

# The Rise and Fall of the Bass Clarinet in A

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The bass clarinet in A was introduced by Wagner in *Lohengrin* in 1848. It was used up to 1990 in about sixty works by over twenty composers, including the *Ring* cycle, five Mahler symphonies and *Rosenkavalier*. But it last appeared in Messiaen's *Turangalila-Symphonie* (1948, revised 1990), and the instrument is generally regarded as obsolete.<sup>1</sup>

Several publications discuss the bass clarinet, notably Rice (2009). However, only Leeson<sup>2</sup> and Joppig<sup>3</sup> seriously discuss the 'A' instrument. Leeson suggests possibilities for its popularity: compatibility with the tonality of the soprano clarinets, the extra semitone at the bottom of the range and the sonority of the instrument. For its disappearance he posits the extension of range of the B<sup>♭</sup> bass, and the convenience of having only one instrument. He suggests that its history is more likely to be found in the German than in the French bass clarinet tradition. Joppig examines one aspect of this tradition: Mahler's use of the clarinet family.

The first successful<sup>4</sup> bass clarinet was the bassoon form, invented by Grenser in 1793 and made in quantity for almost a century. These instruments descended to at least C and had sufficient range for all parts for the bass clarinet in A.<sup>5</sup> They were made in B<sup>♭</sup> and C, but no examples in A are known so far. Their main use was in wind bands to provide a more powerful bass than the bassoon.<sup>6</sup> For orchestral music, they were perceived to be only partially successful as bass for the clarinet family because of their different principle of construction.<sup>7</sup>

The modern form was invented by Desfontenelles in 1807 and improved by Buffet (1833) and Adolphe Sax (1838). It was soon favored for orchestral work, beginning with

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<sup>1</sup> Grove (1880, 1904, 1927, 1954); Grove Music Online; Kroll (1968); Hoeprich 2008, etc.

<sup>2</sup> Leeson 1993

<sup>3</sup> Joppig 2005

<sup>4</sup> The early 'plank' forms, the 'sickle' type of Mayrhofer and the 'serpent' types of Papalini did not lead to models made in quantity by other makers, and I regard them as unsuccessful trials.

<sup>5</sup> Helmholtz notation is used in this paper, with actual pitches italicized and pitch classes upright.

<sup>6</sup> Rice 2009, 268 and 378

<sup>7</sup> Fetis 1833 and 1834

Mercadante's *Emma d'Antiocha* [1834] for bass in C, played by Catterini on his own bassoon-type instrument and using its low C. However, Meyerbeer's solo in *Les Huguenots* [1836] for bass in B $\flat$  descending to its lowest note, written *E*, was played by Dacosta on Buffet's modern-type instrument. Notes below written *E* do not reappear until Strauss' *Tod und Verklärung* in 1889. I know only two modern-type nineteenth-century (B $\flat$ ) instruments with notes below *E*.<sup>8</sup>

To determine the tonality of an instrument, one must know both its pitch and the contemporary pitch context. Few museums allow playing of historic instruments, and measurement of the tube length is inadequate to determine the pitch, because of the uncertain effects of the bell. An improved method of calculating pitch from measurement of tone-hole positions, bore diameter and wall thickness was developed, using tone holes excluding the lowest hole and applying end corrections for the tube length.<sup>9</sup> This was used to eliminate one museum instrument labeled 'Bass Clarinet in A', which turned out to be pitched in C.<sup>10</sup>

Pitch varied greatly in the nineteenth century with time and place. During the mid-1860s, a B $\flat$  clarinet in Paris would have been an A clarinet in Vienna! Sources such as Haynes (2009) and Helmholtz (1863) must be consulted to discover the local pitch convention.

A catalogue of bass clarinets in A was compiled. Just seven instruments<sup>11</sup> dating between 1880 and pre-1959<sup>12</sup> were found in European museums and private collections, and none elsewhere. There is historical evidence<sup>13</sup> for four instruments in Germany dating between the 1850s and 1886. Seven modern 'working' instruments were found, mostly Selmers. Doubtless these lists are incomplete, but the instrument is now extremely rare.

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<sup>8</sup> Nechwalsky of Vienna, 1853 (US-Smithsonian 65.0613), to *D* and Kruspe of Erfurt (Leipzig Musical Instrument Museum 4479), 1870s, to *E*

<sup>9</sup> Theory from Benade (1990). The advice of Stephen Fox is gratefully acknowledged.

<sup>10</sup> Prague CZ-CMM Ludwig and Martinka, E.135

<sup>11</sup> Plus one plank-type prototype from c. 1750, which is a dubious candidate for a bass in A.

<sup>12</sup> The latest of these, by Fritz Wurlitzer, would certainly still be a working instrument had it not been purchased by a museum hours ahead of a member of the Wurlitzer family!

<sup>13</sup> Liszt letters to Wagner, (Wagner, Liszt and Hueffer 1897); Anton Nechwalsky Austrian patent of 22 July 1853 quoted in Dullat (2001); Franz Lachner Bavarian Court inspection entry on 30 August 1867 quoted in Tremmel (1993, 214)

The most significant document is a letter from Wagner to Esser of June 15 1861, concerning a forthcoming performance of *Tristan* in Vienna:<sup>14</sup>

Now, I should like to remind you that a bass clarinet in A must be obtained ... I know that in many places, particularly in Dresden, this instrument was used in *Lohengrin* in addition to the bass clarinet in B-flat, and what the player there could accomplish must be possible in Vienna too. They wrote to me at the time from Dresden that they had obtained this A clarinet from an instrument-maker somewhere on the Rhine<sup>15</sup> ... Have the goodness to find out about this!

Therefore, Wagner considered that something beyond mere range was important; there would be no point in his statement if he would allow the concert D<sup>♭</sup> to be played on a B<sup>♭</sup> instrument.

Orchestration manuals of the nineteenth century emphasized two features of writing for clarinets. One is that it is difficult to play them fluently in 'extreme' keys; a composer should choose the clarinet according to the main key of the work. The other is that the A, B<sup>♭</sup> and C clarinets have different sound character, and composers were instructed to bear in mind the tone implications of their choice.<sup>16</sup> For bass clarinets, composers were instructed to write as they do for the soprano clarinet but an octave lower. It would be difficult for a student to read these manuals without concluding that there is a similar difference between A and B<sup>♭</sup> bass instruments as there is between the corresponding soprano clarinets.

I have found and examined fifty-nine scores that contain the bass in A. Until roughly the 1930s, it was normal to select the bass in A when indicated by the tonality and also for its lowest note. But there are some contrary cases, showing that composers also selected on the basis of sound or key character. The most important are Liszt's *Dante Symphony*, Mahler *Symphony 4*, Dvořák's *The Water Sprite*, and the Strauss *Invalid Workshop*.

Therefore, composers would have been aware of the sound when composing. I was able to play and record one bass in A.<sup>17</sup> My impression, and that of a musical audience on hearing short recordings of basses in B<sup>♭</sup> and A was that there was indeed a difference in sonority. Joppig (2009) draws similar conclusions.

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<sup>14</sup> Holde, Mendel and Wagner, 1941

<sup>15</sup> The instrument-maker in question was none other than Johann Adam Heckel of Biebrich am Rhein.

<sup>16</sup> Similar arguments have been made for soprano clarinets by Lawson 1983, Longyear 1983, and Leeson 1991

<sup>17</sup> Shackleton Collection at the University of Edinburgh No. 5122, This recording, from the finale of Mahler 4 and the first movement of Straus' *Invalid Workshop* will be played at the presentation if selected.

Why, then, did the instrument fade from use? It was not from the availability of B'' instruments with extended range, nor from expense, nor from lack of music, though probably these all contributed. I propose that commercial reasons have played the largest part. Examination of manufacturers' catalogues dating from 1896 showed that the instrument was available from over a dozen manufacturers until the 1930s. By 1960 these had **all** either disappeared or had discontinued the bass in A. Jérôme Selmer commented:<sup>18</sup>

We never decide[d] to go [into] production in series because the investment is not valuable compared to the quantities required by our customers.

The bass clarinet has enjoyed great popularity since the mid-twentieth century, thanks largely to the rise of college music and its emphasis on wind bands.<sup>19</sup> This led to high-volume manufacturing methods for basses in B''. Even partial mass production involves expensive tooling, with keywork made in sets of hundreds. In contrast, Buffet and Selmer have sold a bass in A but once every few years since WWII. Custom instruments have negligible effect on the profitability of a large company, and the future of the bass in A lies again with small, custom makers such as Fox and Seggelke.

Should orchestras revive this instrument? It is hard to make the case for thickly-scored ensembles, but the case for solo passages is strong. As Lawson suggests, for historically-informed performance:<sup>20</sup>

In tackling the complex problem of clarinet sonorities, I believe we should follow the composer's instructions as closely as possible, even where they appear conservative or eccentric ...

Thus we approach more closely to the sound that the composer imagined.

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<sup>18</sup> email of 14 September 2009

<sup>19</sup> Kalina 1972, 214 ff.

<sup>20</sup> Lawson (1983)

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