

‘Musical Pitch ought to be *One* from Pole to Pole’: Touring Musicians and the Issue of Performing Pitch in Late Nineteenth- and Early Twentieth-century Melbourne

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In 1869, English vocal teacher Charles Bishenden complained that the high performing pitch in use in England was ‘ruinous to the voice.’ The high pitch, he reported, was the very reason why many European singers did not perform in Britain.¹ ‘For a Continental larynx,’ French soprano Blanche Marchesi (1863–1940) later explained, ‘it is a real torture to sing to different pitches.’ ‘The muscles of a trained larynx act like fine clockwork,’ she wrote, and ‘a change of tone, up or down, alters the precision of their action.’ For this reason, Marchesi believed that ‘musical pitch ought to be *one* from pole to pole.’²

A standard of performing pitch comprises three fundamental concepts: sound frequency, note-name, and standard. A sound frequency, expressed in Hertz (Hz) or cycles per second (cps), becomes a pitch when assigned to a note in the musical scale, thus determining the pitch of every other note in a particular system of tuning. If, in equal temperament, the A directly above middle C equals 440 Hz, then the C directly above it equals 523.25 Hz. A pitch that is agreed upon, at a given time and place, as the reference point for building and tuning musical instruments to play together, is a pitch standard. Standards of pitch are usually expressed in relation to the note A directly above middle C. Present international standard pitch, for instance, may be stated as $a^1=440$. While today’s standard was first agreed upon in 1939, standards of

¹ Charles J. Bishenden, ‘Musical Pitch,’ *Musical Times and Singing Circular* 14 (1869): 21–22.

² *Musical Pitch: Letters, Articles, and Comments in the Press on the Proposal to Adopt the Low Pitch throughout the Pianoforte Trade: Reprinted for the Information of all Interested in the Question, etc.* (London: Waterlow & Sons, 1899) 54.

pitch have varied over time and from place to place; multiple pitches, serving different musical functions, have also been used concurrently (different standards, for example, for church music and for orchestral playing).

This article considers the matter of performing pitch in relation to touring musicians.³ In particular, it looks at issues of pitch raised by artists who came to Melbourne to perform in the late nineteenth and early twentieth centuries. The article discusses the problems musicians encountered in the absence of an international pitch standard; examines the ways in which they overcame varying pitches; and suggests that touring artists played an important role in the history of pitch in Melbourne. Firstly, however, it is necessary to give a brief outline of performing pitch in Britain and Europe, as well as in Melbourne, in the late nineteenth and early twentieth centuries.

There is much evidence that standards of pitch rose in Britain and Europe in the first half of the nineteenth century.⁴ From its establishment in 1813, for example, the (Royal) London Philharmonic Society tuned to a fork measuring $a^1=423.7$. In 1828, the Philharmonic Society's conductor, Sir George Smart, is said to have raised its pitch to $a^1=433$, and this, Alexander Ellis notes in his invaluable 1880 study 'On the History of Musical Pitch,' is what was first known as 'Philharmonic' pitch. Later, when Sir Michael Costa was conducting the Society, 'Philharmonic' pitch was raised again, and averaged, in the years from 1846 to 1854, about $a^1=452.5$.⁵ Despite efforts at a conference in Vienna in 1834 to establish a general standard, the average pitch across Britain and Europe by the 1850s was about $a^1=450$.⁶

There was concern amongst the musical profession that the work of the great masters of western music was no longer being performed at the pitch at which it was conceived, which led to a commission on the matter, held in France in 1858.⁷ Expressing a desire to establish a lower, uniform standard of pitch, the commission recommended the general adoption in France of a standard of $a^1=435$. This pitch, known thereafter as the French diapason normal, French pitch, 'normal pitch,' or 'low' pitch, was made the official standard in France in 1859.⁸ Other countries in Europe began to adopt the French pitch in the 1860s, though it should be noted that, while the French pitch may have been widely recognised

³ Parts of this article, in particular those on the pitch of local pipe organs, have appeared previously in Simon Purtell, "'Without Further Question": Altering the Pitch of Three of Melbourne's Most Significant Pipe Organs,' *Organ Historical Trust of Australia News* 34.1 (Jan. 2010): 21–8. My thanks to John Maidment, Chairman, Organ Historical Trust of Australia, for permission to republish this material in altered form.

⁴ See, for example, Alexander J. Ellis, 'On the History of Musical Pitch,' *Journal of the Society of Arts* 28 (5 Mar. 1880): 293–336. Reprinted in *Studies in the History of Musical Pitch: Monographs by Alexander J. Ellis and Arthur Mendel* (New York/ Amsterdam: Da Capo Press and Frits Knuf, 1968): 11–62; Arthur Mendel, 'Pitch in Western Music since 1500: A Re-examination,' *Acta Musicologica* 50 (1978): 1–93; Bruce Haynes, *A History of Performing Pitch: The Story of 'A'* (Lanham, MD: Scarecrow Press, 2002).

⁵ Ellis, 'History of Musical Pitch,' 311.

⁶ Haynes, *History of Performing Pitch*, 345, 350.

⁷ Ellis, 'History of Musical Pitch,' 312; Haynes, *History of Performing Pitch*, 348. Extracts and English translations of the report of the 1858 French commission may be found in *British Standard 880: 1950: Musical Pitch* (London: British Standards Institution, 1950) 10–14.

⁸ Decree of 16 Feb. 1859 and Decree of 31 May 1859, Appendix A, I. French Decrees on Standard Musical Pitch, *British Standard 880: 1950*, 12–14; Ellis, 'History of Musical Pitch,' 30; Haynes, *History of Performing Pitch*, 348–49.

on the Continent in the second half of the nineteenth century, it was far from uniformly adopted by musicians.⁹

Some effort was made in Britain to adopt the French diapason normal as the national standard. In 1869, for example, conductor Joseph Barnby (1838–1896) tried to introduce the French diapason normal into London concert life by employing the pitch at a series of oratorio concerts in St. James's Hall.¹⁰ In general, however, pitch levels remained relatively high. In 1874, 'Philharmonic' pitch, now known also as the English 'high' pitch and recognised as the most common standard for orchestral work in Britain, rose to its highest point, $a^1=455$.¹¹ It was not until the mid-1890s that any lasting reform in pitch was made in Britain. In 1895, the Promenade Concerts in Queen's Hall, London, were performed at $a^1=439$. With the financial support of one music-loving laryngologist, George Clark Cathcart (1860–1951), the pitch of the organ recently installed in the hall was lowered, and a set of woodwind and brass instruments was purchased, to enable the newly formed Queen's Hall Orchestra to play at the lower pitch.¹² The following year, the London Philharmonic also adopted $a^1=439$, known thereafter as 'New Philharmonic' pitch.¹³ British piano manufacturers agreed to adopt the lower pitch as standard in 1899.¹⁴

'New Philharmonic' pitch was set at $a^1=439$, not $a^1=435$, on the misunderstanding that the French diapason normal, $a^1=435$, was originally set at fifteen degrees Celsius, and that if the standard was to be adopted in Britain, then orchestral instruments, pianos, and any other instruments used in conjunction with pipe organs, would need to be tuned at $a^1=439$. A pipe organ tuned at $a^1=435$ at fifteen degrees, it was noted, would naturally rise in pitch to approximately $a^1=439$ at the average British concert-room temperature of twenty degrees. The idea that standards of pitch could be expressed at different frequencies, reflecting the effect of temperature on the pitch of instruments, was generally accepted in late nineteenth- and early twentieth-century Britain. The French diapason normal, $a^1=435$, 'New Philharmonic' pitch, $a^1=439$, and (at first) American $a^1=440$ were all seen as legitimate expressions, at different temperatures, of the same 'low' standard.¹⁵

While 'New Philharmonic' pitch was gradually adopted in Britain, the old English 'high' pitch remained in use well into the twentieth century. British defence bands continued officially at $a^1=452.4$ until 1928, when British 'military regulation' pitch was lowered to $a^1=439$, following much debate on the cost of reform and on the impact that a lower pitch

⁹ Haynes, *History of Performing Pitch*, 349, 351–2.

¹⁰ Haynes, *History of Performing Pitch*, 356; 'St. James's Hall: The Oratorio Concerts: Conductor, Mr. Joseph Barnby,' *Musical Times and Singing Circular* 13 (1 Feb. 1869): 688.

¹¹ Ellis, 'History of Musical Pitch,' 311.

¹² Haynes, *History of Performing Pitch*, 357–8; Llewelyn S. Lloyd, 'International Standard Musical Pitch,' *Journal of the Society of Arts* 98 (16 Dec. 1949): 83–84; William B. Ober, 'George Clark Cathcart, M.D. (1860–1951) and Concert Pitch,' *New York State Journal of Medicine* (Sep. 1966): 2302–5.

¹³ Haynes, *History of Performing Pitch*, 357–8; Lloyd, 'International Standard Musical Pitch,' 83–84; Robert Elkin, *Royal Philharmonic: The Annals of the Royal Philharmonic Society* (London/New York, Melbourne, Sydney and Cape Town: Rider & Company, 1946) 91.

¹⁴ *Musical Pitch: Letters, Articles, and Comments*; Haynes, *History of Performing Pitch*, 359.

¹⁵ See, for example, Alfred James Hipkins, 'The Standard for Musical Pitch,' *Journal of the Society of Arts* 44 (28 Feb. 1896): 341–42; David James Blaikley, 'Essay on Musical Pitch,' *A Descriptive Catalogue of the Musical Instruments Recently Exhibited at the Royal Military Exhibition, London, 1890*, ed. Captain C.R. Day (London: Eyre & Sottiswoode, 1890) 235–53.

would have on the tone of military bands.¹⁶ Orchestral players, meanwhile, kept instruments at both 'high' and 'low' pitches into the 1930s.¹⁷

The present day international standard, $a^1=440$, was first proposed at a conference made up of representatives of various national standardising organisations, as well as the International Union for Broadcasting and the International Consultative Committee on Telephony, held in London in 1939.¹⁸ Though World War II appears to have delayed the adoption of the new standard, the International Organization of Normalization reaffirmed $a^1=440$ as international standard pitch in 1953 and again in 1955.¹⁹

In nineteenth- and early twentieth-century Melbourne, there was no uniform standard of pitch. 'High' or 'Philharmonic' pitch, $a^1=452.4$ to 455, was the accepted standard for orchestral work; it was also the prevailing 'concert pitch' in Melbourne. 'Medium' or 'church' pitch, $a^1=445$, was the pitch of many church organs in the city. The Hill & Son London organ installed in the newly built Melbourne Town Hall in 1872 appears to have been originally tuned at between $a^1=445$ to $a^1=450$. The most reliable source I have found on the pitch of the organ actually dates from 1921, when William G. Price, City Organist, Melbourne, observed that the organ's pitch was: 'C – 535 [$a^1\approx 450$] when the Thermometer registers 65° [Fahrenheit; about 18 degrees Celsius] but at the present moment ... C – 530 [$a^1\approx 445$].'²⁰ French or 'low' pitch was first introduced into Melbourne concert life in the final decades of the nineteenth century. Pianos were obtainable at each of the three main pitches, 'high,' 'medium,' and 'low,' and it was common for multiple standards to be used at one concert.

A campaign to establish French pitch as the uniform standard in Melbourne began in the opening years of the twentieth century. In the 1920s, however, two standards were still commonly recognised: 'high' and 'low.' (In Melbourne, as in Britain, it was commonly accepted that French pitch, 'New Philharmonic' pitch, and the then American $a^1=440$, were all legitimate expressions, at varying temperatures, of the same 'low' standard.) The William Hill & Son and Norman & Beard organ installed in the Town Hall in 1929 (replacing the first instrument, mentioned above, which was destroyed by fire in 1925) was originally tuned at French pitch.²¹ Yet in the 1930s, local orchestras increasingly adopted the British 'New Philharmonic' 'low'

¹⁶ Haynes, *History of Performing Pitch*, 360; Myers, 'Instruments and Instrumentation of British Brass Bands,' *The British Brass Band: A Musical and Social History*, ed. Trevor Herbert (Oxford/New York: OUP, 2000) 183.

¹⁷ Anthony Baines, *Woodwind Instruments and their History*, 1st ed. (London: Faber, 1957) 49.

¹⁸ G.W.C. Kaye, 'International Standard of Concert Pitch,' *Nature* 143 (27 May 1939): 905–6. Papers relating to the conference may be found in Broadwood Piano Manufacture: Illustrations and Papers Relating to Piano Design, 2185/JB/71/4a, Surrey History Centre, Surrey, England.

¹⁹ Haynes, *History of Performing Pitch*, 361.

²⁰ William G. Price, 'Report on pitch of Town Hall Organ,' 23 Sep. 1921, Town Clerk's Correspondence Files II [MCC Series 120], VPRS 3183/P0002, Unit 34, File 22/2973, Public Record Office Victoria, Melbourne. For a more detailed discussion on the pitch of the Town Hall organ, see Simon Purtell, 'Singing in "a Sort of Musical Chaos": Dame Nellie Melba and the Campaign to Lower the Pitch of the Organ in the Melbourne Town Hall,' *Victorian Historical Journal* 82.1 (June 2011): 105–23; Purtell, "Without Further Question".

²¹ 'Specification and General Conditions of Contract for the Supply, Delivery and Erection of a Grand Organ in the Town Hall, Melbourne, Victoria, Australia,' 30 Apr. 1926, Town Clerk's Correspondence Files II [MCC Series 120], VPRS 3183/P0000, Unit 125, 'Town Hall Organ Miscellaneous,' Public Record Office Victoria, Melbourne; Wm. Hill & Son and Norman & Beard Ltd., 'Pamphlet on the Grand Concert Organ at the City of Melbourne Town Hall, 1928,' Town Clerk's Correspondence Files II, VPRS 3183/P0000, Unit 171, 'Town Hall Organ Miscellaneous 1930,' Public Record Office Victoria, Melbourne.

pitch, $a^1=439$, not French pitch, and in the years following World War II, $a^1=440$ became the generally accepted 'low,' or 'concert,' pitch.

The persistent use of the English 'high' pitch in Melbourne caused trouble for visiting musicians. An Italian oboist brought out to Melbourne for an opera season at the turn of the twentieth century, for example, had difficulty using his French-pitch oboe in the city's leading (and 'high'-pitch) orchestra, the Marshall-Hall Orchestra. Local players appear to have tuned their instruments down, as best they could, to the pitch of the Italian's oboe. But the difference in pitch presented local players, including New Zealand born flautist John Amadio (1883–1964), with the opportunity to play a practical joke on the visiting musician. Amadio later recalled that, one night, while the Italian enjoyed a long rest in a performance of Mascagni's *Cavalleria Rusticana*, they deliberately pushed the pitch up, so that when he came back in to play an obbligato, he was a quarter of a tone flat. At this point, Amadio recounted, 'the unhappy wretch stood up, and, uttering a frightful Italian oath, smashed his oboe into pieces, leaving me to play his obbligato on the flute.'²²

When Belgian violinist Gustave Walther came to Melbourne to take up a teaching position at the University's Conservatorium in 1919, his debut concert in the city (an orchestral concert conducted by Professor W.A. Laver (1866–1940) in the Town Hall on 17 May 1919) was also marred by a discrepancy in pitch.²³ The violinist was reported to have had an outburst of temper on the platform, when, following an otherwise successful performance, he attempted to play an encore—only to discover that the piano used to accompany him was tuned at a different pitch (according to the *Argus*, about a semitone above Walther's violin). 'My pitch is normal [Walther told the audience] ... the piano is abnormal.'²⁴ Walther was greatly affected by the incident; he alleged a conspiracy to ruin him, and the affair was later cited as contributing to the violinist's decision to leave Melbourne for America in 1921.²⁵

The high pitch in Melbourne, dictated by local orchestral instruments and the organ in the Town Hall, was also a problem for touring singers. When the English bass Robert Watkin-Mills (1849–1930) sang with the Melbourne Philharmonic Society in a performance of *Elijah* on 2 August 1904, the *Argus* reported that:

It became ... gradually evident that the strain of singing a part, in itself high for a bass voice, at the absurd pitch to which the tuning of the Town-hall organ compels all singers and players in oratorio to conform, and which is more than half a tone higher than that employed in the majority of English and all Continental choral festivals, was telling upon the singer's powers of endurance. "Is not His word like a fire?" was felt to be lacking in force; and in the last few notes of "It is enough" there were evident indications of weariness.²⁶

²² 'Melbourne Symphony Orchestra: "Should become First Class": Mr John Amadio's Recollections,' *Argus*, 18 July 1934: 9.

²³ For details of Walther's arrival in Melbourne, see Peter Tregear, *The Conservatorium of Music, University of Melbourne: An Historical Essay to Mark its Centenary 1895–1995* (Parkville, Vic.: Centre for Studies in Australian Music, Faculty of Music, The University of Melbourne, 1997) 58; 'University Conservatorium,' *Argus*, 15 Feb. 1919: 18. For his debut concert, see 'Music and Drama: Orchestral Concert,' *Argus*, 19 May 1919: 5.

²⁴ 'Music and Drama: Orchestral Concert,' *Argus*, 19 May 1919: 5.

²⁵ 'The Troubles of a Violinist,' *The Triad: A Journal Devoted to Literacy, Pictorial, Musical and Dramatic Art*, 11 July 1921: 27.

²⁶ 'Philharmonic Society's Concert: Mr. Watkin Mills in "Elijah",' *Argus*, 3 Aug. 1904: 6.

Singing in the Melbourne Philharmonic Society's performance of *Messiah* on Saturday, 20 December 1913, Miss Muriel Cheek also 'found the high pitch ... somewhat trying.'²⁷

Many touring artists, though, aware of the varying standards of pitch in use across the western musical world, made arrangements in advance to perform at their preferred pitch. In an era when the French diapason normal was widely considered more natural and practical for the voice, singers organised for pianos to be tuned at the French pitch for their concerts. In 1890, the *Argus* could report that, 'many well-known vocalists have made a practice of getting pianos tuned to the French pitch for their [Australian] concert performances.' 'Miss Amy Sherwin, one of our own singers,' the *Argus* noted, 'invariably sings to the French pitch when she is on a concert tour.'²⁸

English contralto Clara Butt (1872–1936) spoke out on the matter of pitch in Britain and made arrangements for the standard to be used wherever possible when on tour.²⁹ For her performances in the Melbourne Town Hall in September 1907, Butt had two pianos placed on stage: one tuned at the French diapason normal, the singer's pitch of choice; the other tuned to the Town Hall organ. The second piano was used when items on the programme, such as Samuel Liddle's setting of 'Abide with Me,' and Edward Elgar's 'Land of Hope and Glory,' called for both organ and piano accompaniment, and Butt was forced to sing at the organ's higher pitch.³⁰

Nellie Melba (1861–1931) clearly preferred to sing at the French diapason normal and made arrangements to use the pitch whenever she performed in Melbourne. Indeed, the use of French pitch appears to have been a condition of the contracts for her homecoming tours.³¹ Records show that, on her 1902 tour of Australia, Melba had pianos prepared at the French diapason normal wherever she performed. Arranging her Adelaide concerts, for example, Musgrove wrote to Melba asking: 'please let me have the tuning fork, as I want it to send to Adelaide for the purpose of having the piano put in order.'³² Like Clara Butt, Melba was forced to perform at different pitches if her programme called for the use of other instruments, such as pipe organs, yet freight receipts for her Australian tours also show that Melba travelled with her own piano/s, tuned, no doubt, at her pitch of choice. For concerts planned for Launceston, Tasmania, in 1903, Melba was to take her own piano, tuned at 'Continental' pitch, and arrangements were made in advance for another piano to be supplied at the same pitch.³³

Touring opera companies also made arrangements to perform at the lower standard. Indeed, the first orchestra to perform at the French diapason normal in Melbourne appears

²⁷ 'Philharmonic Society: "The Messiah",' *Argus*, 22 Dec. 1913: 11.

²⁸ 'Musical Notes,' *Argus*, 27 Sep. 1890: 13.

²⁹ On 24 August 1899, the *London Musical Courier* reported receipt of correspondence from Butt declaring her preference for the 'French diapason normal.' *Musical Pitch: Letters, Articles, and Comments*, 54.

³⁰ 'The Clara Butt Season: Opening Concert: An Enthusiastic Audience,' *Age*, 11 Sep. 1907; 'Madame Clara Butt: First Concert: Enormous Audience,' *Argus*, 11 Sep 1907: 7.

³¹ For a fuller discussion of Melba's preference for French pitch and her efforts to use the standard when performing in Melbourne, see Simon Purtell, 'A Souvenir of my Deep Interest in your Future Achievements: The "Melba Gift" and Issues of Performing Pitch in Early Twentieth-century Melbourne,' *Grainger Studies: An Interdisciplinary Journal* 1.1 (2011): 75–96.

³² George Musgrove, letter to Madame Melba, Myoora, Toorak, 7 Nov. 1902, George Musgrove Records 1896–1905, MS 12450, box F 3300, Australian Manuscripts Collection, State Library of Victoria, Melbourne.

³³ George Musgrove, letter to Fletcher [?], Albert Hall, Launceston, 9 Feb. 1903, George Musgrove Records 1896–1905, MS 12450, box F 3300.

to have been that assembled for George Musgrove's Grand English Opera Company's 1900 and 1901 Australian tour. Musgrove acquired two new sets of Boosey & Hawkes French-pitch woodwind and brass instruments, along with one small French-pitch organ, so that the orchestra (formed out of both imported and local players) could perform at the lower standard.³⁴ The adoption of French pitch was even used to promote the tour, which included concert seasons in Melbourne, Sydney, and Brisbane.³⁵ At the French pitch, it was claimed, the opera company brought 'musical and artistic effects ... of a nature' never before heard in the colonies.³⁶

Musgrove's decision to employ French pitch may, however, have been more pragmatic. When the Moody-Manners Opera Company also adopted the French diapason normal at the turn of the twentieth century, Charles Manners explained that the change had been made in an effort to secure 'better singers, truer voices, and stronger casts, many favourite vocalists feeling themselves unable to accept engagements to sing continuously at the high pitch.'³⁷ Musgrove may have faced similar pressure from vocalists. Indeed, the *Argus* reported that Barron Berthold, an American tenor engaged for the Australian tour, had 'in consequence of his objection to the high pitch adopted in England ... not sung much in that country.'³⁸ Like Musgrove, Melba and J.C. Williamson also acquired new French-pitch instruments, from the London firm of Rudall, Carte & Co., for their opera company's 1911 tour of Australia.³⁹

In some cases, the pitch of local pipe organs was altered to suit the requirements of visiting musicians. The Grand Organ in the (Royal) Melbourne Exhibition Building, built by George Fincham for the Melbourne International Exhibition of 1880–1881,⁴⁰ was, according to a number of sources, originally tuned at the high 'Philharmonic' pitch. Fincham himself specified that the organ's pitch would be 'Philharmonic' in his proposal for the instrument's construction, submitted to the directors of the exhibition in 1879.⁴¹ Yet only a few years later, in 1888, the organ's pitch was raised at the instruction of visiting English conductor Sir Frederic Cowen

³⁴ 'The Princess's Theatre: Mr G. Musgrove's Programme: Interesting Attractions Promised (From our Correspondent),' *Argus*, 31 Aug. 1900: 6. Cited in Alison Gyger, *Opera for the Antipodes: Opera in Australia, 1881–1939* (Sydney: Currency Press/Pellinor, 1990) 94.

³⁵ 'The Stage: The Grand Opera: Interview with Herr Benno Scherek,' *Queenslander*, 15 June 1901: 1131; 'The Grand Opera: A Season in Brisbane: Interview with Herr Benno Scherek,' *Brisbane Courier*, 12 June 1901: 8.

³⁶ 'George Musgrove's Grand Opera Season,' *Brisbane Courier*, 21 Jan. 1901: 5.

³⁷ 'Musical Notes,' *South Australian Register*, 4 July 1899: 3.

³⁸ 'Mr. Musgrove's Grand Opera Company: Farewell Melbourne Season: Three New Artists,' *Argus*, 9 Mar. 1901: 6.

³⁹ Rudall, Carte & Co. Stock Books 0, 2, and 3, Rudall Carte Archival Documents, 1863–1985, Boosey & Hawkes Archive, ARC227/146, ARC227/148 and ARC227/149, Horniman Museum Library, Forest Hill, London.

⁴⁰ Enid N. Matthews, *Colonial Organs and Organbuilders* (Carlton, Vic.: MUP, 1969) 29.

⁴¹ See Matthews, *Colonial Organs*, Appendix III, 'Contract for the Grand Organ for the Melbourne International Exhibition, 1880, Including Original Specification,' 219–23. The proposed specifications can also be found at 'Specification &c. of Grand Organ for the Melbourne International Exhibition of 1880,' George Fincham & Sons Records, Specification Book 13 1875–1887, 84, Item 13, Series 1, MS 13534, Australian Manuscripts Collection, State Library of Victoria, Melbourne. The instrument was reported in the exhibition's official record as being at 'Philharmonic' pitch. See *Melbourne International Exhibition 1880–1881: Official Record* (Melbourne: Mason, Firth & M'Cutcheon, 1882) lxxxii. An article published in the *Carlton Advertiser and Hotham Chronicle* on 16 April 1881 (later reprinted by George Fincham & Son as a pamphlet entitled 'The Melbourne Exhibition Organ') also noted that the instrument's pitch was 'Philharmonic.' George Fincham & Son, *Grand Organ, Exhibition Building, Melbourne, 1880*, www.ohta.org.au/organs/organs/Exhibition, accessed 10 Mar. 2011.

(1853–1935). Cowen had been engaged (for the huge sum of five thousand pounds) to conduct the orchestra for the Centennial Exhibition in Melbourne in 1888 and 1889.⁴² Fifteen orchestral players had also been brought out from England for the exhibition, including W. Richmond Morton, the principal oboist in Cowen's Centennial Orchestra.⁴³ When Morton was unable to tune his instrument to Fincham's organ, Cowen demanded that the organ be altered to agree in pitch with Morton's oboe.⁴⁴

In August 1888, the directors of the exhibition (demonstrating little concern for the effect an alteration in pitch may have on the organ's tone) engaged George Fincham himself to carry out the necessary work. Fincham, one suspects, could not have been very pleased to make changes to his instrument; the work also delayed his other projects. According to Fincham, writing to the Rev C. Crawford on 26 August 1888 to apologise that work on a new organ for Crawford's church in Castlemaine had been postponed, he had been 'obliged to raise the organ' in the Exhibition Building to 'Mr. Cowen's pitch which is a full eighth of a tone higher than the Town Hall Organ.'⁴⁵ If, as mentioned earlier, the organ in the Melbourne Town Hall was somewhere between $a^1=445$ and $a^1=450$, then a full eighth of a tone above this would place Morton's oboe, and the Exhibition Organ's new pitch, at between $a^1=451.48$ and $a^1=456.55$ —in other words, at about the high 'Philharmonic' pitch.

It should be noted, however, that it was mid-winter when Fincham raised the organ's pitch. At exactly what temperature Fincham tuned the organ for Cowen at the 'Philharmonic' pitch is not clear, but in January 1889 the instrument's pitch rose so high in the summer weather that Cowen was forced to abandon use of the organ in some of his concerts. On account of its pitch, one critic noted, 'the instrument had to remain silent' in a performance of *The Creation* that Cowen directed in the Exhibition Building in late January 1889.⁴⁶

The circumstances surrounding the alteration to the organ's pitch was explained in the *Argus* a few years later, in 1908. When responding to calls to retune the organ in the Melbourne Town Hall, one George Park Frayling noted that:

When Dr. F. H. Cowen arrived as musical director of the Melbourne Centennial Exhibition of 1888 he found on a cold day in winter that the organ at the Exhibition was below the pitch of Morton's oboe, and he had the organ tuned up to it. In the summer, when hot winds prevailed, the organ had gone up to such a high pitch that no wind instrument in the orchestra could get near it, and the organ had to be dispensed with.⁴⁷

The organ's pitch would certainly have been affected by fluctuating temperatures in the large,

⁴² Mimi Colligan, 'More Musical Entertainments,' *Victorian Icon: The Royal Exhibition Building, Melbourne*, ed. David Dunstan (Kew, Victoria: The Exhibition Trustees in Association with Australian Scholarly Publishing, 1996) 214.

⁴³ *Argus* 12 June 1888: 5; Mimi Colligan, 'More Musical Entertainments,' 214. Thérèse Radic discusses Cowen's Centennial Orchestra and the orchestra formed out of it, the Victorian Orchestra, following the exhibition, in Thérèse Radic, 'The Victorian Orchestra 1889–1891: In the Wake of the Centennial Exhibition, 1888,' *Australian Music Research* 1 (1997): 13–101.

⁴⁴ George Fincham, letter to Rev C. Crawford, Castlemaine, 26 Aug. 1888, George Fincham & Sons Records, Letters 6 1888–1889, page 167, Item 6, Series 1, MS 13534.

⁴⁵ George Fincham, letter to Rev. C. Crawford, Castlemaine, 26 Aug. 1888.

⁴⁶ 'Music at the Exhibition: Grand Choral Concert—"The Creation",' *Argus*, 28 Jan. 1889: 4.

⁴⁷ George Park Frayling, 'Normal Pitch,' *Argus*, 1 Dec. 1908.

poorly insulated Exhibition Building. According to another report, the organ's pitch rose to more than a quarter of a tone above the 'Philharmonic' pitch—approximately $a^1=468$ —in hot weather.⁴⁸ Under such conditions, it would indeed have been difficult to tune the organ together with orchestral instruments, such as Morton's oboe, built to the high 'Philharmonic' pitch.

Cowen's engagement as Musical Director was critical to the success of Melbourne's Centennial Exhibition, and the conductor enjoyed a positive reception while in Melbourne. As Jennifer Royle has discussed, the exhibition of 1888 embodied ideas of national cultural development, and the appointment of one of Britain's most acclaimed conductors (in 1888, Cowen had just been appointed as Conductor of the London Philharmonic Society) 'made a substantial statement to the international community that the colony could appreciate European "high" art music.' Royle has even argued that the success of Cowen's orchestral concerts during the exhibition was due, not only to his own musical ability, but also to the way in which Cowen was embraced by the citizens of Melbourne as 'gift-bearer of "high" culture.'⁴⁹ And it is interesting to note that, in opposition to a movement to adopt the French diapason normal in late nineteenth-century England, Cowen appears to have preferred using the higher 'Philharmonic' pitch: 'Many instrumentalists and conductors, including Mr. F. H. Cowen,' *The Age* reported on 26 December 1891, 'think that the increased brilliancy of the higher pitch gives it a claim of preference.'⁵⁰ Further research is needed, however, to show whether Cowen was alone in requesting the organ to be retuned, or if the organ's pitch had already been a cause of trouble for local players.

When Cowen returned to England at the end of his Australian engagement in 1889, local musicians were left to deal with the consequences of the organ's now especially high pitch.⁵¹ Some years later, during the Exhibition of Women's Work held in the (Royal) Melbourne Exhibition Building in September 1907, for example, three different pitches had to be employed: firstly, the pitch set by the organ; secondly, the high 'Philharmonic' pitch used by local orchestral musicians; thirdly, the French pitch, preferred by vocalists. Writing in the *Argus* in January 1908, local public figure Sir James Barrett (1862–1945) explained that, although pianos had been prepared for the Exhibition at each of the three pitches, local tuners were not prepared to bring a grand piano up to the organ's especially high pitch: 'they thought the risk of straining the instrument or breaking the strings was so great as to render it most undesirable.' In the end, 'the difficulty was ... got over by tuning one small upright piano to the organ, tuning three pianos to the ordinary orchestral pitch in Melbourne, and tuning another piano for the use of the singers to the classic or normal pitch.' Then, to avoid confusion, 'a label was pasted on each piano, so that the pianists knew precisely to what pitch the instrument was adjusted.' Barrett was far from impressed: 'can anything more ludicrous be imagined in connection with musical development,' he asked, than 'the works of the classical masters being performed in the same concert-hall at three different pitches?'⁵²

⁴⁸ 'Anglo-Australian,' 'The Exhibition Organ,' *Argus*, 3 Oct. 1921.

⁴⁹ Jennifer Royle, "'Preparing to Exhibit": Frederick Cowen in the Public Press Preceding Melbourne's Centennial International Exhibition, 1888–1889,' *Context* 14 (1997): 62.

⁵⁰ 'Music in London,' *Age*, 26 Dec. 1891.

⁵¹ Matthews, *Colonial Organs and Organbuilders*, 33.

⁵² Barrett, 'Classic or Normal Pitch in Music,' *Argus*, 11 Jan. 1908: 4.

Cowen's requirement that the organ's pitch should be raised appears to have contributed to instrument's later neglect. An appeal to save the organ, appearing in the *Argus* in 1921, reported that the instrument had fallen out of use on account of its especially high pitch; it also suggested that Fincham had deliberately built the instrument slightly below the high 'Philharmonic' pitch in order to accommodate the local climate.⁵³ Cowen's request may even have led, in some part, to the organ's eventual ruin—as Matthews remarked, 'a sad end for an instrument which was evidence of the achievement in organbuilding in Victoria during the nineteenth century.'⁵⁴

During his 1934 tour as guest conductor with the Australian Broadcasting Commission,⁵⁵ Sir Hamilton Harty (1879–1941) found the pitch of the (second, 1929) organ in the Melbourne Town Hall too low for the instrument to be used with an orchestra. As noted earlier, the organ was built to the French diapason normal, but by the mid-1930s, local orchestral musicians generally tuned at the slightly higher 'New Philharmonic' pitch. The City Organist, William McKie, explained in 1936: 'orchestras play at a pitch of 522 [a¹=439] ... [and] cannot satisfactorily tune down to the pitch of the organ [a¹=435].'⁵⁶ On Harty's instruction, the organ was therefore heated in order to raise its pitch in line with local orchestral instruments—though it proved 'impossible to warm the organ sufficiently ... without damaging its pneumatic action.'⁵⁷ In contrast, Harty found the pitch of Grand Organ in the Sydney Town Hall much higher than that of local orchestral instruments, and he issued a public statement urging the Sydney City Council to have the instrument retuned:

With all the calls the municipality has on its funds ... it is a serious thing to consider spending twelve or fifteen thousand pounds on modernising this magnificent organ—once the largest in the world. On the other hand, it seems foolish that such a fine instrument should have to be silent when most required, on account of its unfortunate high pitch, which makes it impossible to be used with a modern orchestra. It is rather like keeping a magnificent motor car in a garage owing to a small mechanical defect; for the organ could be put right for a fraction of its original cost. From a purely impersonal viewpoint, I hope the authorities will consider the matter from this angle, which is not only that of artistry, but also that of common sense. The world in general is adopting a lower pitch and those who love music have their perception disturbed by a higher one.⁵⁸

The tuning difficulties Harty encountered while on tour, and his outspoken views on the matter, may have led to a conference on organ pitch held in 1934 between Bernard Heinze, at that time music adviser to the ABC, William McKie, who, as Melbourne City Organist, played the organ for Harty's concerts, William Arundel Orchard, and Melbourne organbuilding

⁵³ 'Anglo-Australian,' 'The Exhibition Organ.'

⁵⁴ Matthews, *Colonial Organs and Organbuilders*, 33.

⁵⁵ Brief mention of Sir Hamilton Harty's 1934 tour with the ABC may be found, without reference to issues of pitch, in Martin Buzacott, *The Rite of Spring: 75 Years of ABC Music-Making* (Sydney: ABC Books for the Australian Broadcasting Corporation, 2007) 28–33, and in Thérèse Radic, *Bernard Heinze: A Biography* (South Melbourne: Macmillan, 1986) 60–1.

⁵⁶ William McKie, City Organist, letter to Town Clerk, Melbourne, 28 Oct. 1936, Town Clerk's Correspondence Files, VPRS 3183/P0003, Unit 396, File 37/2085, Public Record Office Victoria, Melbourne.

⁵⁷ 'Civic Organ: Pitch Altered: Big Task Completed: Weather Man Assists,' *Advertiser*, 23 May 1939: 18.

⁵⁸ 'Music and Drama: The Town Hall Organ,' *Sydney Morning Herald*, 23 June 1934: 10.

firm George Fincham & Sons Pty Ltd. As a result of the conference, in an effort, it seems, to minimise future tuning problems, Fincham & Sons adopted 'New Philharmonic' pitch as its 'shop pitch.'⁵⁹

The pitch of the second organ in the Melbourne Town Hall was also problematic for English conductor Sir Malcolm Sargent (1895–1967). When Sargent toured Australia as visiting conductor with the Australian Broadcasting Commission in 1936, choral music featured prominently in the programs of the fourteen concerts he gave around the country.⁶⁰ As Martin Buzacott notes, 'Sydney heard the Verdi *Requiem*, Melbourne got Elgar's *The Dream of Gerontius* ... Brisbane and Perth heard Elgar's *The Music Makers* and Parry's *Blest Pair of Sirens*, Coleridge-Taylor's *Hiawatha's Wedding Feast* was scheduled for Adelaide, while Hobart missed out on Sargent altogether.'⁶¹ Large choirs were organised for the concerts and, where possible, pipe organs were also used.⁶² In Melbourne, this meant heating the organ in the Town Hall, again, to raise its pitch in line with the orchestra at 'New Philharmonic' pitch, a¹=439.

Sargent conducted concerts in the Melbourne Town Hall on Wednesday 7, Saturday 10, Wednesday 14, and Saturday 17 October 1936, and the conductor enjoyed sufficient command to have the organ kept at a higher than normal temperature—presumably with the use of temporary gas heaters—for more than a fortnight.⁶³ As a result of being heated, however, the organ was seriously damaged. 'Cracks developed in some of the bellows ... there was warping in the upper boards, and there was a crop of mechanical troubles which took a considerable time to put right.'⁶⁴ In order to avoid any further damage, and on Sargent's recommendation, the Council agreed, on 23 November 1936, to have the organ's pitch permanently altered to a¹=439. Herbert Palmer was employed to carry out the necessary alterations, which he completed over a four-week period in mid-1937.⁶⁵

Martin Buzacott has described Sargent's tour as a 'national event such as Australia had never witnessed previously; the conductor, known fondly as Britain's 'ambassador of music,' was 'hailed as a musical messiah, his musical word gospel.' A 'Keep Sargent' campaign was even run during his visit, and the conductor's demand to heat and ultimately retune the organ in the Melbourne Town Hall may be understood in light of the significant adulation he enjoyed, not only from local audiences, but also from musicians under his conductorship. Sargent's tour was also of great significance in the development of the Australian Broadcasting Commission, which, at this time, was working to develop the standard of orchestral music across Australia and to secure its own place as the country's leading broadcaster and concert-organiser. Buzacott notes that the tour was intended to show off 'all the resources at the ABC's disposal' as the broadcaster sought to establish a system of permanent symphony orchestras

⁵⁹ Metal Shop Book, 1927–1964, George Fincham & Sons Records, MS 13534, Series 4, Item 118.

⁶⁰ Buzacott, *Rite of Spring* 78–85. See *Age* and *Argus* 8, 12, 15 and 19 Oct. 1936.

⁶¹ Buzacott, *Rite of Spring*, 81.

⁶² Buzacott, *Rite of Spring*, 81.

⁶³ William McKie, 'The Pitch of Town Hall Organ,' 28 Oct. 1936, Town Clerk's Correspondence Files II [MCC Series 120], VPRS 3183/P0003, Unit 396, File 37/2085.

⁶⁴ McKie, 'Pitch of Town Hall Organ,' 28 Oct. 1936.

⁶⁵ Noted in Town Clerk's Correspondence Files, VPRS 3183/P0003, Unit 396, Files 36/5546 and 37/2085.

in each state, bolstered by regular guest international artists. Sargent's request to use the organ in the Town Hall may have been granted with the success of his tour in mind.⁶⁶

Touring musicians were not only able to change local pitch practice to suit their needs, but they also sparked discussion on performing pitch in Melbourne's musical circles. Debate on pitch, carried out through the columns of the local dailies, followed the arrival of George Musgrove's Grand English Opera Company in 1900, Clara Butt's concerts in the Melbourne Town Hall in 1907, and Melba's visits in 1907 and 1909. As I have shown above, discussion focussed on the difficulties caused by the multiple pitches in use and the desirability of adopting a uniform pitch in the city. Debate on pitch was informed by cultural attitudes. In the opening years of the twentieth century, some musicians raised concern at the increasing use of the French diapason normal in Melbourne, preferring instead to retain British standards of pitch. Increasingly, however, discussion on pitch was marked by a strong desire to bring Melbourne into line with the rest of the musical world.

Some touring musicians became actively involved in the campaign to standardise pitch in Melbourne. In 1907, Clara Butt and her husband Kennerly Rumford gave financial assistance to Professor Franklin Peterson, then Director of the University of Melbourne's Conservatorium, for the purchase of a set of new French-pitch woodwind and brass instruments.⁶⁷ 'Dear Professor Peterson,' Rumford wrote, 'In your most excellent endeavour concerning the adopting of normal [French] pitch, we are both with you, heart and soul, and we would ask you to accept the enclosed cheque to help in such a splendid cause.'⁶⁸

Peterson ordered the new instruments from Boosey in October 1907 (through agents Allan & Co., Melbourne), and the University took possession of its new instruments early the following year.⁶⁹ A special reception was held at the Conservatorium on 28 May 1908 to mark their arrival, whereupon the new instruments were formally named the 'Kubelik instruments' in honour of visiting violinist, Jan Kubelik.⁷⁰ In the meantime, George Musgrove, whose opera company had returned to Melbourne in 1907, lent his set of French-pitch instruments, mentioned above, to Professor Peterson, so that the University's annual concert on 3 December 1907 could be given at the new standard.⁷¹

Of all touring musicians to visit Melbourne, however, Melba was the most active in trying to change local pitch practice. Like, and perhaps because of, Clara Butt, Melba also donated money to Professor Peterson in 1907 to purchase new French-pitch instruments for the University.⁷² Then, in 1909, Melba presented a set of new French-pitch woodwind and brass instruments,

⁶⁶ For quotations in this paragraph, see Buzacott, *Rite of Spring*, 79, 81, 84.

⁶⁷ Director's Report 1907, *University Conservatorium of Music Prospectus 1908*, University Conservatorium Prospectus 1899–1913.

⁶⁸ 'The Stage: Notes,' *Queenslander*, 2 May 1908: 3.

⁶⁹ Director's Report 1908, *Prospectus, Conservatorium of Music, University of Melbourne, 1909*, University Conservatorium Prospectus 1899–1913. On 29 May the *Argus* reported that the Conservatorium was 'from yesterday in possession of a complete range of normal pitch instruments, valued at £300' ('Conservatorium Reception,' *Argus*, 29 May 1908: 5), though Peterson later stated that the instruments arrived at the Conservatorium in April 1908. (Professor Franklin Peterson, letter, 'Town-hall Organ at Normal Pitch,' *Argus*, 17 Nov. 1908: 7).

⁷⁰ 'Conservatorium Reception,' 5.

⁷¹ Director's Report 1908, *Prospectus, Conservatorium of Music, University of Melbourne, 1909* 3; 'University Conservatorium of Music,' *Argus*, 11 Dec. 1908: 9.

⁷² 'Reform in Music: "Normal Pitch" Movement: Gift by Madame Melba,' *Argus*, 13 Sep. 1907: 6.

known as the 'Melba Gift,' to the Marshall-Hall Orchestra.⁷³ Though Melba's instruments failed to bring about any immediate reform in pitch in Melbourne, they certainly proved of use to the diva, who borrowed them for her later opera tours and concerts in Australia.⁷⁴

Melba was still campaigning for the uniform adoption of French pitch in Melbourne in 1921. In August of that year, returning to her hometown from Sydney, Melba stated, in an interview with the *Herald*, that:

It is a shame ... that in my native city I should have continuous trouble with orchestral pitch, whenever I sing here. This is practically the only city in the world where I sing regularly that such a [high] pitch is used and I resent it very deeply.⁷⁵

According to the *Herald*, local players and theatre orchestras were to blame for the ongoing use of the English 'high' pitch in Melbourne. 'The difficulty is,' the newspaper explained, 'most of the woodwind players are engaged in the theatres where the high-pitch is still used ... [and] players will not agree to use the normal [French-] pitch instruments for orchestral concerts.' Players seem to have resented the idea of exchanging the limited number of French-pitch instruments in Melbourne amongst one another. The 'Melba Gift' instruments were not being used, the *Herald* reported, 'as often as they should be,' and Melba declared that, 'while I am here ... I will do all in my power to alter this woeful state of affairs.'⁷⁶

With the aim of having the (first) organ in the Melbourne Town Hall retuned, Melba and James Barrett organised a deputation to put pressure on Sir John Swanson (1865–1924), the Lord Mayor of Melbourne.⁷⁷ If the organ were to be retuned to from a¹=445/450 to French pitch, a¹=435, they argued, local orchestras, which often played in conjunction with the instrument, would be forced to adopt the same standard. Though Swanson was concerned for the appropriate use of public money (it was estimated that it would cost as much as fifteen hundred pounds to lower the organ's pitch), Melba convinced the Lord Mayor that the organ should be retuned. According to the minutes of the deputation, it was the 'benefit of her experience in other countries' that gave weight to Melba's views on the matter. She also expressed concern that Melbourne was being left behind in the international movement to standardise pitch.⁷⁸ On 3 October 1921, the City Council formally resolved to have the organ retuned to French pitch. Herbert Palmer, who was already responsible for tuning and maintaining the organ, was employed to carry out the necessary work, which he completed in June 1922.⁷⁹

⁷³ For more information on the 'Melba Gift,' see Simon Purtell, *The Melba Gift: Issues of Pitch in Melbourne in the Early Twentieth Century*. BMus(Hons) thesis, University of Melbourne, 2006; Purtell, 'A Souvenir of my Deep Interest.'

⁷⁴ George Tallis, letter to James Barrett, 2 Dec. 1910, Marshall-Hall Collection, M-H 9/4–10, Box 42, Grainger Museum, University of Melbourne.

⁷⁵ 'The "High Pitch": Melba Urges Change: "A Woeful State of Affairs",' *Herald*, 23 Aug. 1921: 8.

⁷⁶ 'The "High Pitch": Melba Urges Change,' 8.

⁷⁷ Barrett, letter, "The Town Hall Organ," *Argus*, 16 Sep. 1921: 8. For more details on the deputation, see Simon Purtell, 'Singing in "a Sort of Musical Chaos".'

⁷⁸ 'Notes of Deputation to the Lord Mayor regarding the Establishment of a Normal Pitch of [sic] the Town Hall Organ,' 19 Sep. 1921, Town Clerk's Correspondence Files II [MCC Series 120], VPRS 3183/P0002, Unit 34, File 22/2973.

⁷⁹ Minutes of Meeting of City Council, 3 Oct. 1921, Proceedings of Council Meetings (MCC 2/1), VPRS 8911/P0001, Unit 44, Vol. 1920–21; William G. Price, 'Town Hall Organ: Report on Completion of Operations in Connection with the Changing of the Pitch,' 6 June 1922, Town Clerk's Correspondence Files II [MCC Series 120], VPRS 3183/P0002, Unit 34, File 22/2973.

Melba's leading role in the deputation did not go unnoticed in the local press. A satirical column in the *Argus* observed that the diva had used her strong persuasive powers to convince the Lord Mayor that the organ should be retuned, skills the writer thought could be put to good, perhaps better, use on other important matters facing Melbourne:

According to his own statement, the Lord Mayor (Councillor Swanson) is no great authority on normal pitch, and this led him to be wary when approached by Melba and others with the request that the Town Hall organ be taken down a peg or two, or whatever the technical term is. He had a hazy recollection, perhaps, that somewhere back in his childhood he had learned that one cannot touch pitch and yet remain undefiled, and consequently approached the subject with caution; but the fortress of his reserve was stormed by the irrepressible Dame Nellie with the words, "Don't argue; say 'Yes.'" He capitulated, for diva's reasons. For one thing, he didn't mind the tone of the Town Hall organ being lowered so long as the tone of the Town Hall authorities wasn't lowered at the same time. Happy Dame, who can thus impose her will on those who sit in the seats of the mighty merely by giving the woman's reason, "Because." It might be worth while trying it on Mr. Massy Greene in the endeavour to obtain cheap sugar; on Mr. McPherson, to get funds to build that long-promised Spencer street bridge; on Mr. Clapp, to restore those return tickets and take those obnoxious Tait cars off country lines; on the chairman of the Tramway Board, to give us back our penny sections. Judging by the initial success of Melba's methods, it seems that to be a really great musical artist one must be able to vamp.⁸⁰

Melba continued to call for the French diapason normal to be adopted in Australia. When questioned in 1927 on the future of music in her native country, she stressed the importance of unifying pitch. 'For goodness' sake,' Melba told Hobart's leading newspaper, the *Mercury*, 'let us have normal pitch.' She advised that the organ in the Hobart Town Hall should also be retuned to the French standard. 'You cannot sing cantatas and oratorios with high pitch,' she went on, claiming—rather improbably—that there were no organs left at the old, high pitch in England. 'All the instruments [in England] have been converted,' she stated, while Melba's friend and flautist, John Lemmone, claimed in the same interview that 'there are no high-pitch pianos in America.' Lemmone even stated, falsely, that 'Dame Nellie had the organ in the Melbourne Town Hall retuned to low pitch at her own expense.'

This article has shown that pitch was certainly an issue for musicians and singers visiting Melbourne in the late nineteenth and early twentieth centuries. As the English 'high' pitch remained the prevailing concert standard in the city, touring musicians with instruments built to the French diapason normal had difficulty tuning with local players. Visiting singers struggled to perform with the (Royal) Melbourne Philharmonic Society at the 'high' pitch determined by local orchestral instruments and the first organ in the Melbourne Town Hall.

⁸⁰ 'Oriël,' 'The Passing Show,' *Argus*, 24 Sep. 1921: 7. Sir Walter Massy-Greene (1874–1952), politician, was appointed Assistant Minister in the Hughes Nationalist government in 1918 with responsibility for price-control; in 1919, he was appointed Minister for Trade and Customs. Sir William Murray McPherson (1865–1932) was then Treasurer for the Victorian Government. Sir Harold Winthrop Clapp (1875–1952) was then Chairman, Victorian Railway Commissioners. Red carriages on Melbourne's early electric trains were known as 'Tait cars,' after Sir Thomas James Tait (1864–1940), Victorian railway commissioner from 1903 to 1910.

Many touring artists were accustomed to dealing with issues of pitch. The arrangements they made in order to overcome varying standards, however, came at a cost. Melba's gift of a set of instruments to the Marshall-Hall Orchestra was a generous one. It would have also been expensive for opera companies, such as George Musgrove's, to acquire sets of new instruments at their preferred pitch, and for singers to travel with their own pianos. Even so, although it has been suggested that some singers avoided travelling to Britain in the late nineteenth century on the basis of the high pitch in use there, no evidence has been found that musicians stayed away from Melbourne for similar reasons.

Rather, touring musicians had a strong influence on local pitch practice. They introduced new pitch standards into Melbourne concert life, and, in so doing, sparked discussion on pitch in the city's musical circles. Alterations to local practice were also made to suit the needs and preferences of touring artists. The fact that visiting conductors were able to have the pitch of local pipe organs altered to suit their short-term requirements demonstrates the high esteem in which they were held in Melbourne. Indeed, the move to adopt French pitch in the city at the beginning of the twentieth century appears to have been driven somewhat by a desire to make performing in Melbourne as attractive as possible to the world's leading musicians. Though there was a degree of compliance with high-profile artists, it is unlikely that significant changes were made for all musicians to visit the city, and further research is needed to show whether changes to local pitch practice for visiting musicians can be entirely explained by the high esteem in which touring artists were held. The ABC, for example, would seem also to have had its own ambitions in mind when meeting Sargent's requests to heat and retune the organ in the Town Hall.

Some touring artists actively engaged in local debate on pitch, their experience in other countries giving weight to their views, and also in the campaign to standardise French pitch in the city. Melba especially drew much public attention and support to the issue, and her repeated efforts to standardise pitch in her hometown must be recognised. Above all, however, the strong influence of Melba and other touring musicians on local performing pitch points to a strong desire in Melbourne to keep up to date with international practice. Nonetheless, there has been some deal of delay in adopting new standards of pitch in Melbourne. The French diapason normal was not really used in the city until fifty years after it was first introduced in France; the 'New Philharmonic' pitch, established in the late 1890s, was not widely recognised in Melbourne until the 1920s and 1930s; and the present international standard was not adopted by local brass bands until the 1960s and 1970s.