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A photograph of a red contrabassoon resting on a dark wooden stand. The instrument is positioned vertically, with its long body and silver-colored keys and valves. The background is a lush garden scene featuring large green ferns and a clear blue sky. The image is partially obscured by a blue rectangular area on the left side, which contains text.

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Exegesis

10 December 2010

New Zealand Works for Contrabassoon

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Introduction

The contrabassoon is seldom thought of as a solo instrument. Throughout the long history of contra-register double-reed instruments the assumed role has been to provide a foundation for the wind chord, along the same line as the double bass does for the strings. Due to the scale of these instruments - close to six metres in acoustic length, to reach the subcontra *B flat*”, an octave below the bassoon’s lowest note, *B flat*’ - they have always been difficult and expensive to build, difficult to play, and often unsatisfactory in evenness of scale and dynamic range, and thus instruments and performers are relatively rare. Given this bleak outlook it is unusual to find a number of works written for solo contrabassoon by New Zealand composers. This exegesis considers the development of contra-register double-reed instruments both internationally and within New Zealand, and studies five works by New Zealand composers for solo contrabassoon, illuminating what it was that led them to compose for an instrument that has been described as the 'step-child' or 'Cinderella' of both the wind chord and instrument makers.

History of the contrabassoon in the international context

Development of the instrument

The development of the contrabassoon has been characterised by short bursts of intense development, often completely independently in different parts of the world, interspersed with long periods of very little change. This could be due to the high cost of manufacture and the low level of demand – as early as the sixteenth century, when contrabassoons were first constructed, they were something only a court or orchestra could afford to buy, rarely the individual players. In turn, it may seldom be worth instrument makers’ time and resources to develop the instrument. This has affected composers' use of the contrabassoon. At times when the instrument underwent improvements there tended to be more works calling for it, and larger parts, as was the case around the turn of the nineteenth century in Vienna, for example the parts in Beethoven's Fifth and Ninth Symphonies, then again around the turn of the twentieth century throughout Europe. Over time, when it was not

developed further, it was written for less, or in less demanding and prominent roles. This pattern continues to this day.

An early forerunner of the contrabassoon, used in the sixteenth and seventeenth centuries, is the *Grossbasz-Dulzian*.¹ It sounded in the great bass register, the lowest note being *G'* or *F'*, a fourth or fifth lower than the bassoon. To reach the contra-octave, the lowest note must be at least the *C'* below the bassoon *B flat*.² Possibly the first contrabassoon was made by Hans Schreiber, *Kammermusik* of the Electoral Court of Berlin.³ Schreiber had made an octave trombone, and in *De Organographia* of 1619 Praetorius mentions that Schreiber was now working on an octave bassoon. This may have been successful, as the 1626 inventory at the *Barfüsserkerche*, Frankfurt, listed one *contrafagott*. This instrument has not survived, nor has any indication of in what works it may have played.

An outstanding contrabassoon that has survived is one made in 1714 by Andreas Eichentopf of Nordhausen.⁴ This instrument still plays well, and has signs of wear around the tone-holes, showing it certainly was used. It stands an incredible 2.68 metres, folded once like a scaled up bassoon, and has an acoustical length of 4.5 metres, the lowest note being *C'*. The expense of making this instrument would have been great, so at a time when there was no music written for it, and no players competent at performing on it, is something of a mystery as to why it was made. It is unlikely that it was commissioned. Eichentopf may have simply made the contrabassoon and, after demonstrating it, sold it. It is unusual that no bassoons by this maker have survived.

Made in London around the same time, though vastly less successful, were two contrabassoons by

1 Lyndesay Langwill, *The Bassoon and Contrabassoon*, Ernest Benn Limited (London: 1965), p. 112
See Glossary A, Instrument A, p. 55

2 Will Jansen, *The Bassoon*, Uitgeverij Frits Knuf B.V. (Buren: 1978), volume II, pp. 592-593
See Appendix D, p. 54, for all registers and instrument ranges relative to the piano keyboard.

3 Op. cit., Langwill, *The Bassoon and Contrabassoon*, pp. 112-113

4 Op. cit., Jansen, *The Bassoon*, pp. 594-602
See Glossary A, Instrument B, p. 55

Thomas Stanesby. Handel requested that two contrabassoons be built for use in *Hymn for the Coronation* in 1727. They were built, but not used, as the sound, intonation, and ease of playing were all too poor.⁵ The idea was not dropped however, and in 1739 there were two new contrabassoons, made by Thomas Stanesby junior.⁶ One of these has survived, it is 2.71 metres tall, and has an acoustical length of 4.66 metres. This instrument was unsuccessful, and was hardly used. It has a much narrower bore than the Eichentopf contrabassoon, and this is likely to be what prevented it from being a sound instrument.⁷ It is recorded that that instrument was used in 1739, then fell out of use until the Handel commemoration of 1784, when once again it was not successful. A contemporary report states “The contra, which had never been *heard*, was never again *seen* after these performances.”⁸ The immense size and poor quality of these early contrabassoons prohibited them from being widely used by players or composers, it was only in Eastern Europe and Vienna that there seem to have been contrabassoons in use. More common were semi-contras, or quint- and quart-fagotts, descending to *G*’ or *F*’ below the standard bassoon *B flat*’, the same as the Grossbasz-Dulzian. Examples of these have survived from Milan, Prague, Vienna, Paris, Dresden, Biebrich, Erfurt, St. Petersburg, Linz, Breslau, London, Bratislava, Markneukirchen, Budapest, Malines, and Graz.⁹

In this early era of contrabassoons some parts were written - by composers such as Handel, Haydn, Mozart, Beethoven, and Schubert, but only in a handful of works. There is evidence that contrabassoons were used, where available, and played with the double basses, for example there is a note mentioning the use of two contrabassoons in a performance of Beethoven's Seventh

5 Op. cit., Langwill, *The Bassoon and Contrabassoon*, pp. 114-115

6 See Glossary A, Instrument C, p. 55

7 Op. cit., Jansen, *The Bassoon*, pp. 598-599

8 Ibid., p.597, quote of W.T. Parke

9 Op. cit. Jansen, *The Bassoon*, pp. 612-618

Milan, see Glossary A, Instrument D, p. 56

Prague, see Glossary A, Instrument E, p. 56

Vienna, see Glossary A, Instrument F, p. 57

Paris, see Glossary A, Instrument G, p. 57

Symphony in February 1814.¹⁰ The contrabassoon parts often weren't essential, and if these works were to be performed elsewhere, and a contrabassoon was not available, the part would be left out, or played on another instrument.¹¹ These other instruments are now mostly obsolete, but deserve a mention, as in some countries, notably France and Spain, they were preferred over the course, out of tune, unreliable sound of early contrabassoons.¹² The ophicleide is a conical bored, keyed, brass instrument, played with a cup mouth piece like modern brass instruments, and looks like a cross between a saxophone and a euphonium.¹³ The serpent has a conical bore, most have finger holes, though larger sizes have keys when necessary, and are played with a cup mouth piece. The long pipe is curved, reminiscent of a serpent, which is formed by hollowing each half of the bore separately, then joining them and covering it with some sort of leather to ensure it is sealed.¹⁴ Both these instruments are known to have replaced contrabassoons in a Paris performance of Haydn's *The Creation* in 1800. Contrabassoons had been brought to Paris for the performance, however the sound was deemed too muffled and harsh.¹⁵ A third instrument, commonly used in place of the contrabassoon, was the contrabass sarrusophone. Conceived as a replacement to oboes and bassoons in military bands, sarrusophones were made of metal, had a wider bore, and used the Boehm fingering system.¹⁶ In France and Spain during the first half of the twentieth century it was more common to use a sarrusophone in an orchestra than a contrabassoon.¹⁷ This means that significant contrabassoon parts by composers such as Ravel, Dukas, Debussy, and Saint-Saens were written with this instrument in mind.

10 David Hurwitz, Charles Mackerras, 'A Talk With Sir Charles Mackerras', *Classic Today*, http://www.classicstoday.com/features/fl_0200.asp [Accessed 29 November 2010]; Op. cit., Langwill, *The Bassoon and Contrabassoon*, p.119

11 Op. cit., Jansen, *The Bassoon*, pp. 636-637

12 Anthony Baines, *Woodwind Instruments and Their History*, Faber and Faber Limited (London: 1967), p.167

13 Reginald Morley-Pegge, *et al.*, 'Ophicleide', *Grove Music Online*, www.oxfordmusiconline.com/subscriber/article/grove/music/40954 [Accessed 30 November 2010]
See Glossary A, Instrument H, p. 58

14 Op. cit., Baines, *Woodwind Instruments and Their History*, pp. 307-308
See Glossary A, Instrument I, p. 58

15 Op. cit., Langwill, *The Bassoon and Contrabassoon*, p. 121

16 Gunther Joppig, *The Oboe and the Bassoon*, B.T. Batsford (London: 1988), pp. 116-117
See Glossary A, Instrument J, p. 59

17 Op. cit., Baines, *Woodwind Instruments and Their History*, p. 167

Despite the contrabassoon's lack of success in orchestras during the mid-nineteenth century it was popular in military bands.¹⁸ The impracticality of marching with an instrument approaching three metres in length led to new developments. Compact contrabassoons were developed, where the six metres of pipe was folded three or four times, and complicated key mechanisms were developed to cope with this. Because of this key work these instruments were built to be permanently assembled, as contrabassoons still are today. To relieve some of the weight there were contrabassoons made entirely of metal, and in the case of the maker H.F. Haseneier, of papier maché, though the resulting susceptibility to moisture would not be ideal for outdoor playing.¹⁹ Haseneier named his instruments, first made in wood in 1847, contrabassophons, as they had a wider bore and larger tone holes than contrabassoons. The result of this was that they were very loud, but quiet playing was difficult. His design was modified by Dr W.H. Stone, a proficient amateur bassoonist, and was built by the English maker Morton. The resulting Haseneier-Stone-Morton contrabassophon made in 1875 was popular in England. Possibly the strangest military contrabassoon variation was the claviatur-contrafagott. It was the same as other metal contrabassoons, but the key work was all operated by a piano-style keyboard of fifteen keys. Only illustrations of these instruments have survived.²⁰

The most significant development of the contrabassoon throughout the nineteenth and twentieth centuries occurred in 1879, when Wilhelm Heckel made public his new design of the contrabassoon.²¹ This instrument was a complete redesign, with a range down to subcontra *B flat*", and the same fingering as a Heckel bassoon. Heckel demonstrated this new instrument to Richard Wagner, who approved of it, and wrote for contrabassoon for the first time in *Parsifal*, the only work he wrote between 1879 and his death in 1883. As orchestras adopted these new instruments

18 Op. cit., Joppig, *The Oboe and the Bassoon*, p. 125, pp. 129-130

19 Op. cit., Langwill, *The Bassoon and Contrabassoon*, pp. 122-130

Metal contrabassoon, see Glossary A, Instrument K, p. 59

Papier maché contrabassophon, see Glossary A, Instrument L, p. 60

20 See Glossary A, Instrument M, p. 60

21 Op. cit., Langwill, *The Bassoon and Contrabassoon*, pp. 133-134

See Glossary A, Instrument N, p. 61

contrabassoon parts became more substantial and commonplace within the orchestra. Gustav Mahler, Dmitri Shostakovich, Richard Strauss, Igor Stravinsky, and Alban Berg all wrote significant contrabassoon parts in large orchestral works. The new Heckel contrabassoon design was quickly developed to have either a removable bell giving a lowest note of subcontra A", the lowest note on the piano, and an alternate straight bell for when contra C' was the lowest note required; or a permanently assembled instrument with the lowest note subcontra *B flat*". The 1879 Heckel contrabassoon was designed so well that it, and other makers' copies of it, is the most commonly available contrabassoon in the world today. Instruments made as early as 1898 are still in regular use, and are almost identical to the instruments built a century later.²²

The twenty-first century has seen two new contra instruments released. The first, designed by Arlen Fast of the New York Philharmonic and Chip Owen of Fox Products Corp., was introduced in 2001.²³ Fast's primary aim was to address the placement of the register keys, as on the standard contrabassoon they are overly compromised, making the notes difficult to have speak and keep in tune. Five vents were needed, necessitating one extra key for the left hand thumb, and key mechanisms modified so they determined which vent was opened according to the fingering. These improved vent placements solved the issues of notes not speaking easily, and being out of tune, and also made it possible to play another octave, giving the Fast system Fox a range of four and a half octaves, encompassing both the contra register of traditional contrabassoons, up to the top of the bassoon range. There are also extra *E flat* and *C sharp* keys, facilitating passage work. The register keys on the Fast System Fox are similar to those of the normal bassoon of today, just as the 1879 Heckel was similar to bassoons at the time.

22 Op. cit., Jansen, *The Bassoon*, p. 614

23 'Fast System Contrabassoons', *Fox Products Inc.*,
http://www.foxproducts.com/index.php?option=com_content&view=article&id=48&Itemid=66 [Accessed 7 November 2010]
See Glossary A, Instrument P, p. 62

The second new development is a redesign, complete with new name, the *contraforte*.²⁴ Designed and built by Guntram Wolf and Benedikt Eppelsheim, the *contraforte* also has a range of four and a half octaves.²⁵ The collaboration between Wolf and Eppelsheim began in 2001,²⁶ and a *contraforte* was on display at the 2004 International Double Reed Society Conference in Melbourne. It has a wider bore and larger tone holes than the contrabassoon, more like the contrabassophon of the nineteenth century, however in this case dynamic range is improved from the quietest *pianissimo* to *fortissimo*.²⁷ On the contrabassoon, to get extreme dynamics modified fingerings are often necessary, but the *contraforte* is stable enough to use simple fingerings at any dynamic. The scale is even across the range, and the tone colour is clear and warm, blending particularly well with double basses. The key work uses the non-wear bearing system, which means the mechanisms remain silent - with age the key work on most contrabassoons becomes very noisy. Orchestras in Australia were quick to adopt this new development, Brock Imison of the Melbourne Symphony Orchestra plays one, and has performed the Weber bassoon concerto on it with the MSO. The Sydney Symphony Orchestra also own one. Lewis Lipnick of the National Symphony Orchestra is amongst the first to adopt the *contraforte* in the United States of America.²⁸

Contrabassoonists

As the contrabassoon is an unlikely solo instrument there are few internationally known contrabassoonists. Lipnick, mentioned above, is a highly regarded player and gave the premiere performance of Gunther Schuller's *Concerto for Contrabassoon and Orchestra* in 1979.²⁹ Robert Rønnes, principal bassoonist of the Stavanger Symphony Orchestra in Norway, has premiered a

²⁴ See Glossary A, Instrument Q, p. 62

²⁵ Guntram Wolf Holzblasinstrumente GmbH, http://www.guntramwolf.de/englisch/f_modern.html# [Accessed 7 November 2010]

²⁶ Anne Midgette, 'NSO's Lewis Lipnick trades in his contrabassoon for *contraforte*'s sweeter sound', *The Washington Post*, 14 October 2010, <http://www.washingtonpost.com/wp-dyn/content/article/2010/10/13/AR2010101307014.html> [Accessed 16 October 2010]

²⁷ Op. cit., http://www.guntramwolf.de/englisch/f_modern.html#

²⁸ Op. cit., Midgette, 'NSO's Lewis Lipnick trades in his contrabassoon for *contraforte*'s sweeter sound', <http://www.washingtonpost.com/wp-dyn/content/article/2010/10/13/AR2010101307014.html>

²⁹ Robert Rønnes, 'The Solo Contrabassoon List', www.robertronnes.com, <http://www.robertronnes.com/TheSoloContrabassoonList.htm> [Accessed 1 December 2010]

number of works for contrabassoon by composer Terje Bjorn Lerstad, as well as some works he has written himself. Werner Schulze, another internationally regarded contrabassoonist, has also written works for contrabassoon, some of which have been premiered by Susan Nigro. By far the most well know contrabassoonist of today, Nigro has premiered over twenty works for contrabassoon, including solo pieces, sonatas, and concertos, and has seven CDs on Crystal Records.³⁰ Some other composers who have written multiple works for contrabassoon are Daniel Dorff, Donald Erb, P. Kellach Waddle, and Barton Cummings. Works by these composers are already embracing the new range and technical ability of Fast system contrabassoons and contrafortes, meaning new works are often extremely difficult, if not impossible to play on older contrabassoons.

History of the contrabassoon in the New Zealand context

As the expense of a contrabassoon is prohibitive to would-be performers, the history of contrabassoonists in New Zealand is closely linked to New Zealand's orchestral tradition. The oldest professional orchestra in New Zealand is the New Zealand Symphony Orchestra, formed in 1946 as the National Orchestra.³¹ Prior to its formation there was no consistent orchestral tradition, despite the first orchestral performance having taken place in 1865, when an orchestra of fifty players of the Philharmonic Society performed in the Dunedin Exhibition under George West.³² There were occasional opportunities to form a national orchestra over the next eighty years, sadly none lasted. For the International Exhibition held in Christchurch in 1906-1907 the Government funded the first professional orchestra of just over fifty players, conducted by Alfred Hill. The orchestra was a success at the Exhibition, and afterwards undertook a national tour, privately funded by Mr and Mrs John Prouse of Wellington. Once this was complete the Government declined to continue funding the orchestra and it disbanded.³³ It is highly unlikely that these orchestras would have required a

30 Susan Nigro, 'Artist Biography: Contrabassoonist with a cause', *Susan L Nigro*, <http://www.bigbassoon.com/moreaboutsue.htm> [Accessed 1 December]

31 Joy Tonks, *Bravo, The NZSO at 50*, Exisle Publishing Limited (Auckland: 1996), p.12

32 John Mansfield Thomson, *The Oxford History of New Zealand Music*, Oxford University Press (Auckland: 1991), pp.115-118

33 Ibid. p.119

contrabassoon, as repertoire for that size ensemble rarely calls for a contrabassoon.

In 1920 and again in 1922 Henri Verbrugghen's New South Wales Orchestra toured to New Zealand, the first time with one hundred players, the second time with eighty.³⁴ It is very likely that they brought a contrabassoon with them, a contrabassoon had been purchased for use in Sydney in the early 1900s.³⁵ Works for an orchestra of that size often require one, and on one tour they played Beethoven's *Missa Solemnis*, which does have a contrabassoon part. The instrument purchased in Sydney is a Heckel, and was still in use during the 1980s. It is very similar to the instrument pictured in Glossary A, Instrument N (page 61).

In late 1939 the twelve piece National Broadcasting Service String Orchestra was launched. This group was expanded to become the Centennial Symphony Orchestra of sixty five players for the New Zealand Centennial Exhibition. The Centennial Symphony Orchestra was going to become New Zealand's first permanent national orchestra, however due to its unsustainability during World War II it was disbanded, only the small string orchestra was retained.³⁶ In 1946 the National Orchestra was formed, a contrabassoon was purchased,³⁷ and George Booth became the first contrabassoonist in the orchestra. In 1956 Douglas Lilburn was commissioned to write a piece celebrating the orchestra's first ten years,³⁸ his piece *A Birthday Offering* has a contrabassoon part, so it is likely the orchestra had purchased one by that time. John Hopkins, the resident conductor 1958-1963 remembers the trouble Booth had with reeds,

34 Op. cit., Tonks, *Bravo, The NZSO at 50*, p. 11

35 Philip Sumner, email communication, 3 October 2010, Sumner played the Heckel contrabassoon in Brahms, *German Requiem* in 1984

36 Op. cit., Tonks, *Bravo, The NZSO at 50*, p.12

37 At the time of writing the exact date that the first contrabassoon arrived is unavailable. George Booth as the contrabassoonist in a 1958 programme, Joy Tonks, phone communication, 8 December 2010

Peter Averi remembers the contrabassoon arriving during his time as a score-reader with the orchestra, 1954-1962, Peter Averi, email communication, 7 December 2010

Gordon Skinner remembers the Puchner being quite new when he joined the NZSO in 1962, and thinks they may have had a French system instrument before purchasing the Puchner., Gordon Skinner, email communication, 6 December 2010

As yet no evidence of a French system contrabassoon has been found.

See Glossary A, Instrument R, p. 63

38 Op. cit., Thomson, *The Oxford History of New Zealand Music*, p.122

George was a very warm-hearted person but his skills on the instrument were limited and though he tried very hard one could never be sure what sound would come out. On one occasion when I wished him to play much softer I asked whether the reed he was using was the problem. It was at a time of severe import restrictions and he just replied that the reed he had was made from a bit of Blue Gum! This brought a great laugh from the players.³⁹

Chris Spragg studied bassoon at the Auckland University. At the time there was a large bassoon class, including Spragg, Melbon Mackie, Gordon Skinner, and Colin Hemmingson.⁴⁰ Realising that these players, not much older but much more advanced on the bassoon than him, would fill up the orchestra jobs for years to come he decided to ensure he got work by purchasing a contrabassoon.⁴¹ In 1966 the National Orchestra performed *The Rite of Spring* for the first time in New Zealand, in a concert called 'Homage to Diaghilev', with conductor Juan Matteucci.⁴² The work calls for two contrabassoons, and as Spragg's was the only other instrument in the country he was called to play second to Robert Girvan, principal contrabassoonist at the time. Spragg was based in Christchurch from 1967 to 1969 working as an itinerant music teacher (one of his students was Neville Forsythe⁴³), and playing for the Christchurch Civic Orchestra. At the end of 1969 Spragg returned to Auckland where he played with the newly formed Symphonia of Auckland, under Matteucci, with whom he got on well. Spragg has now retired to Waiheke island, still owns the contrabassoon, and it is occasionally played.⁴⁴

In 1974 Christchurch's professional orchestra changed its name from the Christchurch Civic Orchestra to the Christchurch Symphony Orchestra, and at this time they arranged the purchase of a

39 John Hopkins, email communication, 4 September 2010

40 Chris Spragg, phone communication, 1 November 2010

41 See Glossary A, Instrument S, p. 63

42 Joy Tonks, phone communication, 7 December 2010

Juan Matteucci followed Hopkins as resident conductor of the New Zealand Broadcasting Corporation Symphony Orchestra (the National Orchestra was renamed in 1964), until 1967. Op. cit., Tonks, *Bravo: The NZSO at 50*, p. 16

43 Neville Forsythe, email communication, 20 October 2010

44 Spragg, phone communication, 1 November 2010

contrabassoon, through the then principal oboist, Ross McKeich.⁴⁵ This instrument was permanently assembled, over six-foot tall, and descended to subcontra A’’.⁴⁶ It was showcased by the bassoon section, performing arrangements of bassoon quartets. Initially the instrument was loaned to the Dunedin Sinfonia,⁴⁷ and the Christchurch School of Instrumental Music,⁴⁸ however in the 1990s the instrument was becoming fragile with age and was no longer loaned out.

The NZSO bought a new contrabassoon in 1984, a Fox, similar in design to the older Puchner, but with more even intonation and easier response.⁴⁹ Disaster struck in the 1991 when this new instrument was stolen. After a concert in Auckland the truck was unattended while being loaded and an opportunist took the contrabassoon. It was widely publicised, with articles in the paper showing Liam Gill, then principal contrabassoonist in the NZSO, looking dejected playing the older instrument.⁵⁰

The stolen Fox was later found, smashed and soaking, in the Waitakere Mountain Range west of Auckland. David Smith, an instrument collector and repairman, saw a photo of the Fox, and assumed it would be an insurance write-off. He submitted an offer to purchase the instrument from the NZSO for \$100.⁵¹ This offer was accepted, plus GST. He was not sure that the instrument could be repaired, but with a few months work, and a lot of parts and assistance from Chip Owen at Fox, Smith had a working contrabassoon.⁵² The NZSO replaced the stolen Fox, that was worth \$40,000, with a new Fox, but one worth only \$22,500, and this is the same instrument still used today. Sadly

45 Forsythe, email communication, 20 October 2010

46 See Glossary A, Instrument W, p. 66

47 Dunedin Civic Orchestra, Inc. formed in 1965, and gave its first performance in 1966. Early on the name changed to Dunedin Sinfonia, and then in 2000 the name changed to Southern Sinfonia. Southern Sinfonia are the only professional orchestra in New Zealand that does not own their own contrabassoon, when one is required they borrow one from one of the other orchestras, www.southernsinfonia.org/histroy.html [Accessed 22 October 2010]

48 Founded in 1955 by Robert Perks M.B.E., since then singing tuition has been added and the name changed to the Christchurch School of Music, www.csm.org.nz/About-CSM [Accessed 22 October 2010]

49 David Smith, 'The Saga of Fox Contrabassoon #135', *The Woodwind Quarterly*, Issue 3, p.48
See Glossary A, Instrument T, p. 64

50 Roger Wakefield, 'Case of bassoon buffoonery', *The New Zealand Herald*, 15 June 1991, Section 1, p. 2; Tim Donoghue, 'Requiem for a contrabassoon', *The New Zealand Herald*, 10 July 1991, Section 1, p. 2

51 David Smith, phone communication, 19 October 2010

52 See Glossary A, Instrument U, p. 64

this means the best instrument in the country is Smith's, which he does not play himself, or lend out, so it is now a museum piece, only available to play under supervision for research purposes.

The youngest professional orchestra in New Zealand, the Auckland Regional Orchestra (later renamed Auckland Philharmonia Orchestra), was formed in 1980 after the collapse of the Symphonia of Auckland.⁵³ Philip Sumner moved to Auckland in 1985 and was asked to join as second bassoon, and shortly after auditioned for and won the job of principal bassoon. He owned a contrabassoon, bought the year before through Martin Foster in Sydney.⁵⁴ It was a Sonora contrabassoon, and like the CSO's was permanently assembled, over six-foot, and extended to subcontra A". Whenever a contrabassoon was required, Ruth Brinkman, the second bassoon, would borrow Sumner's. The orchestra purchased a new Fox in the mid-1990s and shortly after that Sumner sold his contrabassoon to a community orchestra in Sydney.

Another organisation to purchase a new Fox contrabassoon in the 1990s was the Christchurch School of Music.⁵⁵ After the CSO stopped lending out their instrument the CSM received money from the Canterbury Savings Bank Community Trust Fund to purchase their own. This new instrument was much better than that of the CSO and the instrument was occasionally hired out to the orchestra, however after less than ten years there were problems of security, and of the CSM having limited access to their own instrument, so policy was changed and it was no longer hired out. The CSM is the only educational institute in New Zealand that has its own contrabassoon, and since purchasing it every contrabassoonist in the NZSO National Youth Orchestra has come from Christchurch. The CSO made do hiring instruments from other orchestras for another few years until late 2008 when they bought a new Fox contrabassoon.

53 Libby Nichol, 'Auckland', *Grove Music Online*, www.oxfordmusiconline.com/subscriber/article/grove/music/40634 [Accessed 28 November 2010]

54 Philip Sumner, email communication, 3 October 2010

See Glossary A, Instrument V, p. 65, Adler-Sonora is now Gebrüder Mönning – Oscar Adler & Co.

55 Forsythe, email communication, 20 October 2010

See Glossary A, Instrument T, p. 64

The Vector Wellington Orchestra bought a Heckel contrabassoon from the Melbourne Symphony Orchestra in 2007.⁵⁶ It is the type that has two bells, one for subcontra *A*”, and the other for contra *C*’. Its case is very large and heavy, making it difficult to transport. It is getting old and requires a lot of attention to keep it playing well, but when in good condition this instrument has a very good sound, and is capable of a wide range of dynamics. Being a Heckel this instrument could have decades of playing left in it.

Oscar Lavän, currently a student at the New Zealand School of Music, also owns a contrabassoon.⁵⁷ It was purchased about four years ago on eBay for \$6500, from someone who clearly did not know what it was – in the photo advertising the instrument it was upside down. It is a tall style, like Sumner's, and CSO's old contrabassoon, but descending only to subcontra *B flat*”, which means the bell, while still downward facing, ends above the height of the player's head, rather than in front of their hand. It is stamped by American maker Linton, but was made by either French makers Cabart, or German makers Kohlert, probably in the 1960s. Lavän's contrabassoon is very difficult to play, though he is able to play it well.

Only the APO and the NZSO have permanent contrabassoonists, the other orchestras use casual players when a contrabassoon is required. At present the VWO and Southern Sinfonia tend to primarily call Hayley Roud, and the CSO primarily call Melanie Chua. They are both from Christchurch, as is Colin Forbes-Abraham, who is also frequently called when he is living in New Zealand. That practically all the casual contrabassoonists in New Zealand are from Christchurch demonstrates the advantage of a teaching institute owning a contrabassoon. Ruth Brinkman is the current contrabassoonist in the APO, she has been a member of the orchestra since it was formed.

⁵⁶ See Glossary A, Instrument O, p. 61

⁵⁷ Oscar Lavän, email communication, 8 December 2010
See Glossary A, Instrument W, p. 66

The NZSO has had a higher turnover; George Booth 1946-1962,⁵⁸ Robert Girvan 1963-1973, Paul Blackman 1973-1978, Colin Hemmingson 1978-1981, Liam Gill 1981-1996,⁵⁹ Hamish McKeich 1997-2006,⁶⁰ and David Angus 2007-present. While McKeich was principal he encouraged the orchestra to buy a contraforte.⁶¹ This was being considered, and he had an instrument on loan for two weeks in 2006, but unfortunately with his resignation the possibility was dropped.

Selected New Zealand Repertoire

The contrabassoon has been written for regularly in ensembles; Yvette Audain, Jack Body, Chris Cree Brown, Cheryl Camm, Edwin Carr, Lyell Cresswell, Gareth Farr, Chris Gendall, Ross Harris, Pieta Hextall, Philip Norman, John Psathas, and Jack Speirs have all written contrabassoon parts in orchestral or chamber music. The works that have been selected are unique in that, as far as the author is aware, they are the only works by New Zealand composers that feature the contrabassoon as a solo instrument. Case studies follow of Bryony Jagger's *Love Duet*, Michael Norris's *Heavy Traffic*, Chris Adams's Chamber Concerto for Tenor Saxophone and Contrabassoon/Bassoon, Tristan Carter's Two Caprices; 'Lilith' and 'Ninurta', and Natalie Matias's *Lyrique*.

Bryony Jagger is an English-born composer, based in New Zealand since 1975.⁶² She studied composition at the University of Cambridge with Roger Smalley and Patrick Gowers, and in Boston with Professor Earl Kim. This formal studied was greatly enhanced by her playing in orchestras, singing in choirs and reading scores. Jagger also studied ethnomusicology, and has taken a variety of courses in her diverse interests, including psychology, writing, broadcasting, Japanese, philosophy, and drama. She has participated in festivals and conferences for writers, and recorder players. She has worked as a composer, writer, and performance poet, while continuing studies and

58 Op. cit., Tonks, *Bravo, The NZSO at 50*, p. 220

59 Joy Tonks, phone communication, 30 November 2010

Liam Gill was officially the contrabassoonist until 1996, however he had problems with RSI for quite some time before this, and had time off, so casual players were used, including Hamish McKeich in 1996, until he was forced to give up playing.

60 Hamish McKeich, interview, 15 November 2010

61 See Glossary A, Instrument Q, p. 62

62 Bryony Jagger, Biographical Details, 2010

raising children. She is an accomplished performer of poetry, and on oboe, cor anglais, recorder, and a singer (contralto). She has had songs, orchestral works, choral works, and chamber works performed in the United Kingdom and in New Zealand, and has won many awards, including in 1993 the New Zealand Symphony Orchestra Friends' Award for Services to Music. Jagger has had four staged works performed, two of these, *Birds of Enlightenment* and *Release From Hell*, were later broadcast on Radio New Zealand Concert (RNZ). She has recorded other works for RNZ, and also for 'Kaleidoscope', a television program about the arts. In 1990 Jagger was in a car accident in which she suffered head injuries, and in 1999 was mugged and received further head injuries, which still affect her memory, balance, cause headaches, and for a time robbed her of the ability to imagine music, making composition difficult.⁶³

Jagger wrote *Love Duet* for solo contrabassoon for Philip Sumner in early 1989. Sumner had played in wind ensembles with Jagger (oboe) earlier in the 1980s before he moved to Australia.⁶⁴ In 1989 he had moved back to Auckland, was teaching Jagger's daughter bassoon, and in conversation with her complained of the lack of repertoire written specifically for the contrabassoon.⁶⁵ Sumner also felt that composers did not make use of the singing upper register of the contrabassoon, only seeing it as a grumpy bass clown. Jagger offered to compose a piece, provided Sumner demonstrated what the contrabassoon could do. Though she had written for most other woodwind instruments Jagger had had little contact with the contrabassoon, and only ever written small parts in orchestral works. When Sumner demonstrated the upper register she was impressed with the singing quality, similar to the contrast between the 'honk' and 'flute' registers of the cor anglais that she was familiar with, so this led to the duet between the lower and upper registers of the contrabassoon. The piece starts with each stating their tune, then the tunes intertwine.

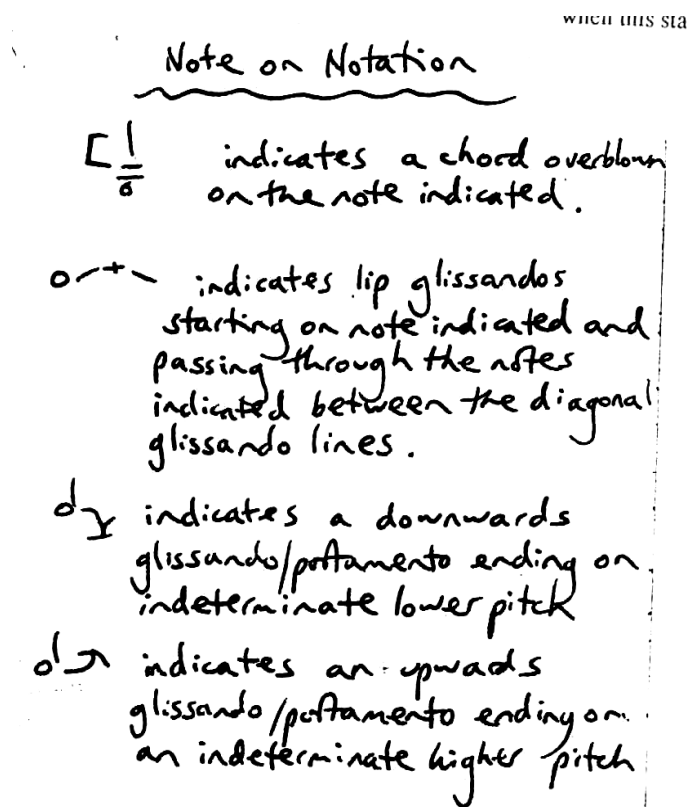
63 Head injuries effecting peoples' abilities to imagine and enjoy music are discussed in Oliver Sacks, *Musophilia*, Alfred A. Knopf, Inc. (Toronto: 2007), a case with a striking similarity to this are discussed pp. 112-119

64 Philip Sumner, email communication, 3 October 2010

65 Bryony Jagger, email communication, 19 August 2010

The playful humorous lower register of the contrabassoon is pitted against the more languorous and sensuous upper register in a love duet. At first each sings its own little tune but, after coming in contact, both find it difficult to continue as individuals, being afflicted by glissandos of desire and chords of hesitancy. Hesitantly they experiment with each others' tunes, until at last they create a new lyrical unity as one united couple.⁶⁶

Despite the registers being used as separate voices, the range of the piece is still comfortable, ascending to only the *g* below middle *c*'. As mentioned in the note above there are some extended techniques employed. Low notes are overblown to produce chords, and a variety of lip glissandos notated as follows:



Love Duet was written the year before Jagger was in her car accident, and she now has no memory of writing this work, or if it has ever been performed. Sumner confirmed that he did perform the work once, soon after it was composed, in the Auckland University School of Music Auditorium. The programme note for this performance was more specific about the programmatic content of the

⁶⁶ Bryony Jagger, 'Programme Note', *Love Duet*, 1989

work, stating that the high voice represents a woman, the low voice represents a man, and the middle section represents the couple in the act of making love. Sumner felt self conscious about performing this, and when he got to this section, with low multiphonic groans and high pitch bending sighs, the audience were audibly giggling and muttering. This concert was recorded by Radio New Zealand Concert (Concert FM at the time), the other pieces that were performed in the same concert were broadcast a few months later, however *Love Duet* was not. Though it was a polished performance the audience reception and background noise led to it not being included in the concert's broadcast. Unfortunately the tape used to record that concert has since been recorded over.

The low male tune is stated first. It is a simple tune A-A'-B-A in form, based on staccato quaver stepwise motion within the fifth contra B' to E' , and jumping between that E' and the B'' below. The high, female tune begins in bar 12. Its first phrase also sits within the fifth B to e , linking it to its partner phrase, but is contrasted in that it is an octave higher, legato, and uses triplet rhythms. The contrasting characters alternate until bar 60, when the different characters begin to infuse one another. The infamous middle section begins at bar 82, announced by the first multiphonic, and soon followed by a high glissando. This section lasts 23 bars, and from bar 105 the tunes return, glissandos still interrupt, but become gradually less frequent. From bar 162 to the end the two characters from the first part of the piece have combined and exchanged elements. The general progression of the final section is from high to low, from a high g in bar 190 to the final phrase, descending to subcontra B'' before ending on E' .

During the 1980s Jagger's marriage had broken up, leaving her a solo parent with two young daughters, and at this time she wrote many songs and poems dealing with broken dreams, destroyed love, hurt, anger, and betrayal. The romantic content in *Love Duet* is in stark contrast to the content of other works by Jagger written around the same time.

Michael Norris is a Wellington-based composer, and lecturer in composition and sonic arts at the New Zealand School of Music.⁶⁷ He studied at Victoria University, Wellington, and City University, London, has been Composer-in-Residence with the Southern Sinfonia, held the Mozart fellowship at the University of Otago, and is a co-founder and co-director of new music ensemble, Stroma. Norris has been commissioned to write works for groups including Duo Stump-Linshalm, members of the Luxembourg Philharmonic, 175 East, and Chamber Music New Zealand. In 2003 he won the Douglas Lilburn prize for orchestral composition, which led to the New Zealand Symphony Orchestra commission of his work *Heavy Traffic* for contrabassoon and orchestra.

Heavy Traffic was premiered by Hamish McKeich, with the NZSO in June 2006, and was written over the preceding summer.⁶⁸ It was performed in Wellington, Hamilton, Auckland, Christchurch and Dunedin.⁶⁹ The NZSO commissioned New Zealand composers to write pieces showcasing principals of the orchestra, and this work was one of these. Norris was given a choice of a few instruments and selected contrabassoon as he had worked with Hamish McKeich, then principal contrabassoon in the NZSO, in Stroma. Norris spent time with McKeich before he began writing, going over the range of the instrument, pitches and registers that were most stable in terms of intonation and tone quality, and some extended techniques, in particular flutter tonguing and multiphonics, which are both used in the work, though sparingly. Norris was aware of other solo works for contrabassoon, in particular the concerto by Schuller, however he didn't listen to any works for contrabassoon before he began writing.

Multiphonic in bar 109:



67 Michael Norris, Biography, *Michael Norris Composer*, www.michaelnorris.info/about.html [Accessed 2 September 2010]

68 Michael Norris, Interview, 26 August 2010

69 'NZSO Listings March-May 2006', *Scoop Independent News*, www.scoop.co.nz/stories/CU0601/S00027/nzso-listings-march-may-2006.htm, [Accessed 9 September 2010]

Flutter tongue in bar 150:



The work is a single movement in three sections, loosely in ternary form. The first section, from bar 1 to 84, is fast, opening with continuous sextuplets in the viola, punctuated by the other strings, and percussion. From bar 9 the texture thickens as brass and wind join. The only variations to the continual sextuplets are the occasional semiquavers and quintuplets, never for more than a couple of beats before returning to sextuplets, which are passed between various sections of the orchestra. The first entrance of the contrabassoon is preceded by an ascending run in the piccolo, flute, E flat clarinet, harp, and second violins. After the agitation of the introduction the contrabassoon entry is a point of rhythmic calm.

Contrabassoon first entry, bar 34:



The melodic material in this section is angular and rhythmic, using large leaps, varied articulation and accents. A descending glissando in the contrabassoon in bar 60 leads into a brief slower section. Chords are held by the strings, brass play high flutter tongue notes with staggered articulation. This texture is punctuated by low stutters on the contrabassoon, reminiscent of a motorbike being reluctantly kick started. The previous material returns at bar 72 to conclude the first section. There is a short transition section from bar 85, when the tempo slows, and the contrabassoon recalls its stuttering in bar 88 before everything comes to rest with a held chord in strings and horns.

The second section begins at bar 89 with new melodic material on the contrabassoon and sparse string accompaniment. The pace is now much slower, with a slower tempo and greater note lengths, and the melody makes use of large leaps, covering two and a half octaves in less than three bars. Sections of the orchestra quickly pick up this new melodic material, starting with horns. After only twenty four bars the material from the first section interrupts, though only for one bar, before returning to the slower tempo. A series of pauses, alternating between strings and contrabassoon, leads back to the melodic material of the second section. The cor anglais leads and is soon joined by the contrabassoon and horn. Bar 123 is a short cadenza for the contrabassoon which leads to the third section.

The third section begins with a duet between the contrabassoon and tuba, the lines of each dovetailing into one another, and the tempo accelerating into that of the first section. The material of the third section is similar in style to that of the first section, but is not the same. The driving sextuplets return in the strings, and the tuba and bass clarinet have prominent parts, sharing material with the contrabassoon. The unruly traffic of the orchestra gets out of hand and an ascending flourish in bar 149 this time leads to four bars of whistles, played by the percussion, brass, and harp. Back on track, the section continues. From bar 172 a modified version of the earlier stuttering idea begins. The contrabassoon has continuous semiquaver subcontra *B flats*” making a crescendo from piano to forte over a minim, repeated three times. This time it seems the kick start has worked on the fourth try and becomes a new low melodic figure. The low semiquaver material continues in the contrabassoon until bar 189. This section is very tiring to perform on its own, ensuring all the low notes speak, achieving a range of dynamics and articulation, and projecting over the orchestra all require a lot of energy. Coming at the end of the work these seventeen bars are a real challenge. The work ends with a progression of *C-C sharp-B-G-E flat-D-F-B* in the contrabassoon, bass clarinet and brass, the contrabassoon holding the final subcontra *B*”, punctuated on the final quaver by

pizzicato low strings, and a descending glissando on piccolo, bass trombone, and violins.

The scoring of the orchestra is designed to keep from cluttering the sound of the contrabassoon, using piccolo, flute, oboe, cor anglais, E flat clarinet, and bass clarinet, but no bassoons in the wind section, and small brass and string sections. At McKeich's request the solo part is written predominantly in the low register, where the contrabassoon is more powerful, and the intonation is more reliable, though there is a lyrical section with strings, horn and cor anglais in a higher register. When Norris heard this section he liked it, as the Schuller concerto frequently makes use of the high register, had he listened to this work prior to writing he may have extended the passage in the higher register.

Figure J, bar 115, cor anglais, horn, and contrabassoon, ending with brief contrabassoon cadenza:

The image displays two systems of musical notation for Figure J, bar 115. The first system includes staves for Cor Anglais (C.A.), E-flat Clarinet (Eb Cl.), Bass Clarinet (B. Cl.), Contrabassoon (Cbn.), and Horn I (Hn. I). The Cor Anglais and Horn I parts are active, with the Cor Anglais playing a melodic line and the Horn I playing a supporting line. The Contrabassoon part is mostly silent, with a few notes appearing later in the system. The second system continues the music, showing the Cor Anglais and Horn I parts. The Contrabassoon part features a brief cadenza, marked 'ad lib.', with dynamic markings of *mf*, *p*, and *f*. The Horn I part also has a cadenza, marked 'ad lib.', with dynamic markings of *mf*, *p*, and *f*. The E-flat Clarinet and Bass Clarinet parts are silent throughout.

The full range of the solo part is from subcontra *B flat*", to high *f*, two octaves and a fifth above.

Despite this sensitive writing the balance between the contrabassoon and orchestra can still be troublesome depending on the hall. In rehearsals and performance both McKeich and Norris found that the sound carried better in the shoebox design halls, such as the Auckland and Dunedin town halls, but tended to be lost in the fan-shaped halls in Christchurch and the Michael Fowler Centre in Wellington. In the live performances a pedestal for the instrument was used so that McKeich could perform standing, giving greater visual presence, and the recording made from these performances is effective, as a microphone was close to the contrabassoon and the balance could be adjusted.⁷⁰ There is currently no piano reduction of the orchestral score, and for a performance of this work in November 2010 a MIDI orchestra track, prepared by Norris, was used as accompaniment. The use of a recording means that volume can be easily adjusted so the soloist is heard.

Norris does not consider *Heavy Traffic* to be programmatic, though it does have extra-musical content. The title alludes to both the weighty nature of the contrabassoon, and the fight to be present in the congestion of the orchestra.

After the opening motoric passage in the strings, the contrabassoon comes flying down the entrance ramp with horn blaring, thereafter engaging in a constant battle for supremacy with the aggressive manoeuvres of the orchestra. In the final chaotic section, for instance, it has to endure the strings' lane-changing (without indicating), the woodwinds' tailgating, and the tuba's road rage while struggling to chart its own course through the orchestra's clogged highways.

Although the way is often blocked by intimidating forces threatening to run it off the road, the contrabassoonist's command of the lowest orchestral register ensures that, in the end, he will be the one sitting in the driver's seat.⁷¹

As the contrabassoon is an unusual solo instrument, unfamiliar to most audiences, having this extra-musical content is a way to make the work more approachable. It gives aural prompts that the

70 CD available from SOUNZ, Norris: *Heavy Traffic*

71 Michael Norris, 'Heavy Traffic Programme Note', *Sounz Centre for New Zealand Music*, www.sounz.org/works/show/16570, [Accessed 9 September 2010]

audience can follow despite never having heard the work, or any other featuring the contrabassoon, before.

This is the only work Norris has written featuring contrabassoon. Through writing it he did gain a greater appreciation of the melodic potential of bass instruments of the orchestra, but also felt that that there was little promise of the expressive potential of the contrabassoon to move beyond the 'tragicomic' nature of the sonority. Settings in which Norris sees potential for the use of contrabassoon in future are in chamber music, where it won't be swamped, and with live electronics as the rich timbre of the contrabassoon lends itself to fruitful electronic manipulation.

Chris Adams studied composition at the University of Canterbury, and completed his Master of Music at Auckland University in 2006. He had worked as a teacher in Christchurch, and after completing his studies in Auckland took up the position of Head of Department, Music, at Liston College in Auckland.⁷² In 2009 he was Auckland Philharmonia's Composer in Residence and reduced his role at Liston College to part time. As part of his role as composer in residence he also mentored composers, and has been a guest tutor at the Nelson Composers' Workshop. As well as teaching and composing Adams has freelanced as a singer and violinist, conductor, chamber music coach, and organised concerts. For 2010 and 2011 he holds the position of Mozart Fellow at the University of Otago, which funds him to compose full time.⁷³ He has had commissions from various orchestras, chamber groups, choirs, and new music ensembles in New Zealand, has had works performed in New Zealand and Britain, and has been broadcast on Radio New Zealand Concert. In 2008 he won the Philip Neill Memorial Prize for his String Quartet, *Persephone*. Adams' upcoming projects include orchestral works, chamber works, and vocal works for various New Zealand performers.

Adams wrote his Chamber Concerto for Tenor Saxophone and Contrabassoon/Bassoon in 2010 for Christchurch based jazz/classical ensemble Silencio. The work has been performed twice, both times with Reuben Derrick playing tenor saxophone and Neville Forsythe playing bassoon and contrabassoon. Adams had worked with Silencio before, arranging the third movement from the Third Symphony by Ralph Vaughan Williams for their May 2008 concert, and writing *Mad Cow-Farmer's Disease* in October/November the same year. Many of the musicians in Silencio are multi-instrumentalists, so there was some flexibility with instrumentation. Forsythe had suggested the use on contrabassoon in *Mad Cow-Farmer's Disease*, and this suggestion was picked up for the Chamber Concerto. Adams decided to feature low instruments as the soloists, in this case contrasting the jazz saxophone and classical bassoon/contrabassoon, with the rest of the ensemble

72 Chris Adams, 'Biography', www.sounz.org.nz/contributor/composer/1230, [Accessed 30 September 2010]

73 Chris Adams, email communication, 27 October 2010

accompanying. Having worked with Silencio before, Adams had an idea of what would work well for them, and he also received a detailed template from the group, regarding individual performers' strengths. He was also involved in the rehearsal process, a sketch of the Concerto was workshopped in rehearsal so Adams heard it live and recorded it while developing the work.⁷⁴

The original conception of the piece was in three movements, however due to the time constraint of eight minutes it had to be reduced to two movements. The original third movement, 'Antiphon', became the first, the second movement, 'Medius Locus', remained, and the original first movement was dropped. 'Antiphon' begins with a four-bar introduction of call and response with the strings, piano and trumpet playing on the first two beats of each bar, and the woodwind responding on the third and fourth beats of the bar. The accompaniment continues in this manner for most of this movement.

'Antiphon', bar 1-8, two-two call and response, and first entrance of soloists:

Chamber Concerto
for Tenor Saxophone and Contrabassoon/Bassoon

Written for the Silencio Ensemble

I. Antiphon

Chris Adams

Rhythmic
♩ = 150

Flute 1
Flute 2
Clarinet 1 in Bb
Clarinet 2 in Bb
Tenor Saxophone
Contrabassoon
Trumpet in Bb
Piano
Viola
Violoncello
Double Bass

⁷⁴ Neville Forsythe, email communication, 20 October 2010

The contrabassoon and tenor saxophone enter in bar 5, the tenor saxophone playing one octave above the contrabassoon. At bar 17 the contrabassoon has a notated solo, accompanied only by the woodwind. The tenor saxophone has an improvised solo from bar 32, accompanied by only the strings, piano, and trumpet. Both soloists begin the original melody again at bar 39, but after three bars a five note ascending motive takes over and is developed. From bar 54 the two soloists stop playing together, and begin a fugal passage from bar 59. The accompanying ensemble now share in the melody for the first time, the theme starting every two bars in a different part, first in the first flute, then the cello, followed by tenor saxophone, then contrabassoon, and so on until none of the accompanying crotchets remain.

‘Antiphon, bar 59-73, fugal passage:

At this point the time signature changes from 4/4 to 6/8, the tenor saxophone and contrabassoon return to the opening melody, now in compound duple time. The accompaniment highlights the change in feel by going from two – two call and response to one – two. The movement ends after a second statement of the opening theme. The contrabassoon part sits comfortably between subcontra *B flat*” and *c sharp* two octaves and a minor third above.

‘Antiphon’, bar 74-82, one-two call and response, compound duple version of opening melody:

The musical score for 'Antiphon' (bars 74-82) is presented in three staves. The top staff is for Contrabassoon (Cbsn.), the middle for Trumpet (Tpt.), and the bottom for Piano (Pno.). The time signature is 6/8. The Cbsn. and Tpt. parts play a melodic line with a 'call and response' pattern. The Piano part provides harmonic support with chords and a rhythmic accompaniment. The score includes dynamic markings like 'f' and 'f'. The key signature has one sharp (F#). The score includes chord symbols: A, D, Bm, G#m, F#m, Dm, Bb/D, Bb, Db, F.

The opening of 'Medius Locus' is sparse, with held chords in the piano, and pairs of slurred quavers passed between the woodwind parts, the strings and trumpet join with long held notes. The ascending motive from 'Antiphon' is the germinative idea of the solo parts in 'Medius Locus', the bassoon enters in bar 13 with a melody based around this motive. Because of the chromatic semiquaver material Adams thought this movement would be more effective on bassoon than contrabassoon. The semiquaver movement is shared between the two soloists so that while one is holding a note the other is moving. After the first solo entry there is a passage for the accompanying ensemble, the soloists rejoining at bar 51. Bars 56 to 63 are a soli passage. For both soloists the passage is notated, but the option of improvising is given. Between bars 75 and 86 the soloists have a cadenza each, before returning to the opening material at bar 88. This is developed and becomes an insistent single-beat motive that is repeated and passed between parts until the semiquavers abruptly stop and the movement concludes with six bars of held chords.

Extra-musical elements were also to be incorporated, with members of the ensemble moving between movements to play from different parts of the hall, as shown in the diagram in Appendix B (page 46). The bracketed numbers next to the flute and clarinet refer to each movement. For the performances there was insufficient rehearsal time to make these movements effective, so it was performed with the soloists next to each other in front of the ensemble, and the ensemble in an arc. Adams thinks that if the ensemble were in a wide enough arc then the spatially conceived elements of the work could still be effective, however he doesn't feel that they came across clearly in the performances.

Balance was also an issue between the saxophone and bassoon/contrabassoon. Placing them at opposite ends of the hall could have addressed this. The performers found it a challenge to match the articulation between saxophone and bassoon/contrabassoon, a legato jazz articulation that came naturally to Derrick was difficult for Forsythe, and others in the ensemble, to match. While the balance was never resolved the differences in articulation were accommodated as rehearsals progressed.

Adams is still considering rewriting this work incorporating his original ideas. The third movement would again feature contrabassoon, and in both solo parts solo passages in each movement would be extended. The instrumentation of the accompanying ensemble could also be changed, adding more string parts to make it more of a conventional chamber orchestra. However, this will depend on there being a group interested in performing it. The ensemble part could also be reduced to a piano part.

Tristan Carter is currently studying towards his Master of Musical Arts (MMA) in composition at the New Zealand School of Music in Wellington.⁷⁵ His solo work for contrabassoon was composed as part of a paper in his MMA. Originally from Auckland, Carter moved to Wellington after secondary school to study both performance and composition, and gained first class honours in composition. Prior to undertaking his MMA Carter had two years away from university. He has had works performed in the 2007 Asia Pacific festival, at Toi Whakaari, BATS theatre, and by the Tasman String Quartet. He also plays in a gamelan ensemble and in 2009 spent time in Indonesia learning more about the music, language, shadow puppetry, and painting at the Mangkunegaran Palace in Surakarta, Central Java. As well as studying towards his MMA Carter composes and performs for new music ensemble SMP, and is working on improvised duos with fellow violinist and composer Chris Prosser.

Carter's work, comprising the two caprices, 'Lilith' and 'Ninurta', was composed for Hayley Roud, as part of a post-graduate composition course, taught by Michael Norris at the New Zealand School of Music. The brief for the assignment was that the work must be two contrasting caprices, each exploring a 'sonic microverse' on the composers' chosen acoustic instrument.⁷⁶ This 'sonic microverse' was to include up to three gestures or timbral identities, one of which must contrast with the other one or two. The work was to explore unconventional playing techniques throughout, and only use conventional techniques very sparingly, if at all. The extended techniques employed as the building blocks of these works were decided upon through collaboration with the performer. The techniques employed in 'Lilith' are as follows;

1. Timbral identity of ghost tones, where a note is purposefully fingered and blown, but in a way that only produces air noise, not a tone, then biting down on the reed to produce a note before immediately returning to air noise. The return to air noise can also be achieved by fingering the note and breathing in through the instrument.

⁷⁵ Biographical note, supplied by Tristan Carter, 2010, Appendix C, p. 53

⁷⁶ Michael Norris, Major Assignment One, Caprices brief, for NZSM405, 2010, Appendix C, p. 47

2. Timbral identity of tongue rams, where the air flow is stopped by closing the reed (also possible without a reed) with the tongue. This has a staccato effect and produces a slight amount of tone
3. Wailing gesture, incorporating three techniques. Initially a note is under blown, where a high note is fingered, but insufficient air pressure and embouchure is used to produce a lower partial of the note fingered. The fingered note is then slurred to, as breath pressure increases, and is followed by pitch bending, where using embouchure and breath support, the note pitch is lipped up or down. Finally, a sort of reverse of the initial technique is used, cracking, which is a combination of pitch bending and under blowing, when a note is lipped as far as is possible then let to crack to a lower partial. This gesture is also modified by varying the vibrato and the use of crescendo and decrescendo.

These techniques require the use of non-conventional notation. The following is an excerpt from 'Lilith', with performance instructions, demonstrating the notation method:

Lilith
solo contrabassoon

Tristan Carter

V, □ Sucking in breath/ Blowing out breath
 ■ Ghost tones. Play air noise.
 - = = = Speed of vibrato. Assume no vibrato required unless this is marked.
 • Articulating air noise with tongue
 x Which pitch should be fingered
 (x) Underblow fingered note to produce any lower partial (or ghost tone if marked (x))
 • Articulate note with a stopped breath, without use of tongue
 When glissando is not to an exact pitch, bend note in proximity of the glissando's position relative to the stave

Gesture 1 :

♩ = c.60

(V)

ppp *ppp*

*Begin with air noise, and as soon as pitch sounds, drop away again

Gesture 3:

V □

pp *ppp* *ppp* *fp* *f* *mf* *pp*

Gesture 2:

- = = = =

p *p* *p*

‘Ninurta’ uses two main devices, tongue rams, as described above, and low rumbles. These low rumbles are notated conventionally, with pitch and rhythm, however it is indicated they are to be played as fast as possible to produce an effect, the individual pitches are not expected to be discernable, the effect of the low continuous rumble is the intended sound.⁷⁷ This is notated as follows:

Staccato Tongue ram

Unless otherwise noted, accidentals last until the end of each system

As fast as possible

The musical score is written for a single melodic line on a bass staff. It consists of six systems of music, each containing measures 1 through 6. The tempo is marked 'As fast as possible'. The key signature has one flat (B-flat). The score includes various dynamic markings: *p* (piano), *ff* (fortissimo), and *pp* (pianissimo). There are also crescendo and decrescendo hairpins. The notation features many staccato notes, indicated by 'x' marks above the notes. Rhythmic patterns include eighth and sixteenth notes, often grouped in beams. Some measures contain triplets or sextuplets, indicated by the numbers '3' or '6' above the notes. The score ends with a final measure in the sixth system.

The final assignment for the same course was to write for an ensemble, and Carter wrote a quintet for three bassoons and two contrabassoons. This work, *Bioconcentration*, uses the same techniques as ‘Lilith’ and ‘Ninurta’. The wailing sounds of the bassoon are a twelfth higher than the contrabassoon, and these higher wailing noises over the low rumbling or tongue rams in the lowest register of two contrabassoons are effective developments of the techniques first explored in ‘Lilith’ and ‘Ninurta’. These works, despite being composed in accordance with the brief of the course, are

77 Tristan Carter described the techniques in his assignment ‘Techniques employed in *Bioconcentration*’, and his Extended techniques primer, 2010, Appendix C, p. 49

indicative of Carter's current soundscape, creating groaning and wailing sounds.⁷⁸ These works create a new sound world through their use of extended techniques. The titles of the caprices also reflect Carter's interest in the ancient mythology and the dawn of civilisation, in this case the storm demon Lilith (Lilitu), and Lord of Earth/Plough Ninurta (Nin Ur), or god of Girsu (Ningirsu). Both were associated with wind, Lilith is a wind demon and Ninurta is the god of the South Wind, and originated in Sumerian mythology circa 4000 BC. In various cultures Lilith is also thought to have been the first woman, before Eve, but was banished from Eden following disagreements with Adam. In some cultures she is seen as being good, but in other she is seen as being a banshee or witch, and this duality of good and bad in one persona also appealed to Carter.⁷⁹

'Lilith' has been performed twice, in composers' workshop at the NZSM, and at SMP ensemble's⁸⁰ 'A Good Time, Not A Long Time' concert on 27 June 2010. As a complete work they were premiered at the NZSM open day at Te Papa on 15 August 2010. The extended techniques these caprices are built from were worked out by Carter and Roud, on the VWO Heckel contrabassoon, later performances of these works could potentially require revision depending on the performer and instruments' capabilities. Instruments are likely to respond differently to the same approaches; even as a performer's technique develops it can become difficult to recreate effects consistently, even on the same instrument. For these reasons the score may need to be revised on a performance by performance basis. The range is subcontra *B flat*", to *a*, just under three octaves above.

78 Interview with Tristan Carter, 14 July 2010, "It's kind of along the lines of what I'm interested in at the moment, definitely. I'm especially interested in groaning and wailing kind of noises, liquid, or fluid kind of movement and sound, and not really just playing notes, like a note that kind of shifts around subtly and things like that."

79 Tristan Carter, Interview 14 July 2010, "It's a mythological/biblical name for a woman that was believed to have been before Eve, as in Adam and Lilith before Adam and Eve. I don't think Lilith went along with Adam's rules of the game so she had to take the high road out of Eden, and Eve had to be made to replace her. In different cultures, or different myths, she's sometimes looked at as a good girl and sometimes more of a she devil, banshee kind of thing. The idea that in a lot of stories she's considered as a bit of a witch, which can either be a good or a bad thing was just interesting."

80 The SMP Ensemble (director: Andrzej Nowicki) was formed in October 2008, and currently comprises Wellington-based musicians Andrzej Nowicki, Anton Killin, Kylie Nesbit, Karlo Margetic, Tabea Squire, Sam Jury, Jason Erskine, Justus Rozemond, Andrew Filmer, Carol Shortis, Tristan Carter, Charley Davenport and Jonathan Berkahn, often in collaboration with other outstanding Wellington-based musicians and advanced students of the New Zealand School of Music and Victoria University of Wellington. <http://www.smpensemble.com/> [Accessed 20 July 2010]

Natalie Matias is a Wellington born composer, currently in her third year of studies at the New Zealand School of Music.⁸¹ Matias started composing at a young age, and received tuition first through the Victoria Academy of Music during secondary school, then as a composition major at the NZSM. She has an interest in film music that she wishes to pursue, but considers her film music to belong to a distinct, separate genre to her ‘art music’, the piece discussed below falling into the latter category. Matias has written works in the past that straddle this divide, but does not feel this was successful and does not wish to do this in the future. She writes predominantly for string quartet, piano, and has written some orchestral works. This year she has also embraced woodwind instruments, writing not only *Lyrique* for solo contrabassoon, but also three clarinet quartets, *Dappled Light* for bassoon and piano, and *Introspective Illusion* for clarinet and piano. The clarinet quartets were commissioned for the ‘Plight of the Dischords’ clarinet quartet, and premiered at their concert on 28 March 2010, and are on the CD ‘Microscore Madness!’. The work for bassoon and piano was inspired by a performance of the first movement, ‘Eo Mugna’, of John Williams’ *Five Sacred Trees*,⁸² and was an opportunity to refine the ideas that were behind *Lyrique*. Matias's style of composition is melodic and traditional, she is currently aiming to achieve a more minimalist sound, but with a complex mood of music. Her writing process has a strong improvisatory element, particularly in early stages, her music is thought out in terms of time.⁸³

Lyrique was informally commissioned by Hayley Roud and was written in early 2010. The repertoire of pieces written specifically for contrabassoon is fairly limited, so having a work written specifically for contrabassoon was the motivation for the commission. Matias was pleased to write a piece that would be performed, as this is often not the case with works written while studying. The opportunity forced her to complete all the finishing touches that she finds can easily be overlooked

81 Natalie Matias, interview, 10 August 2010

82 Kylie Nesbit, bassoon, Jonathan Berkahn, piano, SMP ensemble concert, 31 July 2010

83 Matias, interview, 20 August 2010, "Lately I've just tried to get into a more minimalist realm, meeting very complex mood of music which, it's very hard to do, but it's sort of an area that I'm trying to get into."

"I always take a very improvisational approach to my music, and though it seems very fixed and maybe square sometimes when you look at it is actually just thought out in terms of time and sometimes I try to experiment but it doesn't always come through in my music, so timing-wise it's usually fixed but there is improv."

when a work isn't performed, for example, some areas of articulation, phrasing and dynamics.⁸⁴ As the contrabassoon was an unfamiliar instrument to write for performer and composer went over drafts of the work. In doing this Matias found the lower register of the contrabassoon to not be the sound she wanted in this piece and reworked sections for the higher register. She also increased the technical demands of the work by increasing the tempo of some sections, and adding fast, rhythmically challenging passages, after feedback that the original was not too demanding.⁸⁵ Matias wrote this piece initially with bar lines, but found they constrained the improvisatory nature and removed them in a later revision. *Lyrique* is written in traditional notation and uses conventional techniques, with only a couple of instances of pitch bending, and air noise, effects that she found striking in Carter's works.

Matias's melodic style is present in *Lyrique*, with the melody first stated after a brief introduction, before being absorbed into the constant movement of the piece.



⁸⁴ Matias, interview, 10 August 2010, "Usually when you write a piece, especially at a University level you don't actually write it for somebody to play, and so I find that I can get very lazy in not putting in a lot of directions."

⁸⁵ Matias, interview, 10 August 2010, "Your turned around and said it's not really that difficult, and the moment a composer hears that something's not difficult it's sort of like a challenge that you have to now make something really difficult, so though I might not have made it difficult in extended techniques I think I have made it difficult in terms of speed, and the amount of notes that I've tried to fit in to certain passages and it sort of serves you right."

The melody returns in fragments throughout the piece, only to be absorbed into the ever changing moving passages. This is followed by a contrasting section of low minims that gradually accelerates and ascends, soon turning to air noise, then returning to the earlier moving triplet passage, this time bypassing the introductory melody.



The triplet passage ends with the first instance of pitch bending in this work, then moves into a more rhythmically varied and demanding passage.



The triplet passage has now taken the place of the opening melody, and recurs in fragments between the chromatic, rhythmically challenging figures. After the final triplet statement there is a return to air noise, then further pitch bending before the conclusion of the piece, a series of long notes progressing from the *E* written within the stave to the *B* above, making crescendo and decrescendo between pianissimo and fortississimo.

Matias concedes she is not a great fan of solo works for monophonic instruments, and is considering reworking *Lyrique* to include a piano accompaniment.

Summary

These works are a valuable resource for contrabassoonists in New Zealand, and bassoonists looking to explore contrabassoon repertoire. The level of difficulty ranges from the Adams and Jagger works, which are quite basic, to the Norris work which is somewhat challenging. They are also in a variety of musical styles, from Matias's mostly traditional and lyrical piece, through Adams's jazz influenced concerto, to Carter's, written in entirely extended techniques. Hopefully performers will continue to seek works written for the contrabassoon, and composers will continue to write them, particularly within the difficulty level that is achievable on the instruments we have available. As more players around the world adopt the Fast system Fox and contraforte, more composers write works utilising the range and technical facility of those instruments. So, until an institute in New Zealand acquires one some international works will be off limits for even the best New Zealand players.

Works by Tristan Carter and Natalie Matias. Works by Bryony Jagger, Michael Norris, and Chris Adams are available at Sounz, Centre for New Zealand Music, Level 3, Toi Poneke Arts Centre, 61 Abel Smith St, Te Aro, Wellington 6011

solo contrabassoon

Tristan Carter

Hayley Roud, 300220780, *New Zealand Works for Contrabassoon*, 2010

Ninurta

Staccato Tongue ram

Unless otherwise noted, accidentals last until the end of each system

Tristan Carter

As fast as possible

The musical score for the Contrabassoon part of 'Ninurta' consists of 25 measures. The notation is in bass clef with a key signature of one flat (B-flat). The score is characterized by rapid sixteenth-note passages, often grouped in sixths and triplets. Dynamics range from *pp* (pianissimo) to *ff* (fortissimo), with some measures marked *fp* (fortepiano). The tempo is indicated as 'As fast as possible'. The score includes various articulations such as staccato and slurs. Measure numbers 9, 11, 13, 15, 18, 20, 22, and 25 are marked at the beginning of their respective lines. The piece concludes with a 'poco rall.' (slightly slowing down) instruction in measure 25.

2 28

33 *A tempo*

38

42

45

48


50

52

54

55

Dynamics and markings include: *pp*, *ppp*, *p*, *mp*, *fff*, *mf*, *ppp*, *mf*, *fff*. Markings also include *A tempo*, *3*, *6*, and *3* (triplets).

Embouchure bending = 

■ = Air noise

lyrique

for Contra Bassoon

N MATIAS
©

$\text{♩} = 100$
rubato



p < *p* < *mf* *p* < *mf* *p* < *mf*

10

p

16

mf *p* *mf*

21

p *mf* *ff*

25

p

30

< *p* < *ff* *f* *pp* < *ff*

36

mf *mf*

40

pp < *p*

46 *pp* *accel.*

53 *pp* *p* *Prestissimo*

62 *pp* *cresc.*

70 *mp* *cresc.* *p* *f*

77 *cresc.* *subito p* *f* *p*

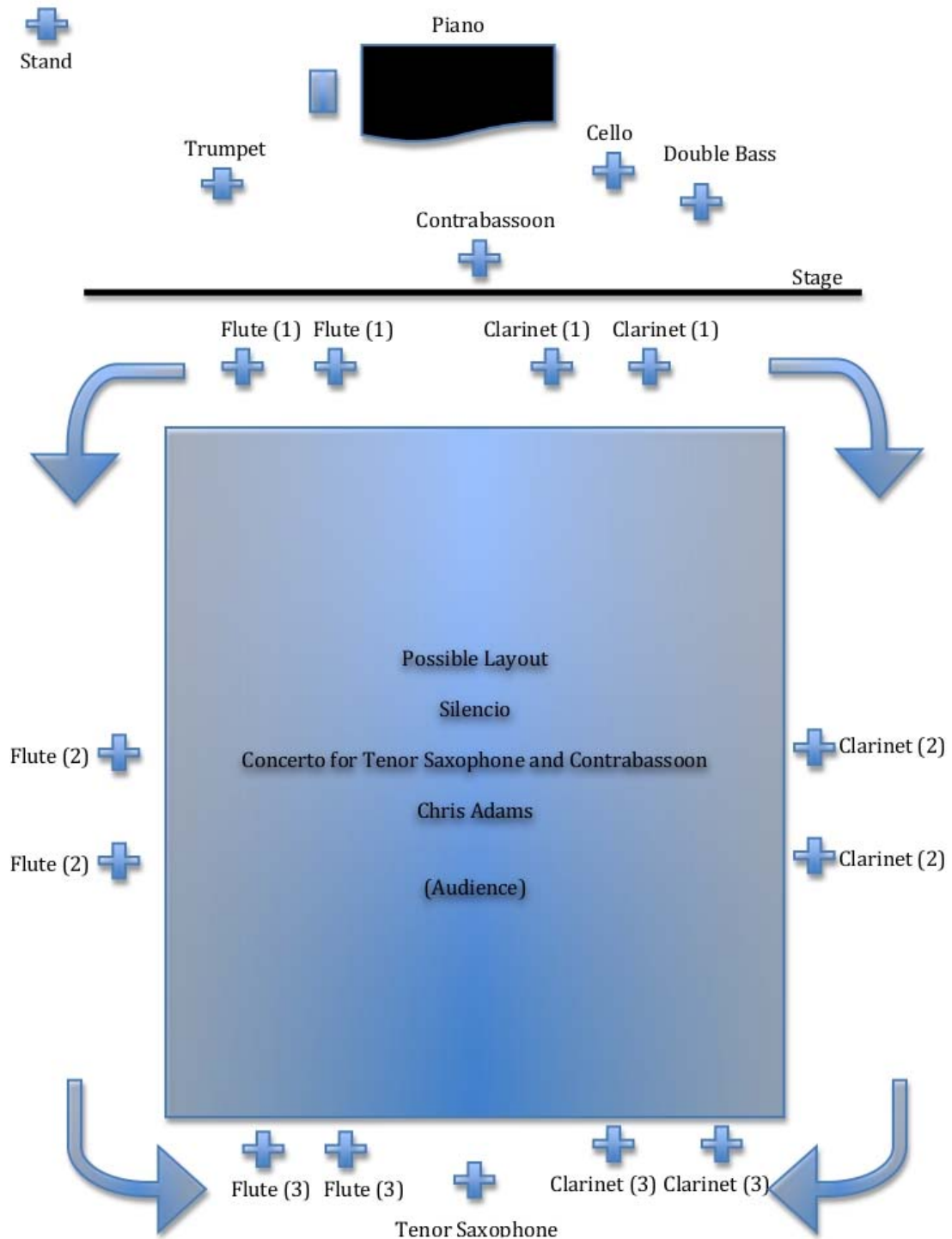
81 *cresc.* *dim.*

85 *p* *p* *p*

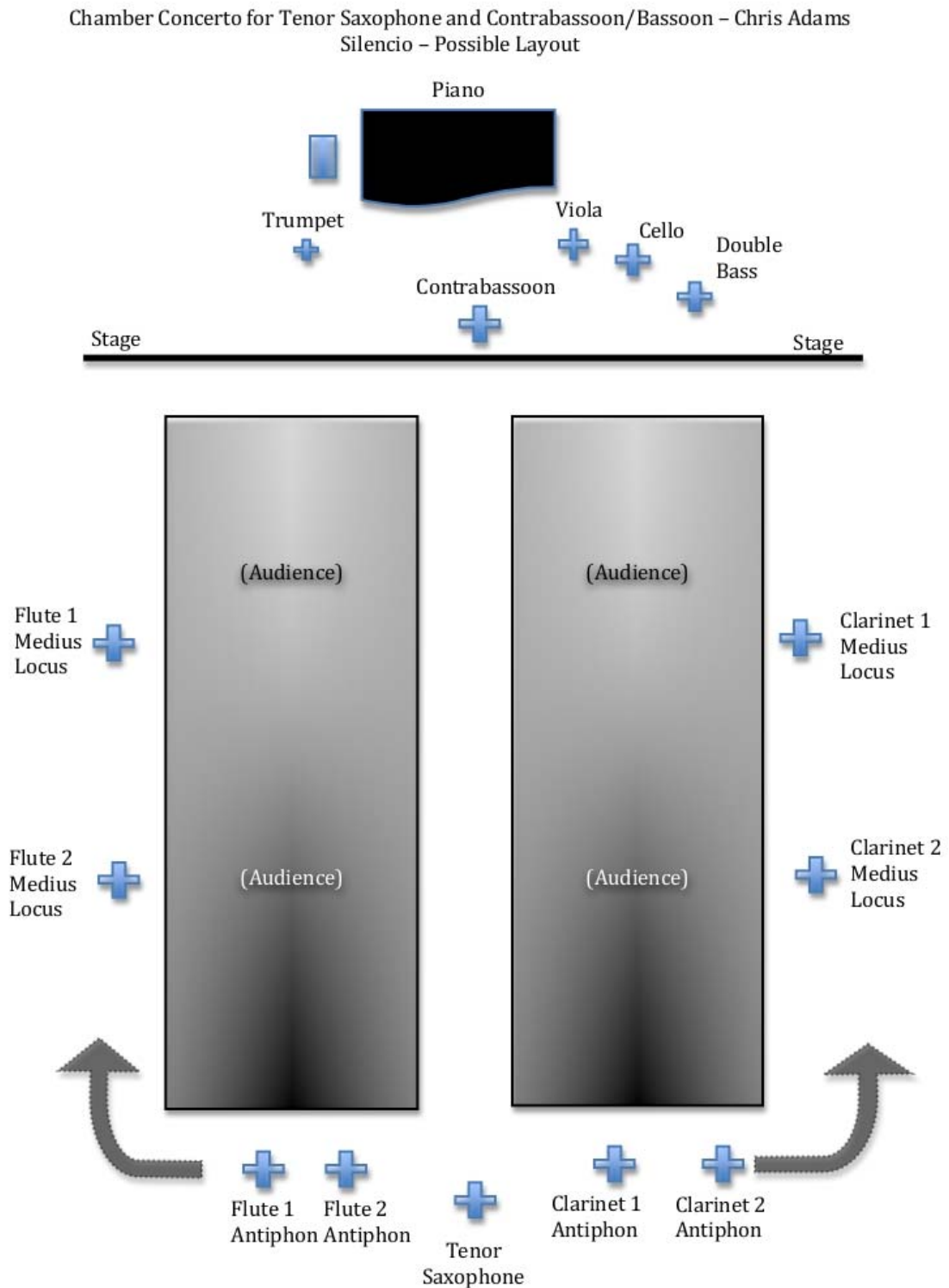
91 + A \flat key *fff* *p* *p* *molto. cresc.* *fff*

Appendix B

Proposed layout for Adams, Chamber Concerto for Tenor Saxophone and Contrabassoon/Bassoon, initial conception as three movement work:



Proposed layout for two movement work:



Appendix C

Supplementary information about Carter, Two Caprices

‘Sonic Microverse’ assignment brief for class taught by Michael Norris:



CMPO 345/NZSM 405 • SONIC MICROVERSES

MAJOR ASSIGNMENT ONE » CAPRICES

Write a work for solo acoustic instrument, within the following parameters:

- » The work must contain **TWO** movements (“caprices”)
 - Each movement must last 2–4 minutes
 - Each movement must explore a “sonic microverse”, the material of which contrasts in some way with the other movement(s)
 - If you use live electronics, you may write only one caprice, but the electronics part must carry an equal weight to the instrumental part, and the performance directions for the live electronics part must be clearly notated
- » The work must conform to the “Sonic Microverses Rules” — see overleaf
- » The work must be performed and/or recorded
- » The work must be more-or-less fully notated; only small amounts of improvisation are allowed

HINTS

Find a performer to work with NOW. You *may* perform the piece yourself, but this will not necessarily lead to the best learning outcome for you. Your relationship with the performer will become almost a collaborative one as you work to explore the chosen extended techniques.

DUE DATE: Monday 19 April, 5pm

COMPOSER WORKSHOP: Monday 26 April 2010, 2.10pm, Adam Concert Room

SONIC MICROVERSES: THE RULES OF THE GAME

- » The piece must have no more than 3 gestural/timbral identities per “caprice”
 - One of the two or three gestures will be a “contrasting” gesture, to create musical tension and interest
- » The piece must explore unconventional playing techniques in a thorough way
 - No conventional instrumental performance technique may enter the piece (except in *very* limited circumstances)
 - Unconventional techniques might include any of the following:
 - * unconventional fingerings
 - * harmonics/overblowing
 - * preparations of the instrument or unconventional instrument construction
 - * unconventional bowing/blowing/other performance technique
 - * unconventional “prop” (e.g. bow, mallet, etc)
 - * percussive effects
 - * multiphonics
 - * noise-based sonorities
- » The piece should avoid having *too many* extended techniques; rather, each gestural/timbral identity should focus on the development of variations within a single technique — the gestural and timbral world of each identity should be highly delimited
- » The development of the piece should follow a chain of varied repetitions of the core cells
 - But the gestures must retain their essential identifying characteristics throughout
 - Typical variations can include:
 - * pitch content (where pitched)
 - * rhythmic expansion/compression (though rhythmic identity must be maintained)
 - * contour (without altering it beyond recognition)
 - * other expressive detail (e.g. articulation, tremolo, etc)
- » The piece may exploit dramatic contrasts and extremes in dynamic, register, rhythm, timbre, etc
- » The piece may be notated using conventional metred notation, or using some form of free rhythmic notation (proportional notation, unbarred notation, etc)
- » The piece should avoid explicitly using conventional tonal materials (lyrical melody, triadic harmony), etc, although these could be *hinted at* in a fragmentary or vestigial manner

Under-blowing

Where a particular note is written and fingered, but a looser embouchure and insufficient airflow is used, a lower note is produced. This sounding note is a lower partial of the harmonic series that the fingered/written note is part of. There can be more than one other lower partial that can be sounded by under-blowing.

Strictly speaking, all notes above the fundamentals on a woodwind instrument are over-blown, as in they are not the fundamental note of the harmonic series which can be produced from the size and length of the bore in question, but there are optimum fingerings to produce certain notes in a series clearly and steadily. So, as stated above, if these optimum fingerings are not matched by the optimum breath and embouchure, other notes of the series may sound.

With the variation in the set-ups of contrabassoon keys, there is no set way to play all notes, and even on a particular instrument, there are various ways to finger most notes. A performer's technique will also contribute to whether or not some partials will even sound. Therefore it is not practical to list all the possibilities. Consultation with the performer and their particular instrument is necessary to work out particular combinations. This also brings up the matter of notating for this technique. One option is to work out which fingering for a particular performer on a particular instrument for a particular note produces which lower partials when under-blown, and notate accordingly.

An example of this could be:

The diagram illustrates the notation for under-blowing on a contrabassoon. It is divided into three main sections:

- KEY:** This section defines the notation. It shows a fingering for the L. Hand Thumb (2nd Reg key) with a sequence of five circles: an open circle, a solid black circle, a solid black circle, an open circle, and an open circle. Below this is a musical staff with a bass clef and a sharp sign (#) on the line, representing the written note F#.
- Notehead:** This section shows a notehead with a vertical line pointing down to a circled 'x' (x), labeled "Sounding note".
- Symbol:** This section shows a circled 'x' (x) labeled "Under-blown".

In the center, a vertical box contains the word "therefore". To the right, a musical staff shows a sequence of notes: a quarter note G, an eighth note F#, a quarter note E, and a quarter note D. The final note, D, is marked with a circled 'x' (x) and a sharp sign (#), indicating it is under-blown.

The issue with this notation is that it may be too exact, and other performers on other contrabassoons may not be able to play an F# with that fingering, or sound the B with that fingering.

One way around this is to just write out the fingered note, and to let the performer choose their own fingering and sound whichever lower partials are produced from this. This is useful when the effect is more important than the note.

KEY:

|
(x)

Which pitch should be fingered

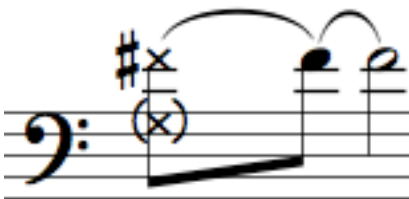
|
(x)

Underblow the above fingered note to produce any lower partial

Example:



One way to employ this technique is to slur between the under-blown note and the fingered note. The fingers don't move but the airflow and embouchure changes to change the sounding pitch. This can be done to and/or from the fingered pitch.

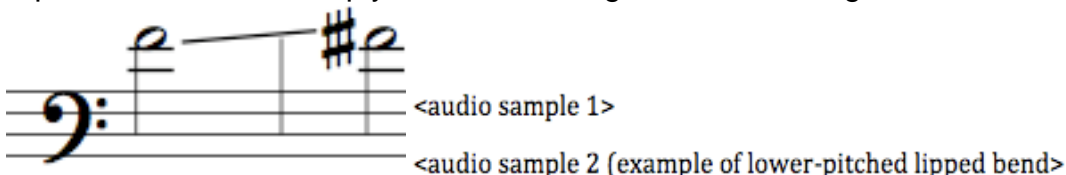


Of course this can be done at various speeds, and if a fingering is found which can sound more than one under-blown note, it is possible to arpeggiate up and down through the notes, by quickly changing the embouchure and airflow.

Lipping

A fingered pitch can be bent up or down without changing fingering, to varying degrees depending on which note is being played. The player does this with their lips. Notes can usually be bent up and down to approximately 3 quarters of a tone, and in some cases, a tone and then some.

A pitch bend can be simply notated with a glissando marking.



Cracking

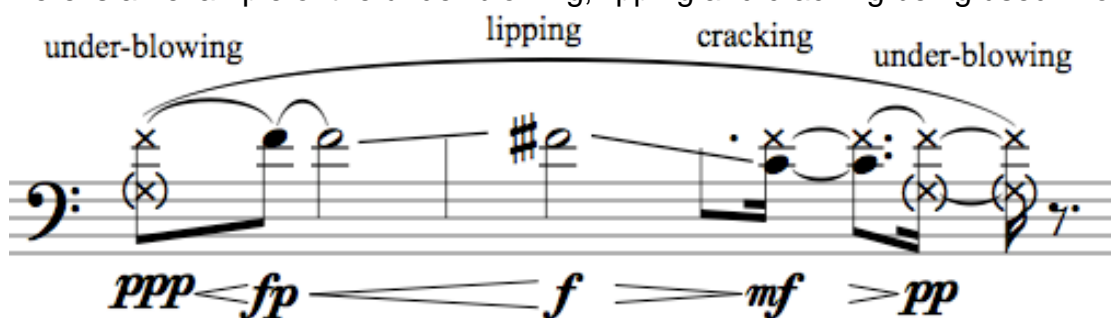
Notes on either side of the register breaks can only be lipped so much in the direction of the break before 'cracking' over the break to another note in the series of the held fingering. One way to notate this is by indicating a lipped bend over the break, i.e. no change in fingering. This example cracks over the break which is between D# and E. The



C is written to indicate this.

Cracking can have a similar effect to a slur between the under-blown note and the fingered note, so one could be written as a variation on the other. Cracking up and down through the break as fast as possible can result in quite a stumbling character to the sound, and with a loud dynamic, quite frenetic.

Here is an example of the under-blowing, lipping and cracking being used in one gesture:



<audio sample 3>(Notice how the final note drops to another lower partial.)

Ghost tone/Air Noise

If the player blows carefully and not too hard, air noise can be slightly amplified by the instrument. There is some differentiation in relative white noise pitch depending on which fingering is chosen or notated, but not a lot. This is also possible without the reed.

As long as a key is given, any different note-head within reason can be employed. I chose to use a square note-head. The below audio and notation example uses ghost tones fading into a normal tone and out again. This is not an easy technique to master, as the airflow required to sound the ghost tone can often be more than what is necessary to produce a hushed pitched tone. It requires beginning with a loose embouchure, then tightening the embouchure and slightly biting down on the reed with the lips to sound the pitch, then loosening again to gradually fade away.



<audio sample 4 >

Tongue ram

Stopping the flow of air into the reed or crook with the tongue results in the sound suddenly ending, usually with a bit of a staccato. The tongue ram itself produces a very small amount of pitch, and the most pitch produced is when it is performed at a loud dynamic. Repeated tongue rams are performed using single tonguing, so can be performed as fast as the performed can single-tongue. Dynamic range is from niente to about mezzo forte. This technique can be performed without the use of the reed, where there is no risk of a normal note sounding, so the dynamic range can be pushed. Care must be taken to allow the performer a moment to remove or attach the reed. When played repetitively, this can have an effect similar to the sound of a small idling motor.

<audio sample 5 >

An example of the use in the second caprice is as follows:

KEY:

× Staccato Tongue ram

(As fast as possible)



Low rumble

Although not really an extended technique as such, it is worth mentioning that with the extremity of depth of pitch a contrabassoon is capable of, some of the very lowest pitches can be quite difficult to hear accurately. When a combination of these low notes is performed in quick succession, the effect of a low rumble is created. It is best to check with the performer which notes are the best to perform very quickly.

(As fast as possible)



Alternatively, a general instruction such as playing any combination of notes of the lowest tritone as fast as possible may be sufficient for the desired effect.

<audio sample 6>

Multiple rumbling contrabassoons playing in an overlapping/dovetailing fashion would create a constant rumble. Extending up into more clearly audible registers could be one developmental trajectory. Variations of strength of attack, and incorporating lipped bending into the texture could also prove useful.

Carter's biographical note:

Tristan Carter Bio:

Tristan Carter was born and raised in Auckland. Upon finishing his secondary education in 2003, he moved to Wellington, to complete a Bachelor of Music at Victoria University, majoring in both Performance Violin and Composition. Upon the completion of the undergraduate degree, he continued to study another year of composition, gaining First Class Honours.

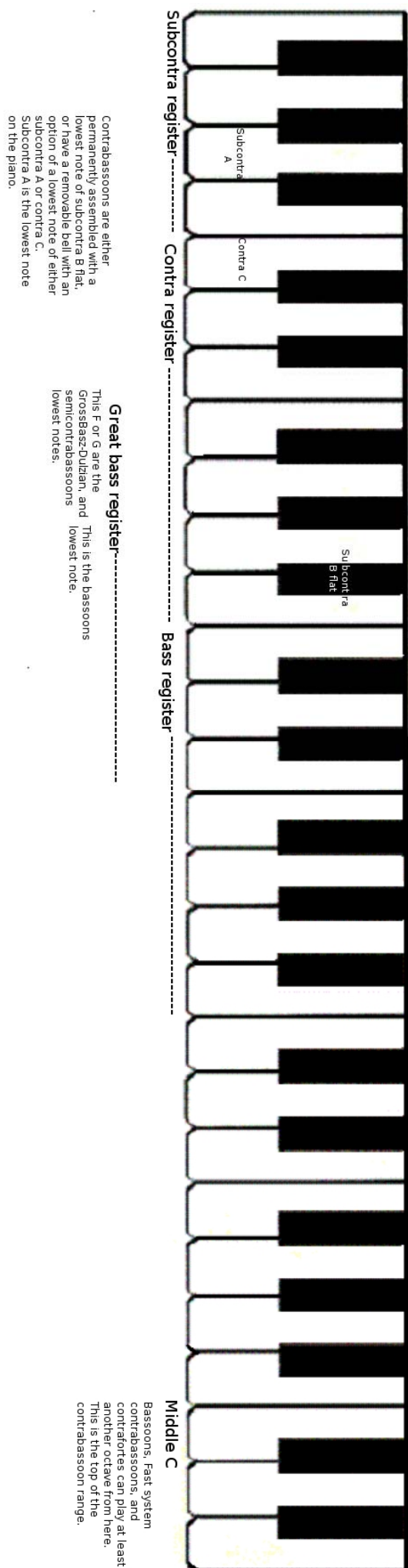
Previous projects include: collaborating with Maori Taonga Puoru instrumentalists James Webster and Horomona Horo in the 2007 Asia Pacific Festival; writing *New World*, for solo percussion and tape in a juxtaposition of supermarket sounds with peace protests on the 4th anniversary of the invasion of Iraq, performed by Arnold Marinissen; writing *Murmur* for the Tasman String Quartet, which was programmed in a New Zealand Tour in 2007, and which is due to be published and also released on an album by Waiteata Music press this year. Involvement in theatre includes writing and performing the music for a contemporary production of Shakespeare's *Twelfth Night* at Toi Whakaari- the New Zealand Drama School in 2007, and co-writing and performing the music for the 2009 BabyShads' production *Charm is Not Enough* at BATS Theatre alongside Takumi Motokawa.

Tristan currently plays in the Padhang Moncar Indonesian Gamelan Ensemble, and was lucky enough to be the New Zealand recipient of the 2009 Indonesian Art and Culture Scholarship. This enabled him to study traditional dance and gamelan music for three months at Mangkunegaran Palace in Surakarta, Central Java, while also receiving lessons in Bahasa Indonesia (the national language), Wayang Kulit (shadow puppetry) and Batik painting.

Current projects include collaborating with fellow violinist and composer Chris Prosser in improvised duos, writing for and performing with the new music group the SMP Ensemble, and studying towards a Masters Degree in Composition.

Appendix D

Range of standard contrabassoon, contraforte, Fast system contrabassoon, semi-contrabassoon, and bassoon, shown in relation to middle C on a piano keyboard.

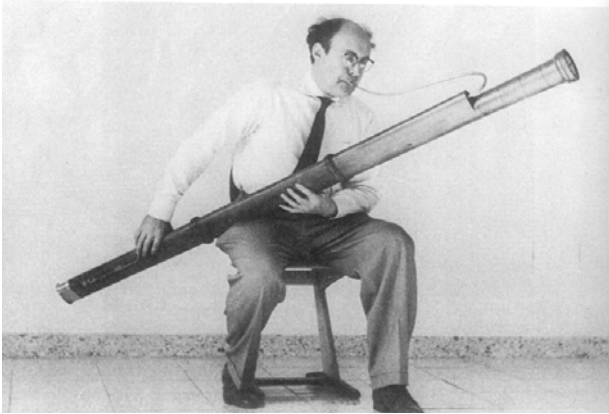


Glossary

Instruments

Early predecessor:

A: Grossbasz-Dulzian

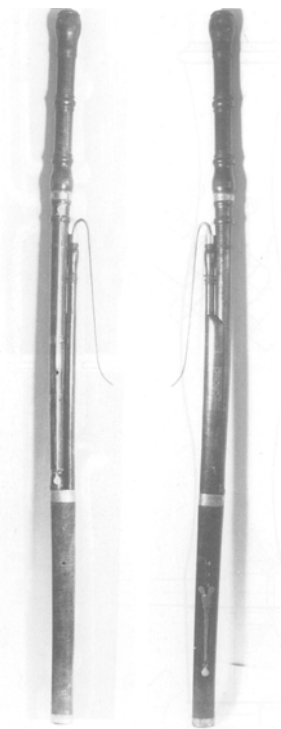


“Instrument maker and repairer Rainer Weber of Bayerbach, West Germany, with the beautiful 'Grossbasz-Dulzian' in F of the Augsburg Museum collection. (by courtesy of Mr R. Weber).”

Will Jansen, *The Bassoon*, Uitgeverij Frits Knuf (Buren: 1978), volume V, Plate 138, Fig. 387

Early contrabassoons:

B: Andreas Eichentopf contrabassoon



“The world's tallest contrabassoon, made by Andreas Eichentopf of Nordhausen. (by courtesy of Instrument Museum of the Karl Marx University, Leipzig)”

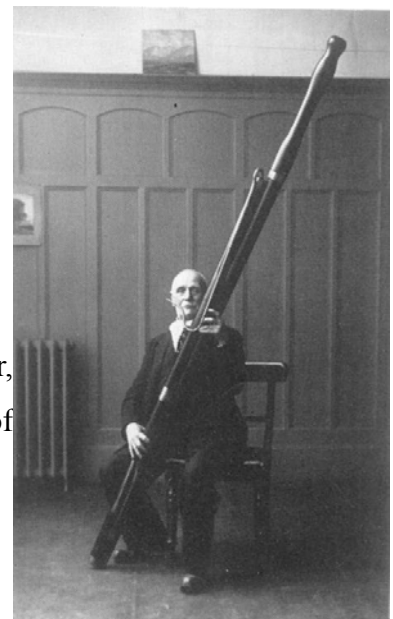
Ibid, Plate 88, Fig. 260

The claim that this is the world's tallest contrabassoon is confusing, as in volume II of this same book the height of the instrument is given as 2.68 metres, three centimetres shorter than the Stanesby contrabassoon.

C: Stanesby contrabassoon

“The Stanesby contra. The gentleman holding it is the late John Parr, the well-known Sheffield bassoonist and collector. (by courtesy of the National Museum of Northern Ireland, Dublin)”

Ibid, Plate 89, Fig. 263



Examples of semicontrabassoon:

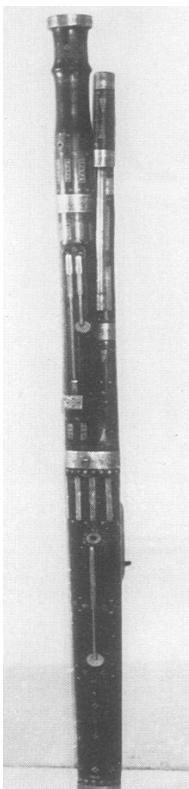
D: J.M. Anciuti semicontrabassoon



“Straight semicontrabassoon by J.M. Anciuti, Milan 1732. Museum Carolino Augusteum, Salzburg. (by courtesy of the Salzburg museum)”

Ibid, Plate 88, Fig. 261

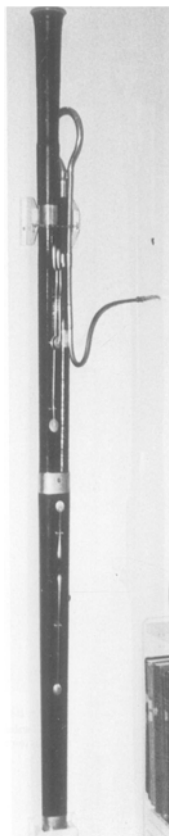
E: S.J. Truska semicontrabassoon



“Straight semicontrabassoon, richly ornamented with ivory and mother-of-pearl inlays, by S.J. Truska. Prague Nationalmuseum. (by courtesy of Mr Otto Oromszegi)”

Ibid, Plate 91, Fig. 267

F: Kaspar Tauber semicontrabassoon

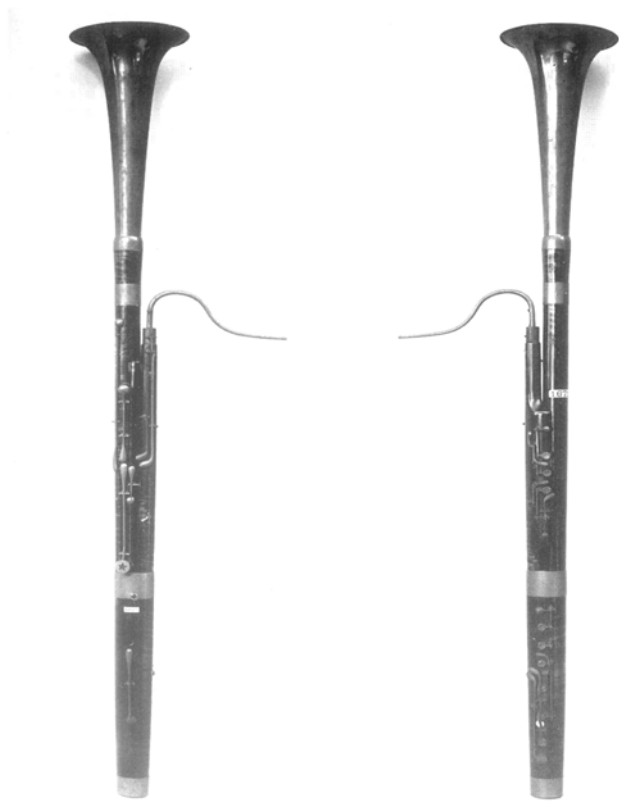


“Straight semi-contrabassoon by Kaspar Tauber, Vienna, of about 1800; the instrument was modernized in 1870 by Karl Stecher.”

Ibid, Plate 91, Fig. 266

When *The Bassoon* was published this instrument belonged to Will Jansen.

G: 'Galandronome', Galander's large bassoon



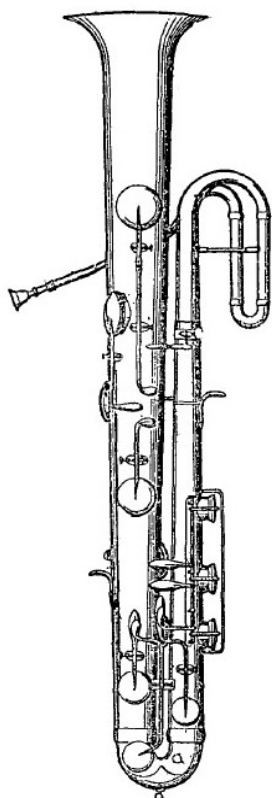
“The 'Galandronome', Galander's large bassoon in B-flat, front and back side. (by courtesy of the Metropolitan Museum of Arts, New York City).”

Ibid, Plate 13, Fig. 32

Instruments used in place of contrabassoons:

H: Ophicleide

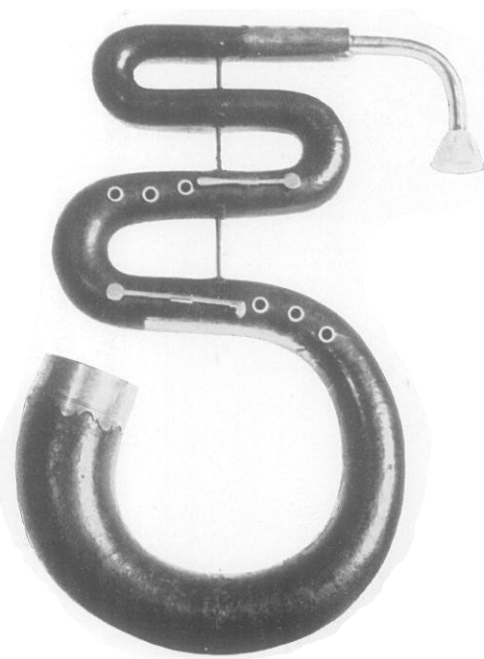
Daniel James Wolf, 'A Miscellany', *Daniel James Wolf Composer*,
<http://home.snafu.de/djwolf/tba.htm> [Accessed 29 November 2010]



I: Serpent

Four keyed serpent, English, c. 1800

Anthony Baines, *Woodwind Instruments and their History*,
Faber and Faber Limited (London: 1967), Plate XXXI,
Fig.2



J: Contrabass sarrusophone

“Contrabass sarrusophone in E flat by Conn, Elkart, c. 1920. (Gunther Joppig Collection.)”

Gunther Joppig, *The Oboe and the Bassoon*, B.T. Batsford Ltd (London: 1981), p.99



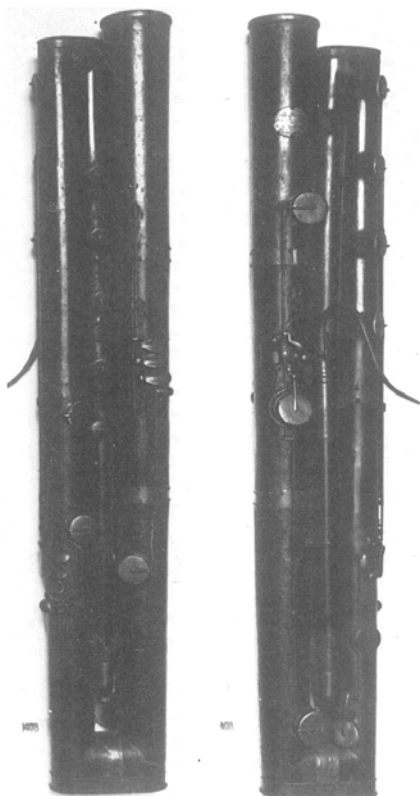
K: Metal contrabassoon

“Metal double bassoon by Evette & Schaeffer, successors of Buffet-Crampon, c. 1900. (Gunther Joppig Collection.)”

Ibid, p.123



L: Haseneier papier maché contrabassoon



“H.F. Haseneier's 'Contrabassophon' made of papier maché. Koblenz 1849.”

Op. cit., Jansen, *The Bassoon*, Plate 94, Fig. 272

M: Claviatur-contrafagott



“All-metal contrabassoon with keyboard mechanism, for military use.”

Ibid, Plate 95, Fig. 274

Beginning of 'modern' contrabassoons:

N: Wilhelm Heckel contrabassoon, 1898



“Contrabassoon by Wilhelm Heckel 1898, lowest tone B-flat. This instrument, in the possession of Jansen, is still very much in use.” [1978]
Ibid, Plate 98, Fig. 281



O: Heckel

The VWO Heckel contrabassoon, shown with A bell. It joins at the second to top silver ring on the tube closest to the camera. The bell ends in front on the right hand. The C bell is straight, ending at about the same height as the upper bow of the A bell.

Photo: Hayley Roud

New developments in contra-register double reed instruments:

P: Fast System Fox



Designed by Arlen Fast of the New York Philharmonic and Chip Owen of Fox Products Corp., this instrument was introduced in 2001. The register keys on the Fast System Fox are similar to those of the normal bassoon, making this instrument ideal for orchestras that use casual players when a contrabassoon is needed, as these casual players would not necessarily play contrabassoon regularly. Images of Fast System Fox contrabassoons are not readily available. In this photo the extra keys for the left thumb are just visible. Along with the contraforte there are none of these instruments in New Zealand.

Photo: Lucy Kraus, 'Orchestra Close-Up: The New York Philharmonic Bassoons', *Playbill Arts*, 3 June 2008, <http://www.playbillarts.com/features/article/7676.html>, [Accessed 8 December 2010]

Q: Contraforte



A new instrument designed and built by Guntram Wolf and Benedikt Eppelsheim, the collaboration began in 2001, and a contraforte was on display at the 2004 International Double Reed Society Conference in Melbourne.

Photo: 'Modern Woodwind Instruments', *Guntram Wolf Holzblasinstrumente GmbH*, www.guntramwolf.de/english/f_modern.html [Accessed 7 November 2010]

Contrabassoon in New Zealand:

R: Puchner



Purchased by the NZSO and used up until they purchased a new Fox in 1984, then again for a few months in 1991 when that new instrument was stolen and they were waiting for the replacement. Already in 1991 this instrument was getting old, Liam Gill complained “The pads leak... the intonation is wild. The key work is very old. It's just a lot harder work for me to try to achieve the same results musically.”⁸⁶ This instrument is still owned by the NZSO, and is used by players in the National Youth Orchestra, is hired to the Southern Sinfonia, and is made available to New Zealand School of Music students wishing to study contrabassoon.

Photo: Hayley Roud

S: Mönnig



Pictured is a modern Mönnig contrabassoon, it is similar the one purchased by Chris Spragg in the early 1960s for £400. It descends to B flat as does the Puchner above, and both stand around five-foot tall.

'Double Bassoons', *Gebrüder Mönnig – Oscar Adler & Co.*, http://english.moennig-adler.de/pitcms/.holzblasinstrumente_engl/hauptordner1/e1_o7/bilder1/w300.jpg

[Accessed 27 November 2010]

⁸⁶ Tim Donoghue, 'Requiem for a contrabassoon', *The New Zealand Herald* direct quote in the article from Gill

T: Fox



This is the most popular contrabassoon in New Zealand, owned by the NZSO, the APO, the CSO, the CSM, and David Smith.

They were designed by Alan Fox and Chip Owen, in collaboration with contrabassoonists in leading orchestras internationally, and were first introduced in 1971.

The NZSO purchased one in 1984, it was stolen in 1991, and they replaced it with another Fox. The first one has a G sharp key for the right thumb and an E flat key for the left hand little finger. These are both custom keys that are not shown in these images. The replacement Fox does not have these custom keys.

The APO purchased a Fox in the mid-1990s.

The CSO purchased a Fox in late 2008.

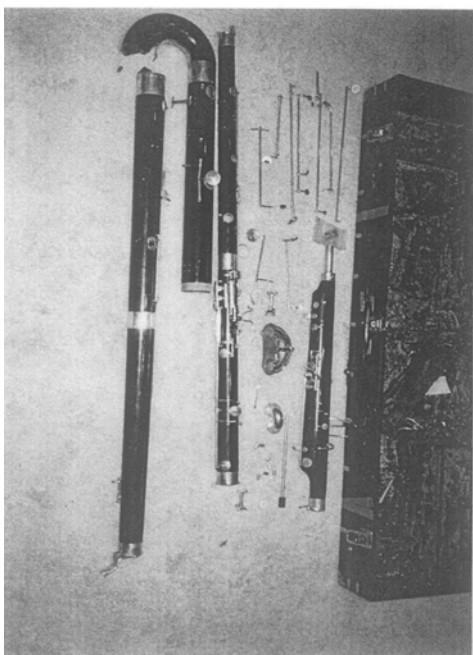
The CSM purchased a Fox, with funds from the Canterbury

Savings Bank Community Trust Fund, in 1995.

Photo:

http://www.foxproducts.com/index.php?option=com_content&view=article&id=46&Itemid=65

U: Fox #135



The photo on the left shows the contrabassoon, as Smith received it, having purchased it for \$112.50 from the NZSO. The photo on the right shows Smith holding the contrabassoon after he had completed its restoration.

David Smith, 'The Saga of Fox Contrabassoon #135', *The Woodwind Quarterly*, Issue 3, p.53, and p.54

V: Sonora



Photos: Philip Sumner, email communication, [26 October 2010]



Philip Sumner had his contrabassoon modified for ease of playing and transportation. He had the bell removed, and rotated it so that it ended in front of the main key work which made it easier to see music while playing, and meant it was possible to stand the instrument almost vertically, rather than at an angle from left to right across the body, removing the weight from the left hand. To ease transportation, (it originally came in a case over two metres long), he cut through the two tubes roughly 600mm up from the bottom, and made the necessary tenons, key extensions and new case. It is similar to the CSO's first contrabassoon, though there's is not modified. The picture showing the assembled contrabassoon shows the size, the bell of the CSO instrument folds down on the far side of the instrument, not down the front as pictured.

W: Linton contrabassoon



This instrument is stamped 'Linton', an American maker, but was made by either Cabart in France or Kohlert in Germany, probably during the 1960s. Lavān bought it about four years ago from Leisuretime Musical Instruments, an American company who fix and sell instruments. The instrument has very little wear and tear, given it's age, probably due to the questionable quality of the instrument.

Photo: Hayley Roud

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