case of eight feet eleven inches.

The four examples of writing for tuba curva in B flat contain these notes:<sup>3)</sup>



The incidence of each note is

c	g	c'	e'	g'	e''
2 pieces	3 pieces	1 piece	1 piece	1 piece	1 piece

1) The notes in the single Eler part are c' and g.  
 2) Buck/ACOUSTICS p.83. But owing to other factors the actual instruments would have been a shorter than 8'11". The same consideration applies in subsequent calculations.  
 3) Gossec, Peuple, éveille-toi (P.8), Hymne à l'être suprême (P.47), Marche lugubre (P.2270) and Méhul's Ouverture (P.2286)  
 (A. Baines)



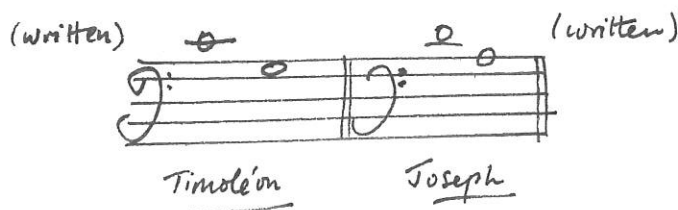


Plate 78 from P.S. Bartoli, Colonna Traiana



Only Marche lugubre contains  $g'$  and  $e''$ ; the copy score mentioned in Pierre/HYMNES has disappeared since 1904, so the parts could not be verified but merely taken from Pierre's edition in full score in Pierre/MUSIQUE. On balance it appears that Gossec notated the parts an octave higher than usual in this early piece, and that the fundamental of the tuba curva in B flat was BB flat, a tone lower than the instrument in C. The instrument therefore sounded a tone lower than written and would have been ten feet long.

Méhul was the only composer to write for tuba curva in D. It occurs in two stage works: Timoléon and Joseph. On both occasions it was called simply "tuba". The manner of writing was as follows:



In the absence of further information, conclusions about this instrument cannot be definite. Perhaps Méhul was able to have an instrument with the fundamental D made specially (or adapted) for Timoléon and used it again later on. Its absence in the meantime may be partially explained because most wind ensemble pieces were in B flat, C or F, the keys favourable to the principal winds.

The tuba curva in A appears solely in the problematic Marche lugubre, where it has the single note  $c'$ . Since this probably sounded as  $a$ , it might have been played on an instrument in D, the one to be used by Méhul.

It is to be noted finally that the only notes for two tuba curvas ever demanded simultaneously were the octaves  $G - g$  and  $c - c'$ ; never the available third, fourths, fifth, sixth or their compounds. Such intervals must have sounded too out of tune.



*Cor de Chasse.*  
Page 223.

*Trompette Chinoise.*  
donnée par Bonnani.

*Buccin.*  
Page 222.



*Trompette courbée.*  
*Tuba Curva.*  
Page 238.

*Petite Trompette courbée.*  
donnée par Bonnani.

*Trompette courbée.*  
Page 238.

*Trompettes Antiques 2.*



*Trompette des Romains  
nommée Tuba directa.  
Page 232.*

*Trompette des Hebreux.  
Page 231.*

*Trompette droite.  
Page 232.*



*Trompette à plusieurs morceaux.  
Page 233.*

*Lituus.  
Page 232.*

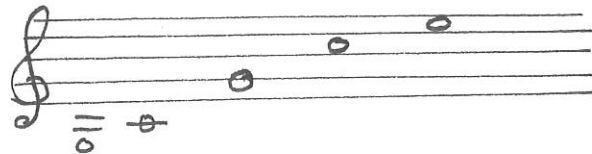
*Trompette double.  
Page 233.*

*Mirys, del.*

*Cheruv, Sculp.*

Buccin: Only twelve pieces remain that include the buccin, and one fragment, possibly by Eler. The tone, as already suggested, may have been too shrill to control; in any case the buccin, unlike the tuba curva, had an existing instrument of parallel tessitura and power in the trumpet. The buccin possessed crooks; there are however no extant examples of buccins changing key in the course of a piece, or of the simultaneous use of two buccins in different keys. As with the tuba curva, the buccin was only ever required to play octaves simultaneously -- other intervals were not admitted.

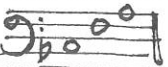
The buccin was used in three different keys. The most frequently encountered was F; a few manuscripts actually designate "en Fa".<sup>1)</sup> The only notes written in this key were:



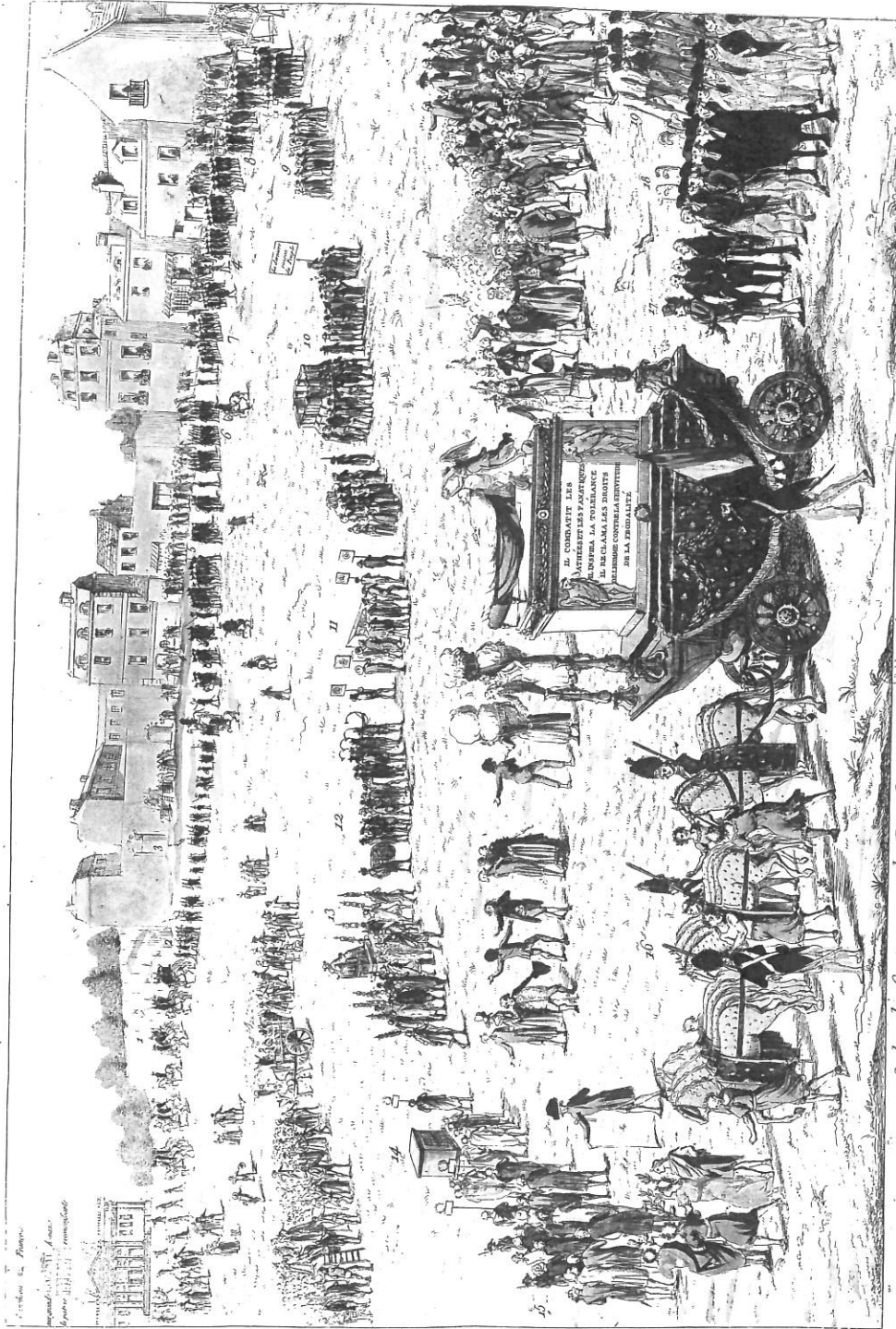
Six pieces of music are involved, and the distribution of notes was as follows:

g	c'	g'	c''	e''
1 piece	3 pieces	6 pieces	3 pieces	1 piece

This again suggests that the unique g was played as an artificial note (not as the third partial) and that the three most frequently used notes were the adjacent 2nd, 3rd and 4th partials of a series whose fundamental was either f or F. It may be calculated as before that the buccin in F was either three feet four inches long, and sounded a fourth above written, or double this length and sounded a fifth below. From the musical contexts and iconographical evidence the former case appears the more likely.<sup>2)</sup>

1) As is the buccin part in Méhul's L'hymne des vingt-deux (P. 109):  not included in the following calculation.

2) Even if the buccin were twice as long, if it is assumed that its written g formed the third partial of the harmonic series on (low) F the resulting music would still sound a fourth above notated. This is an essential point. Dudley/HARMONIE p. 120 assumes without explanation the unlikely proposition that the buccin sounded a fifth lower than notated.



**Ordre du Cortège pour la Translation des Manes de Voltaire le lundi 21 Juillet 1791**

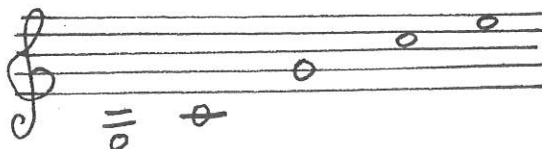
1. Un Démonstrateur de la capitale avec ses Trompettes et son tambour.
2. Un Drapeau de la capitale sur lequel est écrit le nom de la Ville.
3. Le Drapeau de l'Assemblée Nationale.
4. Corps de Tambours.
5. Les Démonstrateurs des Colleges.
6. Corps de Gardes Nationales et de Fiers de la Ville.
7. Démonstrateur des Clubs des amis de la Constitution.
8. Démonstrateur des Clubs, Bénévoles du Département.
9. Corps des Clubs, Bénévoles du Département.
10. Corps des Clubs, Bénévoles du Département.
11. Les Démonstrateurs des Clubs, Bénévoles du Département.
12. Les Démonstrateurs des Clubs, Bénévoles du Département.
13. Les Démonstrateurs des Clubs, Bénévoles du Département.
14. Les Démonstrateurs des Clubs, Bénévoles du Département.
15. Les Démonstrateurs des Clubs, Bénévoles du Département.
16. Les Démonstrateurs des Clubs, Bénévoles du Département.
17. Les Démonstrateurs des Clubs, Bénévoles du Département.
18. Les Démonstrateurs des Clubs, Bénévoles du Département.
19. Les Démonstrateurs des Clubs, Bénévoles du Département.
20. Les Démonstrateurs des Clubs, Bénévoles du Département.
21. Les Démonstrateurs des Clubs, Bénévoles du Département.
22. Les Démonstrateurs des Clubs, Bénévoles du Département.

Sur un tour le 26 Juillet 1791. A Paris chez Baylet M. de la Harpe, rue St. Jacques au coin de celle de Valenciennes. Il vend séparément le Drapeau pour

"Ordre du Cortège pour la Translation des Manes de Voltaire"

The buccin in E flat appears three times: in Gossec's Peuple, éveille-toi (P.8), Hymne à l'Être suprême (E.47) and Méreaux's Jocaste.

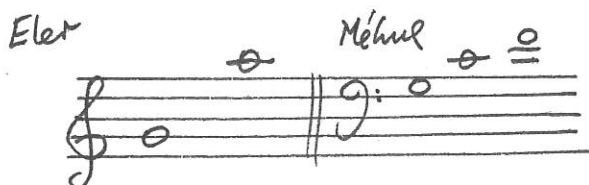
The notes involved were:



1 <sup>g</sup> piece      2 <sup>c'</sup> pieces      2 <sup>g'</sup> pieces      3 <sup>c''</sup> pieces      2 <sup>e''</sup> pieces

from which we may judge that the production of notes was akin to that found in the buccin in F. If the fundamental was e flat, the necessary length of tube (calculated as before) was three feet nine inches. The crook used to convert the buccin in F was thus about five inches long. The instrument would have sounded a minor third above written.

Two less conventional notational examples remain to be described; that of Méhul in the Chant National and that of Eler in his Ouverture (P.2322).



The Eler example may perhaps be explained by postulating an instrument with the fundamental (low) c, 4 feet 5.2 inches long. The note g in the Chant National appears dubiously on pp.76 and 78 in the first orchestra only, whereas the word "tuba" in the second orchestra at the same place against the same note cancels the requirement for the buccin. I have assumed the mistaken omission of this word in the first orchestra (despite the double tails). Méhul's notation may thus be seen as for the normal buccin in F, but indicating the sounding pitch. It is probable that this was done to avoid confusion at a time when the buccin was less frequently





"Translation de Voltaire au panthéon français"

used than hitherto. The same process has been done with the "tuba" part in the later example of Joseph (1807).

### Musical rôle

The tuba curva and the buccin were only usable in loud music, but neither was confined to slow music, as was the tam-tam in its early history. In examples such as Méhul's Ouverture an elementary degree of rhythmic agility was required.

*Allegro vivace*

Buccin  
(F)

ch.

In wind ensemble music the buccin and tuba curva played therefore in the tutti passages in the same way as the trumpet did in orchestral music. (The trumpet, in turn, had a far more varied part to play in wind music.) The tuba curva generally doubled the bass at any given moment. The frequency of inclusion of either instrument depended on the breadth of style. Peuple, éveille-toi demands almost continuous participation by four players at least, producing the energetic effect required. Cherubini's Hymne à la victoire (P. 115),<sup>1)</sup> with more varied instrumental combinations, incorporates the tuba curva only at cadential points. No composer wrote solo passages for either instrument.

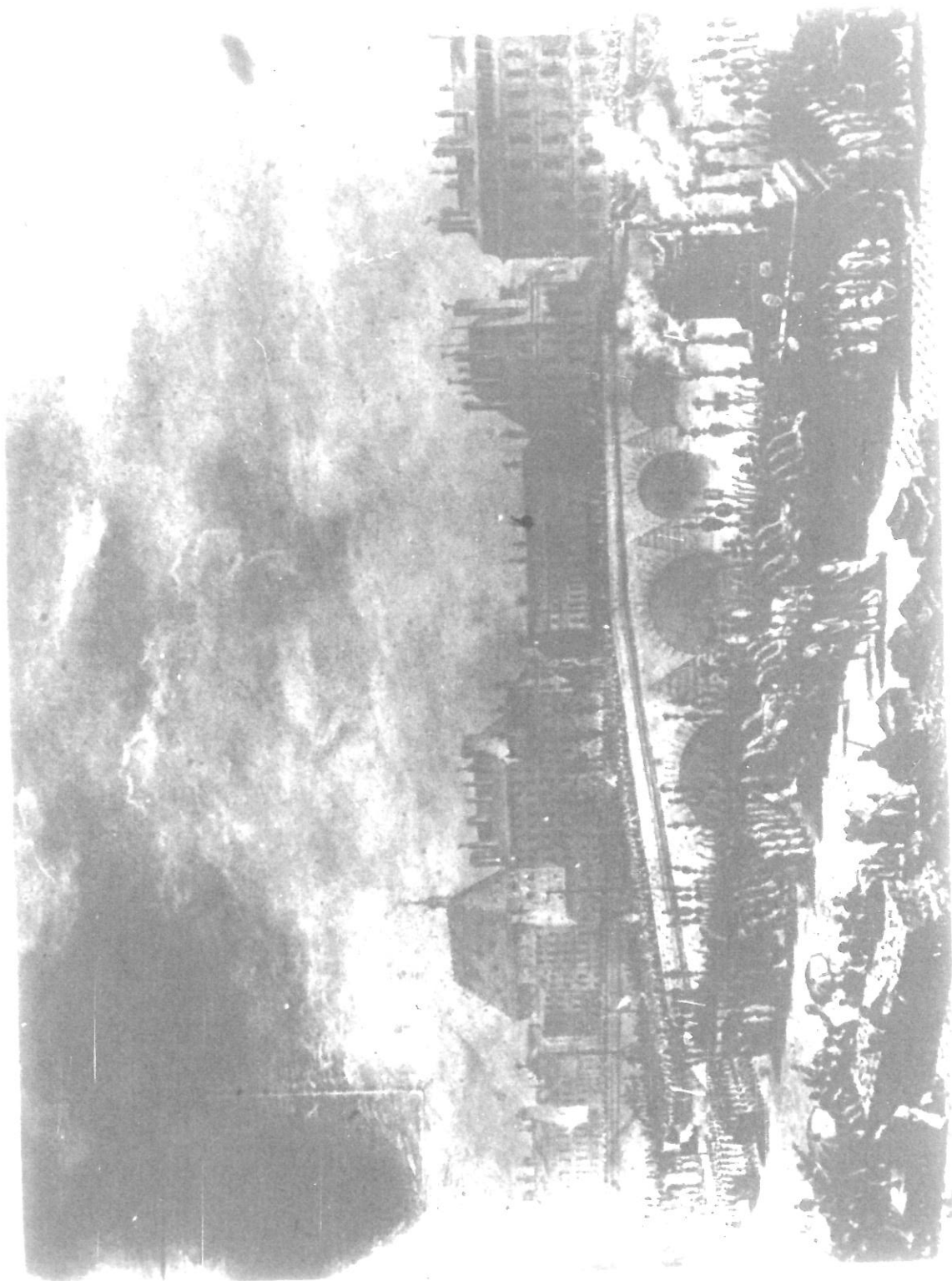
The first examples of the use of these instruments in the conventional orchestra mark climactic points in the tutti. In act 2 scene III of Jocaste a priest and acolytes make libations at the altar of Apollo. Before Oedipus is pronounced guilty,

"La musique bruyante annonce le <sup>u</sup>corroux des Dieux".<sup>2)</sup>

1) Both pieces are reproduced in score in Pierre/MUSIQUE

2) Libretto, B.N., Th<sup>B</sup> 1963





"Translation des restes de Voltaire...Le cortège au pont-royal"

Ex.48 shows this passage. The burning of the palace in Act 3 is shown in Ex.13. In the chorus, "Soleil, sacre flambeau" in Timoléon the culmination results in an extreme clash:

The Chant National and Joseph are more imaginative in treatment. The orchestral passage in the first describing the mysterious emanation of glorious spirits of the past incorporates notes on both instruments answering one another from opposite orchestras, and calls for some dynamic variation. (See also Ex.49 for full score.)

In act 2 of Joseph Méhul transformed the limitations of the tuba curva by making the simple three-note figure which opens the chorus p.116 a recurring musical motif that is also stated by other instrumental groups; Ex.50 shows the tuba curva figure. This is always scored together with horns and trumpets so that the composer is building the orchestration round the technical peculiarities of the new instrument instead of scoring for the latter in a haphazard way.<sup>1)</sup>

#### Design

Through the discovery of several engravings from the Revolutionary

<sup>1)</sup> The "tuba" may have been intended to imitate the sound of stage instruments. Stage instructions to act 3 specify, "Au côté opposé sont des musiciens jouant des divers instrumens connus dans ce temps-là".



"La Fontaine de la Régénération sur les débris de la Bastille"

period I have been able to arrive at more broadly based conclusions than those already published.<sup>1)</sup> Constant Pierre preferred the evidence of an instrument discovered by him in a private collection in 1893, and subsequently deposited at the Conservatoire. It is described in Pillaut/MUSEE, no. 1414, but no longer appears to be in the Conservatoire museum. The length of this specimen (5 feet), the U-shape described in Pierre/HYMNES p. 211 and its harmonic series on A (about B flat in 1790) conflict so severely with the engravings and with the statistical evidence adduced above that it cannot be regarded as an authentic specimen.<sup>2)</sup> Pierre made no analysis of the music for tuba curva and buccin which he had so painstakingly documented.

The discussion in Dudley/HARMONIE is not based on musical analysis or existing instruments but on engravings (ii), (v) and (vi) below. That by Prieur is almost certainly too fanciful to be of great use, and the conclusions vitiated as a result.

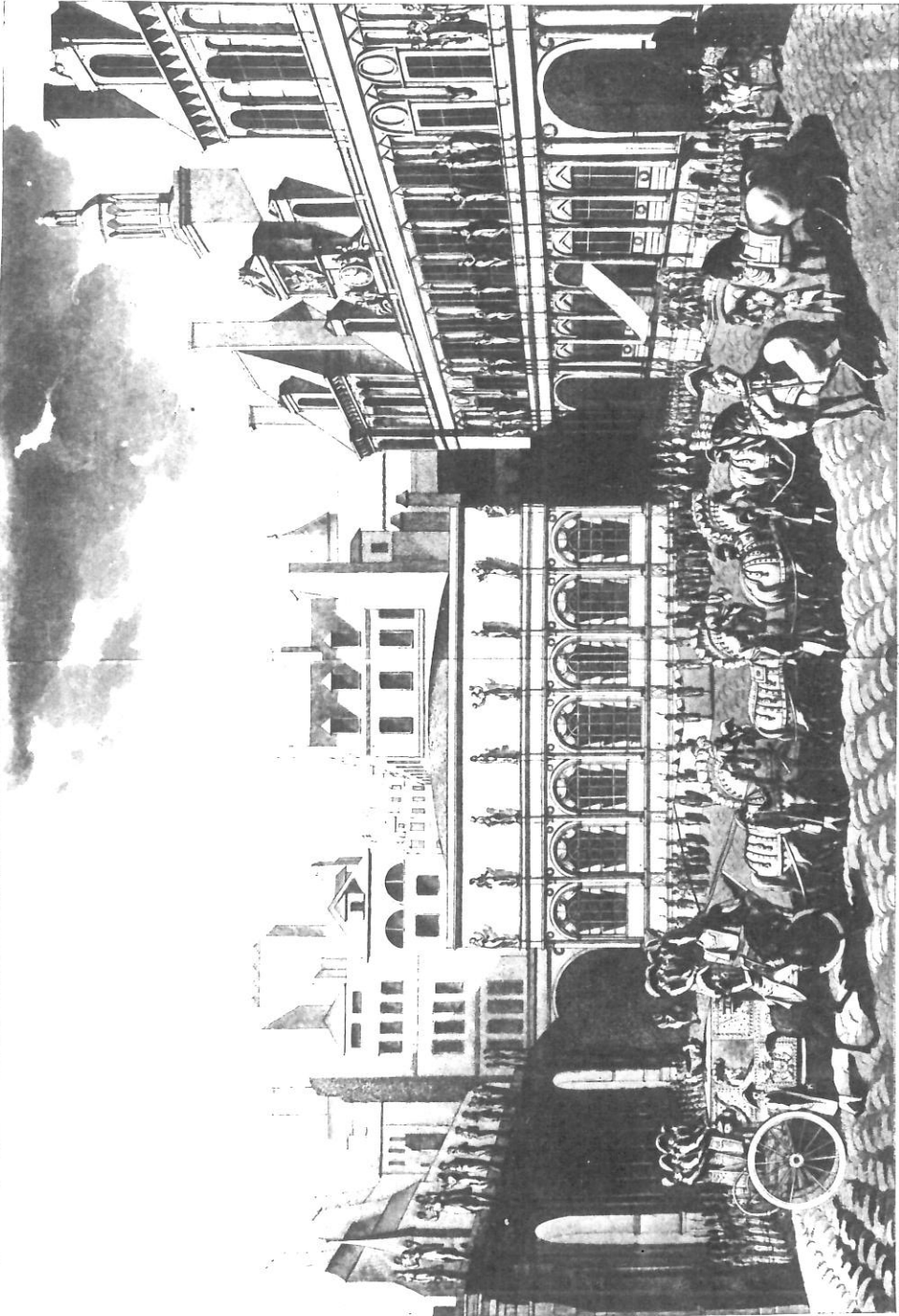
The relevant engravings (see opposite page<sup>S</sup>) may be listed in chronological order of subject.

- (i) Plate 78 from Bartoli/TRAIANA, showing the only two kinds of trumpet portrayed on the Trajan column.
- (ii) Plates from Laborde/ESSAI showing the straight "Hebrew" trumpet and the G-shaped "tuba curva".
- (iii) "Ordre du Cortège". Bibliothèque Nationale (Estampes), Collection de Vinck, Tome 24, no. 4171. Shows the Voltaire procession (11 July 1791) and is dated 26 July 1791. Anonymous.
- (iv) "Translation de Voltaire au panthéon français". (Detail)

---

<sup>1)</sup> Descriptions in Marcuse/Dictionary and Sachs/Lexikon are unreliable. The "tuba curva" in the Paris Conservatoire described in Chouquet/MUSEE is a copy of a Pompeian "lituus" discovered in 1857. (Information kindly furnished by Dr. H. A. Fitzpatrick). The details were copied into Jaquot/Dictionary.

<sup>2)</sup> The entry in Marcuse/Dictionary is based on this report. A similar instrument is now at the Conservatoire museum, 5 feet 1 inch long.



**FÊTE DU SACRE ET COURONNEMENT DE LEURS MAJESTÉS IMPÉRIALES.**

Vue de la Place de Grève de l'Hôtel de Ville et des deux mâts élevés sur cette place à l'occasion de la Fête donnée par la Ville de Paris à l'occasion de la Couronne de Louis-Napoléon, le 28 mai 1854. M. le Maréchal Gouverneur de Paris, à la tête du Corps municipal, etc. etc. est sur le premier plan à la réception.

Peinture sur bois, par M. de la Haye.

1854.

Paris, chez M. de la Haye, graveur, rue de la Harpe, n. 10.

"Vue de la Place de Grève de l'Hôtel de Ville"



Bibliothèque Nationale (Estampes), Ef.95, Vol.1, no.35. Designed by L. Lagrenée  fils.

- (v) "Translation des restes de Voltaire à St.-Geneviève. Le cortège au pont-royal". In Nolhac/TABLEAUX, plate 53 and Chamfort/TABLEAUX, plate 55.<sup>1)</sup> Designed by J.-L. Prieur.
- (vi) "La Fontaine de la Régénération sur les débris de la Bastille, le 10 août 1793". (Detail) In Monnet/TABLEAUX, plate 9. Designed by C. Monnet.
- (vii) "Vue de la Place de Grève, de l'hôtel de Ville ... à l'occasion de la Fête donnée par la Ville de Paris". Bibliothèque Nationale (Estampes), Collection de Vinck, Tome 59, no.7950. Designed by Le Coeur.
- (viii) "L'arrivée de leurs Majestés à l'Hôtel de Ville". (Detail) Drawing by J.-L. David; Louvre, Cabinet des Dessins, R.F.1916.
- (ix) "Cortège de Sa Majesté ... à l'Ouverture du Corps l'Egislatif, le 6 Nivôse, An 13". [i.e. 27 December 1804] (Detail) Bibliothèque Nationale (Estampes) Collection de Vinck, Tome 59, no.7957. Designed by Le Beau.
- (x) "Léonidas at Thermopylai", by J.-L. David. Louvre. (Detail)

Those engravings found in the Bibliothèque Nationale are of great value in providing correctives, especially in the case of the Voltaire ceremony. From (iii), a schematic plan, it can be seen that (iv) and (v) are simplified renderings. Not only do three various groups separate the chariot from the effigy of Voltaire, but the musicians are placed in front of the effigy. The chariot is preceded only by civic officials. (iv) shows a group of musicians and singers realistically clustered about each other as the procession reaches its destination. By contrast (v) shows a row of six instrumentalists behind the chariot, then seven more in front of the

<sup>1)</sup> Original in the Musée Carnavalet, Paris



"L'arrivée de leurs Majestés à l'Hôtel de Ville"

horses. (Four ranks of horses are falsely illustrated, but only three in (iii) and (iv).<sup>1)</sup> The arrangement of these players is symmetrical rather than realistic, and no other instrumentalists or singers can be seen anywhere.

(vii) portrays the same occasion as (viii), the arrival of Napoleon and Josephine at a reception on 16 December 1804. The David sketch was intended as the third of a Napoleonic trilogy with the "Coronation" and "Distribution of Eagles", but was never executed in any other form.

We may now turn to an examination of the historical evidence for the derivation of the tuba curva and buccin, since no contemporary description has been found.

Two statements only are of use.

- (a) "des strophes d'une ode de M. Chénier, mise en musique par M. Gossec, exécutée en parties avec des instrumens antiques, copiés sur la colonne trajanne, et qui produisent le plus bel effet ... célébrèrent les bienfaits de Voltaire et l'influence de son génie". 2)
- (b) "Ils ont [i.e. composers] cherché chez les anciens et parmi les peuples qui exécutoient sous la voûte du ciel ... Ils ont trouvé chez les Grecs le tuba corva et le buccinus chez les Hébreux. Le premier faisoit partie des ornemens du char antique de Voltaire". 3)

Two lines of enquiry may thus be followed: the Trajan column, and Sarrette's alternative information.

The Trajan column was known generally through the many editions of the engravings of Bartoli/TRAIANA. No French edition, or any edition of this later than the earlier eighteenth century, is kept at the Bibliothèque Nationale, from which a different version of the scenes could have been known.<sup>4)</sup> Moreover, if J-L. David had had any part in the design of the instruments, they would have been executed as originally found and shown

- 1) c.f. an English eye-witness: "afterwards came the coffin on a very fine triumphal car drawn by twelve beautiful grey horses four abreast". Letter by the second Viscount Palmerston of 11 July 1791, printed in Connell/ PORTRAIT p.220.
- 2) La Chronique de Paris, Tome V, 12 July 1791, p.782. (Not given in Pierre/SARRETTE)
- 3) Report of Sarrette's speech of 20 November 1793, reported in Journal de Paris; reproduced in Pierre/SARRETTE p.48
- 4) Piranesi's engravings of the column (1775-6) portray only one tuba curva at all closely, and this instrument does not differ importantly from Bartoli's version.