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An investigation into the development of the baritone saxophone and
selected published solo works, from its invention to the 21st century

LUCY CARBY

A thesis submitted to the University of Huddersfield in partial fulfilment of the requirements for the
degree of Masters by Research

The University of Huddersfield

March 2021

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Abstract

The baritone has almost always been associated with ensemble performances, whether it be in jazz orchestras, wind orchestras or saxophone ensembles. However, there is solo repertoire written for it and performed – but why is this not heard of as much? My aim in this project is to look at the baritone from the beginning of its life and follow its journey to where it is in the modern day, whether it has always been perceived as an ensemble instrument or perhaps at one time took centre stage.

The thesis will be split into three sections:

The first will look at the instrument's early life – from inventor Adolphe Sax's patents and notes, and early method books written by musicians at the time. Looking at a range of sources I will be able to find out what the public's perception of the saxophone was, how social and political factors affected it and the struggles that Sax endured to create the instrument and begin to teach it in the Paris Conservatoire.

The second section will move forward into the 1900s, briefly looking at jazz and how this influenced the baritone; the reopening of the saxophone class discussed in the first section and what new directions were occurring for the saxophone. Again, the focus will lie with the baritone and how these factors directly affected (or didn't) its position in the classical music field, and whether this had an effect on solo repertoire written for it.

The third and final main section will follow a chronological continuation into the second half of the 1900s and beyond, where we see such events as the World Saxophone Congress beginning, new styles being adopted and performed, and an increase in accessibility to both the instrument as well as technological advances in terms of performances. I will look how the baritone has travelled through

the times, and whether its position and identity has changed throughout its lifetime and how this differs to what was intended for it originally.

As a part of this project, I have recorded some of the earliest pieces written for the baritone, as well as two more modern pieces so to discover the changes in compositional styles and approaches to the instrument.

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Introduction

When someone is asked to think of notable saxophone players or pieces, nine times out of ten these will be players of ‘common saxophones’, such as the alto or tenor. Of course, to a certain extent this should be expected – the alto is generally the first saxophone that prospective students are introduced to, especially students of a younger generation. This is a far more accessible type of saxophone than others, not only for its size but for its financial cost. It is only after a while of learning the saxophone that doors and opportunities tend to open up to playing other members of the family, as was my own experience – during my undergraduate degree I began playing the soprano, followed shortly after by the baritone. After discovering a love for the lower end of the saxophone family, I began to play the baritone outside of ensembles, looking for solo works to play in recital performances. This is where my interest for my project began: why was there such a lack of pieces to choose from compared to the alto? Why was the instrument only really seen in ensembles and not as an entity to itself? Was this what it was invented for? It is only through starting at the very roots of the saxophone family that I will be able to begin to understand where the baritone started, what pieces (if any) were written for it, and how it developed through from the nineteenth into the twentieth century.

What I have found throughout this project is that there seems to be a distinct lack of sources for this particular saxophone – lots have been written about the alto, but it is apparent that in comparison there doesn’t seem to be any research that goes into depth on the baritone as a solo classical instrument. This has meant that my information has been drawn upon primary sources, by analysing treatises that may mention the baritone; method books that talk about the whole family, as

well as individual compositions for the instrument. An incredibly useful resource to begin to look at compositions has been Jean-Marie Londeix's *Comprehensive Guide to Saxophone Repertoire*, where I have been able to compile a bibliography of published pieces for the baritone, from the very first through to 2012. Although this has provided with a high volume of information, research has had to be undertaken to attempt to find missing information that wasn't included in the book, such as dates of compositions.

Chapter 1 – The beginning of the baritone saxophone

Adolphe Sax – The life behind the saxophone

Adolphe Sax (originally christened Antoine Joseph) was born in Dinant, Belgium on the 6th November 1814, and was the oldest child of Charles Joseph and Maria Sax (Liley, 1998, p. 1). Inventing and developing instruments was not something that Adolphe Sax randomly stumbled upon. In fact, his father had created his own business in instrument manufacture (following the manufacture of cabinets and tables), even being appointed ‘Instrument Maker to the Court of the Netherlands’ by King William I (Horwood, 1983, p. 18). He had extended his offerings to not only brass and woodwind instruments, but also dabbled in the makings of violins and violas, as well as a ‘new piano conception, a harp with a keyboard and a guitar with a harp-like sonority’ (Horwood, 1983, p. 18). Charles is perhaps best known for his version of the *cor omnitonique*, which was created to combat the issues of the crooks of the hand horn but was surpassed by the more efficient valved horn (Liley, 1998, p. 2). It is not surprising, then, that Adolphe took an interest in the business and gradually became more involved in what he had seen his father creating.

After a formal education, Adolphe went on to study music at the *Conservatoire Royal de Bruxelles*, in which he also studied the flute, later taking up the clarinet. (Horwood, 1983, p. 19). He could have very easily become a clarinet virtuoso after showing such talent on the instrument, but the lure of the family business and his desire to improve current problems on the clarinet was too strong. (Horwood, 1983, p. 20).

A few years after his initial exhibits at the Brussels Industrial Exhibition of 1830, where he showed two flutes and a clarinet, Sax began his work on what were known as saxhorns – valved bugle-horns – and saxophones – a single reeds mouthpiece with a conical metal tube (Horwood, 1983, p. 20).

Slightly prior to this was his specification of a bass clarinet, dated June 19th, 1838. Sax worked on the problem that many instrument makers struggled with on bass instruments, that being the placement of the tone-holes in their scientifically measured places, but also so that the fingers could reach them. He ignored existing inventions of undulating shapes and slanting holes in thick-walled tubes, and instead placed the holes correctly but brought them under the fingers by means of covered cups (Horwood, 1983, p. 20). Coincidentally at around the same time, Theobald Boehm was on a similar path to discovery as Sax. 'On a visit to London in 1831 he [Boehm] heard Nicholson, whose volume of tone of the large-holed flute astonished him.' (Baines, 1991, p. 320) On his return home, he got started on incorporating larger holes on his flute, and more drastically changing the once closed keys into open keys to allow full venting. Following these changes, he realised that the player's fingers would be unable to fully cover the larger holes and eventually developed a system where finger plates would cover the holes, in a similar fashion to what Sax had created with the saxophone.

In 1839, conductor François Antoine Habeneck heard Sax perform on his bass clarinet and Habeneck is known to have said 'Compared with this instrument, the old clarinet is a monstrosity' (Horwood, 1983, p. 23). His bass clarinet led him to travel to Paris where he located Isaac Dacosta (first clarinet at the Paris Opera), who had also tried his hand at improving the clarinet. After persuading Dacosta to listen to Sax perform the solo from Meyerbeer's *Les Huguenots*, Dacosta admitted to superiority of Sax's instrument and how in fact his was not actually a great deal different from the original clarinet (Liley, 1998, p. 3).

In 1842 Sax returned to Paris for good, after meeting influential musicians such as Berlioz, Halévy, Kastner and Meyerbeer, who turned out to be useful contacts for him (Liley, 1998, p. 3). Sax came into contact with General de Rumigny, who along with others were concerned with the state of French military music-making and were aware of the superiority of bands of Prussia and Austria.

(Cottrell, 2012, p. 19). He began his commission for the overhaul of French military bands in 1845, his proposal including saxhorns but no saxophones – even though his patent for these was submitted in the same year. It is not clear on why he did not include these, possibly so it wasn't seen by competitors or the fact he did not feel it like it was developmentally ready (Cottrell, 2012, p. 20).

Following his plans for a family of valved bugles, Sax's second instrumental family conceived in Brussels was the saxophone (Horwood, 1983, p. 33).

Patents

Sax's first patent for the saxophone in 1846 began with him discussing the weaknesses of other pre-existing wind instruments, in particular 'that those belonging to the bass register were either too weak or too loud' stating that 'the bassoon was so weak' and, 'quite useless in the orchestra during loud passages'. He then went on to describe the ophicleide as having a less than satisfactory sound and having the inability to be 'dynamically flexible' (Sax 1846, cited in McBride, 1982, p. 113). This dislike of the ophicleide was also shared by critic Henri Blanchard, who in the *Revue et gazette musicale de Paris* on the 10th September 1843 said,

With the exception of the bassoon, there are no instruments which work agreeably well with the stringed instruments and the bassoon is worthless for outside performances where an instrument must overcome the strident voice of the brass instruments. The saxophone remedies these inconveniences: because of its more intense sonority, it can be modified better than any other instrument.

According to Kastner, Berlioz and others, the first saxophone was of the bass register (Horwood, 1983, p. 37). This interest in the lower wind instrument is interesting when we are looking at the baritone as Sax was aware that there was a gap in the market for an instrument that could cover

these ranges and wasn't lacking in ability to achieve a quality sound. This begs the question as to whether today's baritone was actually what he initially thought to be the 'main' instrument or focus in the family.

Named as No. 1, the *Tenor* was one of only two saxophones that Sax went into detail about and has more of a resemblance to the modern-day baritone than the modern-day tenor.



Figure 1: Eb tenor saxophone in Sax's 1846 patent (McBride, 1982, p. 118)

The description that he gave for this first patent included a family of instruments quite large – approximately 14 possible models – however only three were named and only two drawn with keywork (one of which is the tenor in Fig. 1), showing that his patent wasn't complete and was

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lacking in detail. The fact that both of the two drawn instruments (the other being of the lower end of the family as it sits between the *Tenor* and *Contrabasse*), are the only ones to have been drawn shows that they were the models in the family that Sax had spent more time on and had worked out more details for. This goes against today's preconceptions about the alto being the 'main' model as clearly Sax was more interested in the lower end of the family, evidenced from both his patent and also his statements about pre-existing woodwind instruments belonging to the bass register.

Table 1: Comparison between Sax's 1846 patent and 1850 patent. Models marked with an asterisk in the 1846 patent were drawn with keywork. (McBride, 1982, p. 120)

Saxophones in the 1846 patent		Comparable instruments in the 1850 patent	
N° 8	—	—	AIGU
N° 7	—	N° 1	SOPRANO
N° 6	—	N° 2	ALTO
N° 5	—	—	TENOR
N° 1*	TENOR	N° 3	BARYTON
N° 2*	—	N° 4	BASSE
N° 3	CONTREBASSE	—	
N° 4	BOURDON	—	

Sax went on to submit a second patent for the saxophone family 4 years later in 1850, this time for its importation into Belgium (McBride, 1982, p. 117) as opposed to his original French patent. As seen in the table above (Fig. 2), the names of the models had been through a complete overhaul, and the shapes of the models had been refigured. However, the 1846 *tenor* greatly resembles the 1850 *baryton* (Fig. 3), with the range and pitch also being completely identical to one another. This is not to say that the two models are completely identical, in fact the key work on both drawings shows a

fair number of differences. For example, McBride identifies that the position of some of the holes have changed as well as the number of sections of tubes used being reduced from 6 to 5. Perhaps one of the main changes is the position in which the mouthpiece sits: in the 1850 patent it is now more horizontal to the player which would give the player more control of the reed. This, being more of a resemblance of today's baritone mouthpiece position than the 1846 model, is accompanied with a slightly shorter bell, which benefits the mounting of improved keywork (McBride, 1982, p. 119).

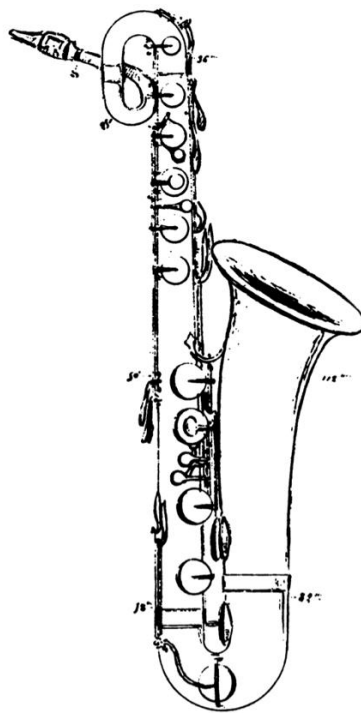


Figure 2: *Baryton* (no.3) model in Sax's 1850 patent (McBride, 1982, p. 118)

It is interesting to point out the apparent change in focus on the family. The omission of the *Contrabasse* and *Bourdon* is replaced with the names of the previously unnamed four higher pitched saxophones, giving the impression that Sax was now more interested in this end of the family rather than the lower end. It is unknown why he went in this direction; perhaps a realisation of the greater

flexibility that the smaller instruments had with smaller gaps between the keys and fingers, or the complexity of the larger instruments and the amount of keywork required. Either way, the 1850 *Baryton* is still firmly part of Sax's patent, withstanding the changing thoughts he had between them and being the only detailed model that he carried forward.

Public opinion

Sax's first public presentation of the saxophone was during the Brussels Exhibition of 1841.

According to Sax's friend and musicologist Georges Kastner, he presented a saxophone as well as several clarinets, however whether by accident or on purpose the instrument 'was sent flying with a kick by an unknown person at a time when the inventor, Adolphe Sax, was away' (Liley, 1998, p. 3). However, not long after this event Sax was visited by Lieutenant General Comte de Rumigny, who was hopeful that Sax's invention would help him to revitalise French military bands, and it was after this visit that Sax decided to leave Brussels and travel to Paris in 1842.

A welcoming announcement from Berlioz and a concert by Sax in the Paris Conservatoire led to the opening of the Adolphe Sax Music Instrument Factory, but this undoubtedly brought with it tension from current instrument makers. Clearly threatened by him and his relationships with prominent musicians of the time, they attempted to ruin his business by what Berlioz describes in a letter in 1843:

It is scarcely to be believed that this gifted young artist should be finding it difficult to maintain his position and make a career in Paris. The persecutions he suffers are worthy of the Middle Ages and recall the antics of the enemies of Benvenuto, the Florentine sculptor. They lure away his workmen, steal his designs, accuse him of insanity, and bring legal proceedings against him. Such is the hatred inventors inspire in rivals who are incapable of inventing anything themselves. (Cottrell, 2012, p. 18)

Particular tactics were used to try and sabotage the use of Sax's instruments, one being the use in orchestras. Some important musicians worked with instrument manufacturers and would refuse to perform if rival instruments were to be played, for example Gaetano Donizetti and his opera *Dom Sébastien* in 1843. Whilst writing, Donizetti prepared a part for the Sax bass clarinet, but was met with the threat from the principal clarinetist of the Opera orchestra that the orchestra would simply walk out if Sax's instrument was to be used. Donizetti therefore didn't have a choice in the matter and was forced to drop the use of the instrument, despite his high regard for Sax (Liley, 1998, p. 5).

During the 1850s, the development of the Orpheonic Movement saw the increase in amateur musical societies, and Orpheonic Authorities exerted pressure on these societies (which included wind ensembles and brass bands), to improve the quality of their instruments. At the end of 1857, they established a national commission to standardise the different wind ensembles and brass bands of France (Rauline, 2004). This work set out to remedy the bad quality of ensembles by working on ideal groupings of instruments, however Sax's instruments were not included in this initial list. 'This omission was remedied by Jules Simon – one of the Orpheonic authorities – who wrote several articles in 1862 and 1863 in the journal *l'Orphéon* [...] in which he recommended, in glowing terms, the instruments of Sax' (Rauline, 2004, p. 237).

By 1894, the saxophone had been included in works by symphonic composers, the very first being Kastner's *Le Dernier Roi de Juda* in 1844. Several others wrote for the instrument, making way for the orchestral works by such composers as Bartók.

The late uptake to the saxophone did not only occur within classical music, but surprisingly also within the jazz world. During the first two decades of jazz materialising, the saxophone was rarely

seen, and a typical ensemble would only consist of a trumpet, clarinet, trombone, plus a rhythm section of piano, drums and bass. It wasn't until after World War I that the saxophone was more prominent, where it is until to this day a common sight within jazz bands (Liley, 1998, p. 18). It was in the band that the saxophone was seen most during the nineteenth century. Fredericke Hemke writes that the 'saxophone was accepted in Spanish and English bands in the 1850s, but it was not until 1872 that audiences in the United States were made aware of the effectiveness of the saxophone' (Liley, 1998, p. 18).

In 1925, at the instrumental section of the Kansas City Conference, Jay W. Fay said:

The general attitude seemed to be that the saxophone was a wretched instrument with a vicious record, playing disreputable music in a highly offensive manner, and that the solution of the whole matter in the schools was to ignore it, to deny its existence, to refuse to have anything to do with it.

His argument against the opposition was that music educators should not be turning away students who wanted to learn the saxophone, as these children have expressed an interest in music, and they should be able to develop this. Already, the saxophone had seemed to gather great momentum within schools, as he stated that 'there are of course thousands of Saxophone players in our schools. One factory alone is turning out 700 Saxophones a month and selling them all, mostly to school children' (Fay, 1925). He then went on to state that 'the E flat saxophone' was 'the best member of the family', and this could be argued as to whether he was referring to the alto or the baritone as indeed both of them are in the key of E-flat. However, in the remainder of his article he lists pieces of music that he recommends playing, which are 'all effective and playable by the Alto Saxophone' (Fay, 1925).

By investigating nineteenth century music dictionaries we are able to find out exactly how the saxophone and the baritone were seen at the time, and what they were used for. In 1883, Grove and Fuller-Maitland described the saxophone as ‘inferior in compass, quality, and power of articulation to the clarinet, and bassethorn, and especially to the bassoon’ (Grove & Fuller-Maitland, 1883)

A few years later in 1895, William Stone gave the following definition:

BARITONE, the name usually applied to the smaller bass saxhorn in Bb or C. It stands in the same key as the euphonium, but the bore being on a considerably less scale, and the mouthpiece smaller, it gives higher notes and a less volume of tone. It is almost exclusively used in reed and brass bands, to the latter of which it is able to furnish a certain variety of quality (Stone, 1895).

Both of these definitions give the impression that the saxophone was seen to be more of a substitute brass instrument and seen less favourably when compared to woodwind instruments. The baritone especially, with its low sounds could be seen similarly to the euphonium, but again the definition gives an underlying sense that it wasn’t regarded nearly as highly as existing brass instruments.

The saxophone and the military band

In 1845, to add more tension between the instrument makers, General de Rumigny, who Sax spoke with previously about the state of French military bands, headed a commission following the French government’s announcement that they were to reform the bands, inviting instrument makers to submit their instruments for consideration.

The commission listed the following five problems as issues that were affecting the military bands at the time:

- 1) Restriction to a prescribed number of musicians
- 2) The use of set instrumentations

- 3) The insufficient number of performers
- 4) The use of inferior instruments
- 5) The perceived inferior position held by the players

(Farmer, 1904, p. 104)

Sax was the only one to give a full response. Already, it was apparent that General de Rumigny was interested in Sax and when they met a few years previously he saw his instruments as a solution to his problem. Whether or not there was in fact any other full responses sent for consideration in 1845 is unknown, perhaps it was indeed just Sax who responded fully but given their history and the troubles Sax had faced, it isn't too hard to believe that there may have been some underhand tactics in order to help push Sax along in the running.

Following the Champ de Mars contest in the April of 1845 where Sax's instruments (saxophone and saxhorn) competed against the instruments of Prussian Wilhelm Wieprecht (Farmer, 1904, p. 107), a clear victory had pushed Sax to the forefront of producing instruments for the French military bands. Instrument makers came together once again to try and protect their businesses and push Sax out; *L'Association Générale des ouvriers en instruments de musique* was formed and pushed many lawsuits towards the newcomer. Their arguments were that the saxophone didn't exist, and if it did then it was not original, as well as being compared to other current instruments. Several saxophones were bought and sent off to other countries, removing Sax's engraving and poorly re-engraving in an attempt to prove unoriginality (Liley, 1998, p. 6).

Early saxophone teaching in the Gymnase de Musique Militaire and the Paris Conservatoire

The earliest recorded information on the teaching of the saxophone goes back to the Gymnase de Musique Militaire in 1846, (opened as a result of the commission reorganising military bands), although “these appear to have been short lived since there is no record of them after 1850” (Cottrell, 2012, p. 34). This was of course the during the same time as Sax’s Belgium and French patents, so the uncertainty of what the saxophone family would even look like would have surely been a deciding factor on whether it was viable to be teaching them at that time.

The purpose of this establishment was to raise the musical level of military personnel, players and conductors, by having some of the leading virtuosos of the time as instrumental teachers. The admission requirements were not of a very high level (if we were to compare them to similar establishments today), as the prospective student had to be able to read and write, know some basic concepts of music as well as play a music instrument (Sluchin & Lapie, 1997, p. 6).

Jean François Barthéthemy Cokken was named as the first and only instructor of the saxophone from 1845-1850, and in 1847 Hector Berlioz wrote about the inclusion of saxophones to the school:

The military bands are somewhat more numerous than before; soon military musicians will be better prepared, supplied with better instruments, and, as a result paid and more respected. Already the study of a valuable instrument of which he (Adolphe Sax) is the inventor, has been admitted to the Gymnase Musical; a special class of saxophone has been created in this institution (Berlioz, 1847).

After the school’s closure in 1856, responsibility for the education of military musicians was passed to the Paris Conservatoire. It was around this time that Sax wrote the following letter requesting he be appointed to teach the saxophone:

Among the artists who today play the saxophone, there is not one who is equipped to teach all individuals of the whole family, from the soprano to the bass, and none of those who play possesses the best sound (the quality of the timbre) because of the instrument they practised previously and which they are obliged to continue to play every day. If therefore the teaching of the saxophone were abandoned to a professor other than myself, the timbre would inevitably deviate from that which I wanted and have achieved [...]. It is not only to prevent the torture of me hearing all my life a timbre different from that which should be obtained that I insist upon this point; you know, gentlemen, how important are the posture and sound production in relation to the human voice [...] you appreciate even more this importance with regard to a new family of instruments. (Cottrell, 2012, p. 34)

To ensure that the saxophone could be continued to be played as Sax intended meant that having it taught by Sax himself would be the most suitable option. Records pertaining to Sax's appointment of saxophone teacher are surprisingly scarce, and according to Stephen Cottrell this was due to the fact that the Paris Conservatoire saw the teaching of military music as inferior to the main work of the Conservatoire and as such, teachers of these classes 'were not regarded as full professors' (Cottrell, 2012, p. 34). Other sources suggest otherwise, Sluchin and Lapie make an observation that 'the important place occupied by military musical ensembles necessitated the establishment of special means of training their personnel. The introduction of the Garde Nationale musicians as teachers at the Conservatoire illustrates the important place these musicians held.' A total of six different instrument classes were taken over at the conservatoire, however all of these military classes were discontinued after the war of 1870-71 (Sluchin & Lapie, 1997, p. 6). Perhaps there is an element of truth to Cottrell's statement in that there may well have been some individuals who saw military education as inferior, but as there was so much emphasis on improving military bands, so much so that a specific educational institution was set up for this purpose it is hard to believe this was a general opinion.

Economic factors occurring in France at the time had a profound effect on both Sax and the class, and the Franco-Prussian war in 1870 and particularly the French defeat in the Battle of Sedan led to the French economy declining drastically. The saxophone class was closed that year, causing Sax to lose income (something that he had been battling with all throughout his years of introducing the saxophone), as well as him realising that the future of his instrument would now be in jeopardy. On the realisation that no teachers meant no students, Sax offered to teach the saxophone without payment, however this proposal was rejected. In 1873, Sax was declared bankrupt, for the second time in his life (Liley, 1998, p. 9). Despite this closure, which ‘deprived the instrument of the best in tuition, its quiet success in French military bands assured it of a place in manufacturers’ catalogues’ (Horwood, 1983, p. 165).

Early Methods

George Kastner – Méthode complète et raisonnée de saxophone (1844-45)

The first method book written for the saxophone was by French musicologist and composer George Kastner, during 1844-45. His *Méthode complète et raisonnée de saxophone* was shortly followed by methods from Jean François Barthelemy Cokken, and Hartmann (although this person’s exact identification is unknown), but Kastner’s method stood out as the most comprehensive of the early saxophone methods (Levinsky, 1997, p. 10). Frederick Hemke noted that ‘Kastner’s method book probably contains the truest picture of Sax’s conception of saxophone performance practices’ (Hemke, 1975, p. 258), and Kastner himself wrote:

In order for our method to have real value and incontestable usefulness it requires certain information that include the use of the best sources. What better man than Mr. Adolphe Sax

himself could remove our doubts, and remove any uncertainty could in a word direct our efforts in accomplishing a task of this nature? Not only as the inventor did we consult Mr. Ad. Sax, he is more than an artist; he plays his instrument and consequently knows everything about its properties. His ideas are clear and were of great help for this work.

What is surprising to see is the discussion of double and triple tonguing, which some may believe is a more recent technique in contemporary method books. In actual fact, the technique was already adopted by the saxophone and a description of how to achieve it is provided. There is no evidence in the Singelée or Demersseman pieces performed as part of this study of any such techniques employed, nor in compositions by Singelée that were written for the other members of the family.

What seems to be an important part of nineteenth century performance is the need for musicianship executed in pieces, as Kastner describes in the following statement:

It is not enough to have conquered the difficult technical aspects of the instrument nor thoroughly mastered the mechanism in order to merit the title musician. He still has to play his instrument with style. Style is that quality by which the player gives to every part of the piece of music he plays the expression and sentiment which fits it (Levinsky, 1997, p. 23).

The information in this statement is evidenced in the pieces performed (described in the next section of the thesis), where the need for attention to detail in the musicianship is equally if not more important than the technical aspect. This could be the reason why in these early pieces there are more opportunities for expression over phrases rather than technically difficult passages (again this is discussed in more detail in the next section).

Kastner's method identified each key with a different number, which made the fingering chart cluttered and difficult to use. For example, the key used to produce F3 was identified as key no. 19 (Levinsky, 1997)

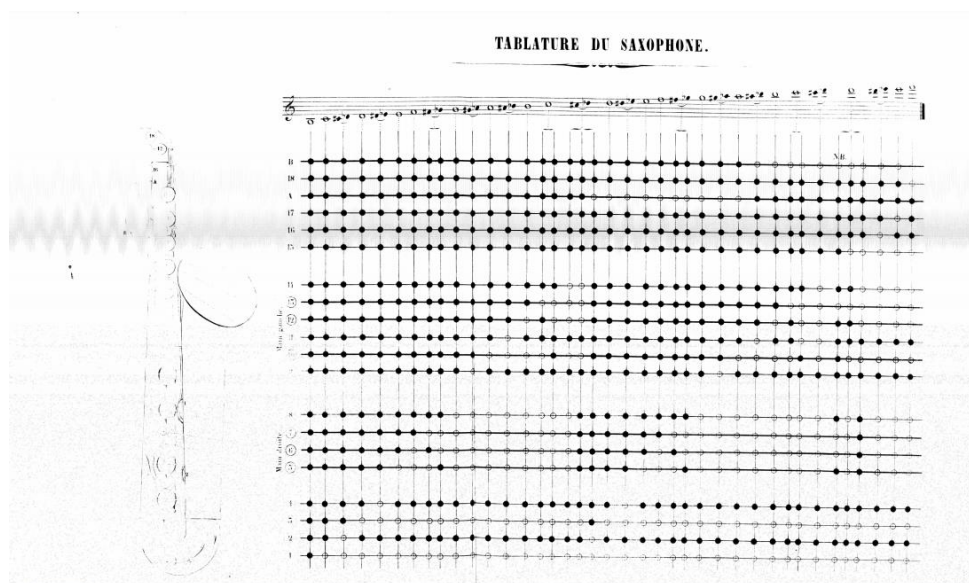


Figure 3: Fingering chart in Kastner's *Méthode complète et raisonnée de saxophone* (Kastner, 1846)

Cokken - *Méthode complète de saxophone* (1846-47)

Cokken's *Méthode complète de saxophone* describes on the title page that the book can be used by “all saxophones in different keys” and identified it as ‘adopted by the Gymnase Musical Militaire’ (Levinsky, 1997, p. 27).

Cokken provides information at the beginning of the method about the saxophone family, stating ‘Presently, only those saxophones keyed in Eb are used. It is the contralto or tenor that we represent in the fingering chart, because the mechanism being the same for the entire family’ (Levinsky, 1997).

Levinsky believes that this would indicate that Cokken was describing the use of either the Eb alto

or Eb baritone saxophones but reaches the conclusion that the saxophone illustrated in Fig. 3 is the baritone saxophone.

The fingering chart in the Cokken method is considerably less cluttered than that of Kastner.

Cokken labelled the principal keys used by the first three fingers of each hand as Key No. 1, 2, 3, 4, 5 and 6, as well as using closed and opened dots to show when a key is pressed (Levinsky, 1997, p. 29). In comparison, Kastner's method looks to be harder to understand, especially for the student who is at an early stage of learning the instrument.

Cokken's method also provides information on musicianship, however in more detail. He decided that there are four main points to discuss: expression, nuance, phrasing and breathing. As well as instructional material, most are followed with examples of music where the saxophonist can see correct and incorrect approaches. Levinsky comments in her research,

Again, Cokken presents much greater detail than did Kastner, and his is one of few French saxophone methods to provide specific explanations and exercises for developing these musical concepts. This is an extremely important aspect to the early methodology, as typically any discussion regarding musicianship is left to the more advanced player (Levinsky, 1997, p. 34).

This suggests that musicianship and stylistic playing was ingrained and approached at an early stage in a saxophone student's early education, whereas now it can sometimes become an afterthought, once the basics and technical features are mastered. This can be hard to effectively produce within music when it is not taught or introduced straight away, as it is harder to grasp and change to new habits when old ones are already there.

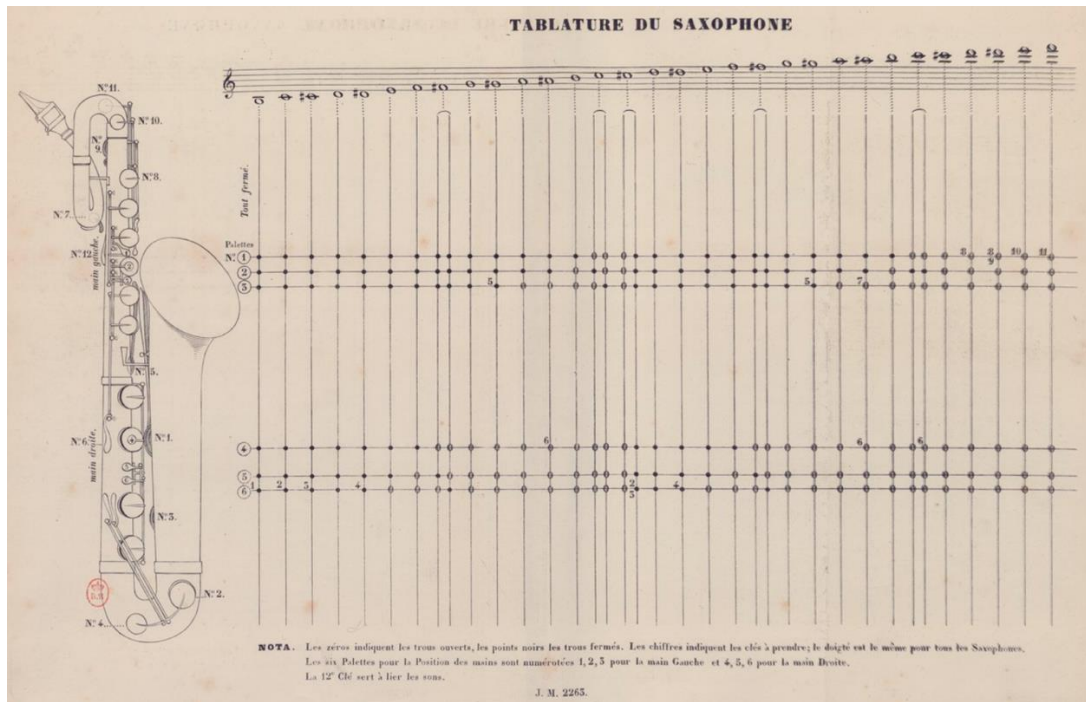


Figure 4: Fingering chart in *Méthode complète de saxophone*, Cokken (1846)

Hyacinthe Klosé - *Méthode complète de Saxophone-Baryton* (1879)

Born in 1808, Hyacinthe Klosé was both a clarinet soloist and an educator, serving as clarinet professor at the Gymnase Musical Militaire followed by the Paris Conservatoire. He received lessons from Sax and became a saxophonist, and in 1877 wrote his *Méthode complete des Saxophones*, which was for many years after still seen as one of the main texts for the study of saxophone. Two years later however, he wrote a further method book specifically for the baritone saxophone, which he states in the beginning of the book,

The continued study of an instrument is often arid, to obviate this inconvenience, I have written for this Twelfth Part, Etudes, Exercises, Duos, etc., of different genres and different

combinations, in such a way that the work made interesting, makes the pupil overcome, almost without realizing it, the difficult features and the most difficult passages.

Although stating that it is written for the baritone saxophone, it doesn't actually contain anything in the text that is baritone specific, it would seem that it could quite easily be played by any one of the saxophones.

Performance of Early Repertoire (1858 – 1866)

As part of my research, I performed a selection of the very first solo works written for the baritone saxophone and piano.

Jean Baptiste Singelée was born on the 25th September 1812 in Brussels, Belgium. A violinist, conductor and composer, he composed approximately 140 compositions during his lifetime, at least twenty-four of these works were published by Adolphe Sax's publishing company, *Chez Adolphe Sax* (Singelée J. B., Fantaisie, Op. 60, 2005).

Having met Sax at the Royal School of Music in Belgium, he became a long-time friend of the inventor and was one of the first composers to treat the saxophone as a serious classical instrument. Including the pieces below, Singelée composed over 30 Solo de Concours for Sax's students at the Paris Conservatoire.

Jules Demersseman was very much what could be seen as a child prodigy, at the age of 11 studying at the Paris Conservatoire and a year later winning a first prize in flute. Born in 1833 in France (close to the Belgium border), he had a career as a pedagogue and soloist, performing several of his own

compositions. Like Singelée, Demersseman was a close friend of Adolphe Sax and was the first French composer to compose pieces for the newly invented saxophone, as well as pieces for the saxhorn and for Sax's valved trombone. Sadly, like many people of the time he died young at the age of 33 whilst still living in Paris. (Fairley, 1982)

A decision about the performance of the pieces after selecting them was in which order to play them; either in chronological order or in a way that grouped them stylistically together. It was decided to play them in the order that was written, as this seemed more fitting with the overall project and any noticeable characteristics or features could be identified through the years, both from the composers and also what was expected from students in the Conservatoire.

Table 2: Details of published nineteenth century pieces (retrieved from Londeix)

Pian	Composer	DoB	Death	Title of Piece	Year of Cc	Duratio	Dedication	Arranger ()	Instrument	Publisher •
	SINGELÉE, Jean-Baptiste			<i>Fantaisie</i> , op. 60	1859	4'	to Mme de Contades		Bsx/Pno	Sax
P	SINGELÉE, Jean-Baptiste			<i>2nd Solo de Concert</i> , op. 77	1861	3'15	to M. Sax père		Bsx/Pno	Sax/Ron
	SINGELÉE, Jean-Baptiste			<i>3me Solo de concert</i> , op. 83	1862		to M. E. Monnais		Bsx/Pno	Sax/Lem/Rub
	SINGELÉE, Jean-Baptiste			<i>7me solo de concert</i> , op. 93	1863		to M. C. Sax fils)		Bsx/Pno	Sax/Ron
	SINGELÉE, Jean-Baptiste			<i>8me solo de concert</i> , op. 99	1864				Bsx/Pno	Sax
P	DEMERSSEMAN, Jules	1833	1866	<i>1er solo</i>	1865	3'				Ron
P	DEMERSSEMAN, Jules	1833		<i>2me solo</i>	1866					
P	MAYEUR, Louis	1837	1894	<i>1ère Fantaisie originale</i>	1877					Go

It should be mentioned that the composition date for *Fantaisie* which Londeix lists is different to what is listed below. This is due to a picture of the original front cover that is included in the score, which lists the date as 1858 and for the purposes of this study I have decided to go by this.

Jean Baptiste Singelée

Fantaisie, Op. 60 (1858)

Solo de Concert, op. 77 (1861)

Solo de Concert No. 3, Op. 83 (1862)

Septième Solo de Concert, Op. 93 (1863)

Composed just 8 years after Sax's Belgium patent, *Fantaisie* is a relatively short contest piece at approximately 4 minutes long. It is largely technically non-demanding, the focus lies much more with phrasing the calm, lyrical melodies that flow throughout. The quiet dynamic at the start coupled with the appearance of some of the lower notes requires the performer to play with a warm tone, ensuring that the note played is clear and doesn't break or split. This gives the baritone opportunity to show that it can play in the lower range effectively at all dynamics, and this was one of the reasons that Sax created the family.

Solo de Concert, Op. 77 was written three years later and displays much of the same compositional style as written in *Fantaisie*; beautiful lyrical melodies are apparent as a feature of Singelée's writing.

This particular *Solo de Concert* was dedicated to 'Monseur Sax Père', which refers to Sax's father.

Similarly, like *Fantaisie*, the baritone enters in a low register requiring more of the same control and tone quality. It also follows the same structure but Singelée seems to have developed his writing to include more semiquaver runs. The melody presented in the final section was known to have been designed to display the student's fingering agility and articulation prowess, perhaps as a reaction to the realisation that the baritone could offer more than first thought.

Solo de Concert No. 3 follows the same patterns in compositional approach but is developed further in that the music displays a grander feel, with use of fanfare style melodies and larger dynamic ranges.

However, Singelée still very much makes use of lyrical lines, intertwined with more adventurous triplet rhythms and *ritardando* bars, making it clear to still identify his compositional style.

In both this piece and *Septième Solo de Concert*, op. 93, Singelée introduces the use of cadenzas.

Perhaps as a response to growing confidence within performers and/or students of the instrument, or maybe just a more general theme across all instruments at the Conservatoire at that time.

By looking at other members of the saxophone family and Singelée's compositions for those at that time, we are able to gain an insight into whether or not they follow the same kind of pattern.

Solo de Concert, Op. 74 written for alto saxophone and piano in 1861 largely follows the same ideas, perhaps with slightly more semiquaver passages showing the dexterity of the performer's fingers.

There is a hint at the idea of more freedom for the performer, although not a large cadenza, it gives the player more freedom of expression (Fig. 4).

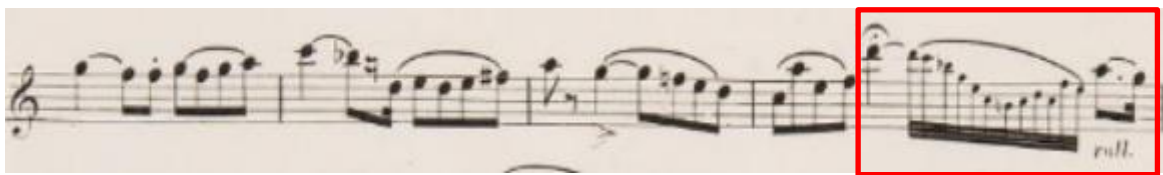


Figure 5: *Solo de Concert No. 1*, Op.74 - Singelée - Written for alto saxophone (Singelée J. B., 1860)

Moving further on into 1864, Singelée's *Sixième Solo de Concert* (written for the tenor saxophone), includes a cadenza which follows the development of his writing for the baritone saxophone. From this, it doesn't seem that the baritone was treated any differently or 'left behind' so to speak, the only noticeable change is that it could be seen that the baritone pieces have slightly less of an element of technical difficulty, in terms of fast passages where the player's fingers had to show speed and accuracy.

Jules Demersseman

Premier Solo (1865)

Deuxième Solo – Cavatine (1866)

Premier Solo, composed in either 1864/65, was dedicated to Joseph Bosch, the director of the band of the Fortieth Regiment of the French Infantry. The piece instantly has a different feel to those of Singeleé, the louder dynamic in both the saxophone and piano is displayed throughout with only small passages of calmer and quieter writing. Demersseman very much exploits the lower range of the saxophone which dominates the piece, and there are a few times where the saxophone plays unaccompanied and the deep, warm elegance of these tones are displayed. The composer was well aware of the ability of the lower saxophones to compete note-for-note with their higher-pitched counterparts, which is displayed in the faster second section.

Used as a Conservatoire contest piece in 1866, *Deuxième solo* is in the form of a *Cavatina* and a shorter *Cabaletta*, a vocal aria form used in bel canto operas during the life of Demersseman. What is certainly different to his previous piece is the use of the full range of the saxophone, rather than just the lower end. Higher notes are used throughout the first section within its more expressive and ornamented melody, with the use of two solo cadenzas which allow the instrument to showcase the virtuosity and ability of not only the saxophone but of the performer too. The second section (the *Cabaletta*), is much faster and technically challenging than the section previous, still making use of the full range of the instrument and ending in a similar style to the previous pieces, giving a feel of grandeur to the composition.

***Fantaisie* – Jean Baptiste Singelée (Second Recording)**

During my research in the saxophone towards the 1940s (detailed in the next chapter), I was interested to see the information about the use of vibrato not being established until the appearance of Marcel Mule. This brought the question forward of whether it was historically correct in performing early repertoire with the use of vibrato, which is a standard feature in today's saxophone performance. With this in mind, I decided to record one of the earlier pieces to reflect this development in my research. I chose to record *Fantaisie*, as out of all the earlier pieces I felt that this piece gave me more opportunity to display performance without the use of vibrato; long, lyrical melodies dominate the piece, and in my first performance I made use of vibrato as this is common practice in the classical saxophone of today.

Of course, without original recordings we are unable to hear exactly how the pieces were performed, but with research into literature a clearer conclusion can be made. Stephen Cottrell points out,

The suggestion that vibrato was not used at all in classical saxophone playing is not entirely consistent with the recorded evidence. But in developing his own sound Mule arrived at a deeper and more metrically consistent vibrato, an approach in which the pitch undulations became an integral part of the overall sound (Cottrell, 2012, p. 248).

This indicates that vibrato was perhaps used, but not in the structured way that we know and perform today – Mule refined it and from here it influenced the performance of future saxophonists.

Throughout my practice of playing the piece without vibrato, an issue that became clear was being able to play through the phrases, as the lack of vibrato meant that sometimes the line lacked shape and had a tendency to sound somewhat dull. Partly this was due to concentration to not use vibrato

(as it proved to be more of an ingrained habit than first thought), but also a realisation that I as a player (and perhaps others) rely on the use of vibrato too much and don't pay as much attention to the sound of the line without it.

From looking at studies on performance practice in the nineteenth century, some similarities can be made between the saxophone and other instruments at the time. Deanna Joseph stated in her study on the topic that, 'Before the twentieth century, vocal and instrumental vibrato were not a continuous part of tone production but rather were used as expressive tools' (Joseph, 2014, p. 24).

In fact, various performers, including violinist Joseph Joachim (1831-1907), and singing pedagogue Manuel Garcia (1805-1906) were not happy with the introduction of constant vibrato in music. They saw this as 'an affectation that covered up a lack of true artistry and control' and 'constant vibrato was seen as either a technical fault or a sign of a good singer past his or her prime, and the basic belief was that something constant could no longer be expressive' (Joseph, 2014, p. 25).

This rings true with my own thoughts as mentioned previously, in that when playing without vibrato, it became clear that it was difficult to play expressively and it took more thought and concentration than what it would to play using it.

Further studies into vibrato in the nineteenth century lead us to the woodwind family, and Dwight Manning describes how, 'some woodwind players had apparently begun to experiment with breath vibrato during the late 18th century, but they met with some resistance [...]. This debate continued into the 19th century' (Manning, 1995, p. 68). This was a continuation of experiments with different techniques to achieve vibrato, including finger vibrato (*flattement*), and breath types. Manning goes on to state that German flute virtuoso Fürstenau listed three ways to produce vibrato but showed a preference to those using breath types as opposed to the finger type, of which he only listed one way. Of course, as the design of instruments developed and keywork was added to them, the finger

vibrato eventually ceased to be used through the nineteenth century, and techniques therefore stayed with breath techniques and movement of the jaw.

This research shows that there was uncertainty with the use of vibrato in nineteenth century performance practice, both with opinions that differed as well as which technique was more suitable and created the best sound. *Fantaisie* may have therefore had elements of vibrato in to accentuate expressiveness but definitely not to the extent that we know today, and certainly not relied upon in achieving better tone quality.

What would have been more beneficial in playing the *Fantaisie* in a more historically informed manner would to have been able to play the piece on an original 19th century saxophone, as this would have brought to light any other limitations in performance in comparison with what the modern saxophone allows, such as if it could reach the same dynamic or the placement of the keys on the body.

Chapter 2 – The baritone saxophone in the 1940s

Reopening of the saxophone class

In 1942, under the direction of French pianist and composer Claude Delvincourt, the saxophone class at the Paris Conservatoire reopened. Marcel Mule, already known for his talent as saxophone virtuoso, was asked to be professor of the class, and this would be the start of his 26-year residency at the conservatoire. Before joining as professor, Mule had already established his own private teaching studio, but 'he was so passionate about the potential of the saxophone that he never wanted to turn away someone who wanted to learn ... However, the sheer number of students often overwhelmed him' (Miracle, 2015, p. 6).

For the saxophone class to have reopened in 1942 initially seems strange, given that this was halfway through World War II and Paris was under German occupation. However, it would seem that the Germans were keen to see that Paris still maintained its cultural life (albeit for propaganda reasons), and of course the French wanted to ensure that their national cultural identity was maintained through such difficult times (Cottrell, 2012, p. 249).

Piano or Orchestra/Band	Composer	DoB	Death	Title of Piece	Year of Composition	Duration	Dedication
P	FRANKISER, Carl	1894	1967	Canzona	1939		
P	Fontaine, E,			Interlude Melody	1942		
	CARNEY, Harry	1910	1974	Warm-Up Follo	1943		
	SIMIĆ, Vojislav			Belada	1959		

Figure 6: Published repertoire for the baritone saxophone in the 1940s

What is quite unusual is that around this time when the saxophone class reopened, was that there wasn't any increase in repertoire written and published for the baritone. In fact, only two compositions were made, and neither of these were of a classical style. The first piece, *Interlude Melody*, was written by Eli Fontaine who was an American session musician of the 1960s, going on

to work with the likes of Marvin Gaye. The second item, *Warm-Up Folio*, was written by renowned jazz baritone saxophone player Harry Carney (discussed in more detail in *The Baritone in Jazz* section further along). This book contained a selection of warm up exercises, followed by nine jazz solos for the baritone along with piano accompaniment (Ronkin, 2012).

The reopening of the saxophone class in 1942 and the immediate years that followed didn't seem to have a direct impact on the baritone. In comparison, the alto had a range of compositions continuing to be written for it; solos such as *5 Divertissements* by Emile Damais (1946), and alto and piano pieces such as Paul Creston's *Sonata, Op. 19* (1944), of which are still regarded some of those most important pieces within the classical saxophone repertoire. This may be due to the class not offering teaching on the baritone saxophone, and instead having a focus on the alto, at what was essentially a second start in the saxophone's life.

The baritone in the quartet

Born in 1901, Mule began playing saxophone at the age of 8 and went on to join the elite military band, *La musique de la Garde Républicaine* in 1923. It was also around this early point in this career that he played in jazz and dance bands, which is where he noticed the use of vibrato and from there cautiously began to integrate it into his classical playing.

From developing a characteristic tone quality and the use of classical vibrato, to establishing the standard saxophone quartet and much of the saxophone solo repertoire, Mule had a tremendous impact on the growth of the saxophone as a respected classical instrument (Miracle, 2015, p. 3).

He set up *Le Quatuor de la musique de la Garde Républicaine*, which was essentially the first major saxophone quartet to be formed. Of course, being one of the first formations of soprano, alto, tenor

and baritone set ups meant that there was a distinct lack of repertoire, so they initially transcribed string quartet chamber music.

Although Mule's quartet was seen as the first, there is evidence to suggest that there were quartet formations in the nineteenth century. The first piece of repertoire written for the saxophone quartet is thought to be by none other than Jean-Baptiste Singelée, who was the composer for the very first solo baritone repertoire. His *Premier Quatuor*, Op. 53 was completed in 1857, and was in a response to his encouragement to Adolphe Sax to develop the four main members of the saxophone family. The four movement, 18-minute-long composition makes use of beautiful melodic lines, with all four members of the group having equal importance. The baritone in particular, although used for its low tone when accompanying, has times where it is able to show off its higher registers in the melodic writing, for example in the second movement *Allegro* where faster lines aren't just reserved for the higher instruments. With this being composed to encourage the development of the four main saxophones, this suggests the possibility that there might not have been a quartet formed prior to writing it, but instead may have been formed afterwards as a response to the music he composed. This wasn't the only piece that Singelée composed for four saxophones: he wrote *Allegro de concert* (1849), followed by *Grand quatuor concertant*, op. 79 (1861). This would suggest that the Conservatoire class engaged in chamber music, and although not becoming standardised until Mule, it is certainly viable that there were such ensembles before that time.

The baritone in jazz

Aside from the classical genre, the saxophone is probably most associated with the world of jazz. It is from the significant involvement with this music that classical and other standard repertoire quite

often display jazz influences. Within jazz there have been multiple styles; from early Ragtime styles to blues and swing, and amongst those the baritone became just as important as other members of the horn family.

Anthony Baines in *Woodwind instruments and their history* (Baines, 1991) states about the role of the saxophone family in jazz:

One most striking thing about the saxophone in modern times is the way each principal size developed an individual character of its own during the classic age of jazz in the 1920s and 1930s. The alto, with its clear but rather monotonous solo-tone settled down as the chief saxophone in ensemble work... The expressive tenor, whether husky and almost speech-like... inevitably became the great solo instrument of the family... Next to it, for solos, came the baritone, on which Ellington's Carney improvised with perhaps the lightest and most breathing sound ever conjured from a deep wind instrument.

This is a surprising statement in that the baritone is placed above the alto in solo preference; one might have thought that the alto would be more preferable in that its higher tones would be able to project more clearly over the sound of the rest of the band but obviously the sound of the baritone was seen as the saxophone with the more enjoyable sound.

Harry Carney

Possibly one of the most important people to look back on when talking about the jazz baritone is Harry Carney – spending four decades in Duke Ellington's orchestra he initially entered the band on alto, but soon doubled on the baritone within his first week. Being one of the only prominent players on the baritone in jazz until the mid 1940s (Berendt, 1992, p. 339), he is quoted to have said he 'tried to make the upper register sound like Coleman Hawkins and the lower register like Adrian Rollini' (Sudhalter, 2001, p. 172), who played tenor and bass saxophones respectively. Ellington made use of Carney's natural flair for the instrument where he often played 'parts of harmonies that

were above the obvious low pitching of the instrument' which 'altered the textures of the band's sound' (Williams, 1993, p. 101).

This more unusual sound of the instrument evidently got it noticed; in an interview with Carney, Valerie Wilmer made the suggestion that without his adoption then perhaps later players of the baritone such as Gerry Mulligan, Serge Chaloff and Pepper Adams may never have played with their own unique sounds. In a similar pattern of events as the classical baritone, the jazz baritone was also only used for its 'depth in ensemble passages' and was seen 'just as obscure as the bass member of the family' (Wilmer, 1964). This is not to say that the baritone was now perfectly placed at the forefront of the band from this point – Wilmer goes on to mention that 'even Mulligan went through some pretty ponderous days before achieving facility' (Wilmer, 1964).

Carney himself was reluctant to take this credit for the rising popularity of the baritone - although admitted that making records using the baritone it may well have encouraged others to play - but what spurred him on with playing it was that only at the young age of seventeen, this big sound made him feel more grown up because of the attention it commanded (Wilmer, 1964).

Chapter 3 - The baritone from the mid-20th Century

Repertoire

The 1960s saw an increase in solo baritone repertoire, after the previous decades in the 20th century saw what could only be described as a handful of pieces; a stark contrast of what was to come. Similarly, for the rest of the saxophone family, the amount of repertoire certainly slowed down through the Second World War, although some notable pieces were composed, particularly for the alto saxophone. However, as Thomas Lilley describes, it seems that only in the first and most recent decades of the instrument's existence have composers given serious consideration to the other members of the family. To find out why there was a sudden increase for baritone repertoire, I will be looking at events that were occurring in the saxophone world at the time, and if any of those were a direct cause of this change.

The Saxophone Congress

1969 saw the arrival of the first World Saxophone Congress, a one-day event held in Chicago, Illinois. The idea was first brought about by Canadian saxophonist Paul Brodie, who in 1968 held a saxophone recital and clinic for the annual Mid-West Band and Orchestra Clinic at the Sherman House Hotel in Chicago. During their final meeting of the event, Brodie spoke with the executive committee and pitched his idea – something that he had been thinking about for a few years prior. In his own words, Brodie described the main benefit of holding such an event would aid the saxophone in becoming regarded as a 'serious musical instrument'. This issue was something that the saxophone had been subjected to during its years in the public eye, as seen in my previous

section outlining the opinions of the instrument. Luckily, the executive board agreed with his idea and so was born the World Saxophone Congress, what we now know as a five-day event held every three years, attended by some of the best performers and composers in the field. Brodie was then joined by renowned American saxophonist Eugene Rosseau, and they set about inviting performers such as Cecil Leeson, Marcel Mule, Sigurd Rascher and Larry Teal.

From here, they created six goals for what they wanted the congress to achieve for the status of the saxophone. These included the commission and performance of new repertoire, so to encourage composers to finally warm to the instrument, the presentation of recital programmes and clinics, and the establishment of methods of communication among saxophonists. This would help to bridge the gap between saxophonists of different countries, where ideas could be shared, and trends passed on.

The premieres of new works for the saxophone have been a prominent feature at every Congress since 1969, the first new piece to be heard was Bernard Heiden's *Solo*, which was dedicated to his colleague Eugene Rosseau and to the first congress.

Alain Margoni – *Sonate* (1976) 8'30

Born in 1934, Alain Margoni was a French composer, conductor, teacher, pianist, musicologist, lecturer and essayist (Marti-Frasquier, 2018). By his own definition 'multicoloured', he believes that the practice of various disciplines is a sign of vitality, courage and open-mindedness. Most notably, he came first in the prestigious Prix de Rome in 1959 with the cantata *Dans les Jardins d'Armide* (Montagne, 2018).

The fifth World Saxophone Congress, held at the Royal College of Music in London in 1976, saw four days of events that took inspiration from an international stance; the second day designated as 'North American Day', the third day as 'French Day' and the first and last days described as 'International Days' (Liley, 2003). During this, Alain Margoni premiered the *Sonate* for Baritone saxophone, performed by Jean Ledieu and accompanied by Margoni on piano. A difficult piece technically, the one movement piece includes the use of extreme altissimo register and multiphonics, which hadn't been particularly prominent in works for the baritone. Ledieu was a member of the Quator de Saxophones Daniel Deffayet, Deffayet being the second professor of saxophone at the Paris Conservatoire after taking over from Mule following his retirement (Ingham, 1998, p. 67). As well as requiring accuracy during faster passages, the piece also requires the baritone to be played expressively.

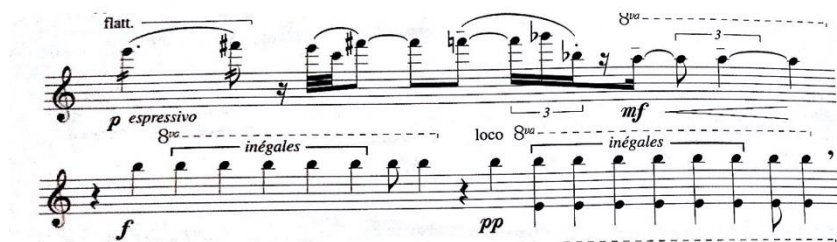


Figure 7: Example of altissimo in Alain Margoni's *Sonate*

The dynamics that the piece requires can also make an already difficult technique even more so, playing at a *pianissimo* dynamic in the section shown above can make it tricky to get the altissimo B to speak and requires good support and a strong embouchure to maintain the number of notes written.

Other factors affecting development

A major influence on the popularity of composing for the saxophone came from emergence of more artists, as well as the increase in saxophone teaching positions at major schools of music in various countries, including France and the USA. There was also a continuation of composers writing for already well-established performers, as well as contest pieces for players at the schools of music.

As the saxophone was gaining momentum in both the classical world and outside, alongside it came the ever-increasing demand for instruments. About three-quarters of the way through the 20th century, American manufacturers came together to compete with the manufacturers of saxophones from around the rest of the world, as at the time European companies were producing cheaper instruments to cater for the increase in the student market. America also saw the saxophone being played in more high school bands, and in universities standards were being raised in both classical and jazz studies, and this was visible in Europe as well. ‘The most satisfying outcome has been the growth of good quality teaching, combining a classical discipline with enriched knowledge of jazz, rock and pop’ (Ashton, 1998, p. 24)

Extended techniques and the baritone

Ronald Caravan - *Preliminary Exercises and Etudes in Contemporary Techniques for Saxophone* (1980)

Born in 1946, Ronald Caravan is an American clarinetist, saxophonist, composer and educator. He is a prolific writer of music for the saxophone family, and has also been involved in the writing of methods for extended techniques for not only the saxophone but for the clarinet also. In 1980 he wrote *Preliminary Exercises and Etudes in Contemporary Techniques for Saxophone* (derived from his doctoral dissertation *Extensions of Technique for Clarinet and Saxophone*, 1974), which covered techniques such as quarter tones, multiphonics, flutter tonguing, slap tonguing, and percussive effects to name but a few. He mentions in his introduction that the use of these extended techniques has been more widely accepted for 'contemporary serious musical composition' during the second half of the 20th century, whereas before this only some experimental musicians and jazz musicians would play these 'peculiarities' (Caravan, *Preliminary Exercises & Etudes in Contemporary Techniques for Saxophone*, 1980).

Caravan talks about the use of different saxophones in the beginning of the book, stating:

All of the fingerings contained in this volume for timbre variation, quarter tones, and multiphonics have been derived and thoroughly tested utilizing the E-flat alto saxophone. This does not preclude the possibility of using other sizes of saxophones, such as soprano or tenor [...] but in many cases fingering adjustments may be necessary [...] some of the multiphonic fingerings may not respond well at all on saxophones other than the alto (Caravan, 1980, p. 1)

Marcus Weiss and Giorgio Netti - *The Techniques of Saxophone Playing* (2010)

Born in 1961 in Switzerland, Marcus Weiss is both a saxophonist and composer who has studied with Fredericke Hemke and has extensively explored the use of extended techniques on the instrument. Similarly, Giorgio Netti (1963) is a composer who also specialises in contemporary performance and has written pieces for a range of instruments including tenor recorder and violins (Netti, n.d.). *Techniques of Saxophone Playing* is split into four sections, covering multiphonics, altissimo, key percussion and various tongue and embouchure changes, amongst other techniques. It is set out to cover soprano, alto, tenor and baritone saxophones, although they state in the foreword that this is not limited to these four members, and that this is just for practicality in compiling the book. The techniques can be used on sopranino, bass and contrabass saxophones (no mention of soprillo due to it not being produced until a few years after this publication), as any discussions of performance techniques could be played on each one.

As a part of each section, pages can be found with lists of notes and suggested fingerings for each of the four saxophones. For the multiphonics, Weiss and Netti 'explored all possible fingerings, beginning with the lowest possible opening of the saxophone tubes up to the highest position' (Weiss & Netti, 2010), so that they could assess which made the complex sound but also which fingerings were more reliable and achieved the multiphonic.

Performance 2 Recording

Ronald Caravan – *Sonata* (1989)

Caravan wrote his treatise *Preliminary Exercises & Etudes in Contemporary Techniques for Saxophone*, but his *Sonata* for baritone does not display such techniques (with the exception of an altissimo A and G and brief use of slap-tongue). The reason why is not because he hadn't developed an interest in extended techniques by the time of writing this piece, as his treatise was written 9 years before and original dissertation on the subject 6 years prior to that. In fact, he has written compositions that display such techniques, but as well as the baritone he has also written Sonatas for the other three main members of the family, and all of these compositions are of a traditional style and with conventional use of notes. These were not all composed at the same time: the soprano *Sonata* was composed a few years before the baritone in 1984, with the alto and tenor pieces not being composed until 2004 and 2007, respectively.

From the point that this thesis aims to look at, the fact that the baritone composition was the second piece Caravan wrote, well before the tenor and especially alto, is interesting in the way that one would assume the most frequently solo-played saxophone would take priority. From comparing this with what else was written for the baritone in this decade, the quantity of compositions for the baritone was certainly on the rise, a total of 29 published works between 1980-1989, compared with only 14 in the decade before. Between 1990-1999, this figure increases again to 46, so perhaps Caravan saw this trend in popularity for the instrument and decided that that would be an ideal time to compose his *Sonata*.

Anne Boyd - *Ganba* (2011)

Written by Australian composer Anne Boyd, *Ganba* is a piece of music that incorporates extended techniques such as multiphonics and slap tongue. Boyd is known for the spiritual and meditative nature of her pieces; her musical style being transparent and with features of gentleness and delicacy, with much of her influence deriving from her long involvement with Asian traditions (Anne Boyd, 2016).

Ganba was composed for Australian saxophonist Michael Duke, who over the years had had extensive performance experience with various orchestras, including the Melbourne Symphony, Sydney Symphony, and Orchestra Victoria, among others. Duke has also had an extensive career playing other styles of music, pursuing jazz studies in the USA, and going on to be a freelance musician performing with artists such as Gloria Estefan, The Four Tops, Bill Cosby and Gary Burton (Associate Professor Michael Duke, n.d.)

Strangely, the saxophone part and full score aren't exactly the same, for example as shown in table 2. The saxophone enters the pieces with an A (the lowest note on the instrument), played at a quiet dynamic marking of piano. However, the piano score shows the saxophone entering on a multiphonic, at the same dynamic marking. This continues up until bar 20, where eventually the scores match up. This could be due to the fact that after writing it and working with Michael Duke on it, he could have decided that starting the piece on these quiet multiphonics would be quite difficult, as it is when the dynamic marking changes to forte that the scores then match up. After playing it myself, I reached this conclusion due to the fact that it is extremely difficult to get these multiphonics to speak when playing at such a quiet dynamic. What is more than likely to happen (when trying to play the multiphonic quietly), is that it doesn't speak and only one note would

sound. If this was to happen in a performance, this would have a direct impact on the atmosphere of the piece, and it wouldn't achieve the sound or feeling that Boyd wants to create.

At the beginning of the piece (and again at bar 138), the 'darkly hued Baritone Saxophone is required to play directly into the piano soundboard, used as a resonator. These notes and multi-phonics, conjoined with upward gushing piano scales and tremolos, arising from [spelling mistake – assumed 'from'] deep in the bass register, in the Earth key of D flat, create sonorities intended to represent the monster/sea sounds travelling hundreds of miles through the subterranean passage ways running under the Nullarbor Plain' (Boyd, 2011). Boyd states that her piece is a 'sounding of Australian history', which, in comparison to the nineteenth century repertoire, is a complete change in how and why the composition was created. Singelée and Demersseman wrote their pieces with the purpose of displaying what the instrument could do at the time and to be performed as contest pieces, whereas Boyd has written this piece with the main focus being the composition and underlying message, with the baritone almost just being a tool used to create this.

Bar Numbe r	Saxophone Part	Piano/Sax Score
2-4		
20-22		

Table 3: Differences between the saxophone part and piano part in Anne Boyd's *Ganba*

Reflection

After undertaking this research, it has become apparent that the baritone was more used as a solo instrument than was at first thought. Initially, it was assumed that it had always mostly been an ensemble instrument, but already in the nineteenth century it had equal and if not more importance than its younger family members. From Adolphe Sax's patents describing it in more detail than others, it shows that this model of the instrument was at the forefront of his mind and his designs. From the closure of the saxophone class at the Paris Conservatoire, this is where I believe the importance of the baritone took a turn and was surpassed by the alto and tenor. With the integration into the music of jazz, the alto and tenor were more versatile and had a projection that could easily be utilised by a band; but of course, when the likes of Harry Carney and others dedicated themselves to the instrument, a new lease of life was given to it and a realisation that it could compete with its counterparts.

I believe that it was in the twentieth century that the baritone found itself among ensembles more than on a stage on its own, as with an increase in students beginning to learn the saxophone (typically the alto), and a lack of people playing the baritone it naturally fell into a position of an ensemble instrument.

From the second half of the twentieth century, more and more composers have written for the baritone, and its capabilities have been realised as a soloistic instrument. With performers such as Leo Pellegrino attracting attention to it, hopefully it will continue and thrive in a solo environment.

Appendices

Appendix 1 – Recording of nineteenth century pieces

File name:

Recording 1 – 19th Century.MOV

Appendix 2 – Second recording of a nineteenth century piece - Fantaisie

File name:

Singelee – *Fantaisie* (2nd Recording).MOV

Appendix 3 – Recordings of late 20th/21st century pieces

File names:

Caravan – *Sonata* (Mvmts I/II).MOV

Caravan – *Sonata* (Mvmts III/IV).MOV

Boyd – *Ganba*.MOV

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