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ADOLPHE SAX IN PEDAGOGICAL TERMS.
PROBLEMS OF NOMENCLATURE. ASPECTS ON (LARGER)
SAXHORN LEARNING

Pedagogical aspects in relation of Sax's invention have to be considered from the point of view of plagiarism to which Sax saw himself exposed. Mitroulia and Meyers conclude their article in relation to this topic:

"Visionary or plagiarist? The authors are unable to give a simple verdict. Sax was incontestably a visionary; as for the plagiarism, borrowing in music and musical instrument making has been as old as music itself and appears to be inherent in most developments and advances in art and science. The fact that Sax claimed originality for some borrowed ideas seems in retrospect less important than the true vision shown in his inventions."¹

To this point of view one could, however, add some arguments in favour of plagiarism. Before Sax there were pre-existing instruments with

1. similar valve-systems;
2. similar shapes;
3. similar pitches;
4. similar names.

A striking argument against plagiarism could be the different patent legislation in countries like France, Germany and Britain.²

¹ Eugenia Mitroulia and Arnold Meyers, *Adolphe Sax: Visionary or Plagiarist?*, in: *Historic Brass Society Journal*, Vol. 20, 2008, p.135.

² Eugenia Mitroulia, *Adolphe Sax's Brasswind Production with a Focus on Saxhorns and Related Instruments*, University of Edinburgh 2011, p.40.

About nomenclature

This argument of course also concerns nomenclature. In his chapter about saxhorns, Wally Horwood raises the question of originality and claiming the right to give a new name to already existing instruments:

“We can say, as did Sax’s opponents, that a saxhorn is merely an illegal name given to instruments already well established before the world had heard of Sax. Conversely, we may insist, as did Sax’s supporters, that a saxhorn is a valved bugle built to superior proportions and specifications of its designer, being so superior to former bugles as to warrant being called an invention.”³

In this light the right of giving new names to pre-existing instruments is only due to the technical perfection which was provided by Adolphe Sax.

Problems of Saxhorn Terminology across Language Barriers

Sax also endeavoured to provide his instruments with unambiguous names. His taxonomic clarification and the common standard for every *saxhorn* being its conical shape, although some instruments being more cylindrical, for example the *saxhorn tenor* in comparison to the *saxhorn basse*, both having the same length and being tuned in Bb, should not obscure the fact that there exist some problems in comparison to present-day designation. The list provided in Table 1 includes some main, but not all main, languages and, therefore, cannot claim completeness. However, it reveals the problem.

While the designation of *flugelhorns* seems to be clear in every language, *soprano* being allocated to the standard size and *sopranino*, respectively *Eb* / *mib* for the smaller instrument, complications arise according to the *saxhorn alto*. In British brass bands this instrument is called *tenor horn* and it is tuned in *Eb*. This leads to the confusion with the German term *Tenorhorn*, which designates an instrument with rotary valves tuned in Bb being comparable to the *saxhorn baryton*.

³ Wally Horwood, *Adolphe Sax 1814-1894. His Life and Legacy*, Herts 1983, p.153.

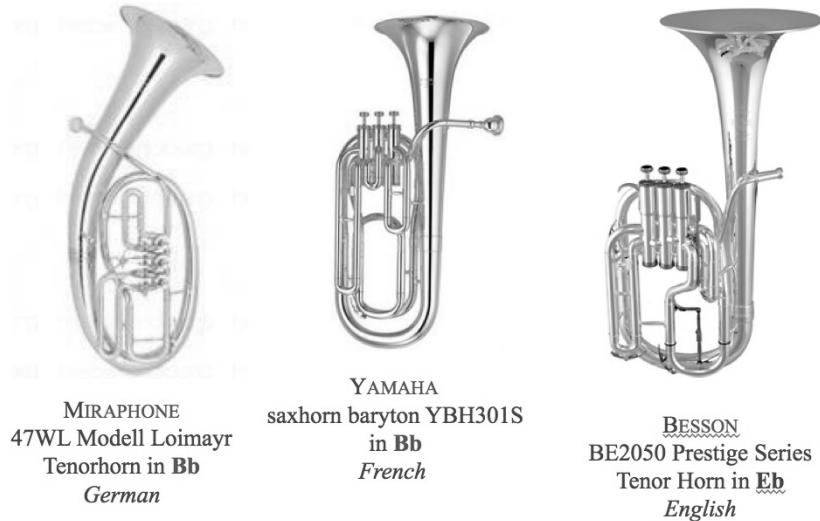


Figure 1: Confusion with the term of *Tenorhorn*

The ‘Euphonium’

More important divergences arise in relation to the *saxhorn basse*. Brian Bowman states that, indeed

“The nomenclature is often confusing, as different names are used for the euphonium in different countries: baryton (German for Euphonium), flicorno basso (Italy), saxhorn basse (France), clarion-basse (French), kleine [sic!] bass (German), and bass flugelhorn (Britain).”⁴

As can be seen in this quote of the highly estimated Dr. Bowman, the problem of nomenclature is added to by orthography troubles concerning the

⁴ Brian Bowman, *Band and Orchestral Excerpts*, M. B. O’Connor, *A Short History of the Euphonium and Baritone Horn*”, in: R. Winston Morris, Lloyd E. Boone, Jr., Eric Pauill (Eds.), *Guide to the Euphonium Repertoire: The Euphonium Source Book*, Indiana University Press, Bloomington, Indianapolis 2007, p.251.

euphonium. The term *baryton* does not exist in German; it is the French term for the German *Tenorhorn* and the English *baritone*. In German the *Bariton*, oval shape with rotary valves, is indeed comparable to the *Euphonium*. The exact orthography for the term *clarion-basse* is *clairon-basse*. The term *kleine* [should be *kleiner* if written correctly] *bass* does not exist in German; it is a translation from the French word *petite basse*. Concerning the tube, all these instruments (in B-flat) have the same lengths. Concerning shape and bore they are comparable, but not identical.

On the other hand, the etymology of the term *euphonium* is easier to comprehend. It has Greek origins: While the Latin suffix *-ium* has a more general meaning, the prefix *eu* means ‘good’ or ‘well’ and *phone* means ‘voice’ or ‘sound’.⁵ Finally, the composite word *euphonia* means ‘good sound’ or ‘voice’.⁶ In relation to the typology of the instrument, however, it is only an empty word, in the sense that every good sounding instrument could be called a *euphonium*.



Figure 2: The *Sommerophone*⁷

⁵ cf. *Online Etymology Dictionary*, in: <http://www.etymonline.com> (access 6 / 2014).

⁶ Judy Pearsall and Patrick Hanks (Eds.), *The New Oxford Dictionary of English*, Oxford 1998, p.634.

⁷ Download: <http://euphonium-history.up.n.seesaa.net/euphonium-history/sommer-sommerophone02.jpg?d=a0> (access 11 / 2014).

According to Michael O'Connor the term *euphonium* was mentioned for the first time in 1844. One year before, the Weimar bandmaster Ferdinand Sommer developed an instrument, which he called a *Sommerophone*. Franz Bock of Vienna patented a similar instrument and called it the *Euphonion*. This is the first appearance of the name, but with a slightly different spelling.⁸

The Anglicized term *euphonium* was used since the end of the 19th century and survives until the present day.⁹ Today it is often used in relation with an instrument equipped with an automatic compensating system as was invented for the first time in 1864 by Pierre Louis Gautrot who called it *système équitonique*. David James Blaikley perfected it in 1874. His system was granted a patent in 1878 and it remains a standard until today.¹⁰

In 1973 in the US the *TUBA (Tubists' Universal Brotherhood Association)* adopted the term *euphonium* officially to replace the designation *tenor tuba* used in compositions of the late romantic period.¹¹ Although the term *euphonium* is completely meaningless according to its organological-related content, it has indeed suppressed other country- and language-specific nomenclatures.

Today the term *euphonium* is established in every country, i.e. *eufonio* in Italy and in Spain, but specific national terms should, however, not be ignored: In Benelux countries the instrument is still, even if more rarely, referred to as a *tuba* in older publications, while the *tubas* are called *basse* respectively *contrebasse mib* or *sib*. The German term *Bariton* refers to the instrument in oval shape with four valves and with a larger bore compared to the *Tenorhorn*.

The following two examples and Figure 4 explain how different instrument names can lead to confusions in practice, but wind band conductors mostly are well informed and know how to handle this unclear labeling.

⁸ cf. O'Connor 2007, p.7.

⁹ Katja Brunk, 'Das Cello des Blasorchesters' - Zur Geschichte und Funktion des Eufoniums, in: *Clarino* 2 / 2011, p.16f.

¹⁰ O'Connor 2007, p.6.

¹¹ Harvey Phillips and William Winkle, *The Art of Tuba and Euphonium*, Van Nuys 1992, p.6.

Example 1 in relation to the euphonium (saxhorn basse)

In the four excerpts in Figure 4 the term *saxhorn* does not appear. However, each of these instruments is supposed to be a *saxhorn*. The pieces have been published in Belgium and in the Netherlands. The labeling of the *saxhorn baryton* part causes no problems, i.e. the publishers use the English term *Baritone* (*Theme from Shaft*, Bernaerts, *Forza del Destino*, Molenaar) and the French term *Baryton* (*Music*, Tierolff). Concerning the *saxhorn bass* parts, on the other hand, we encounter the following names: *Euphonium* and *Baritone* (English), *Bariton* (German), *1e Tuba Bes* (Dutch), *1e Petite Basse sib* (French) and *Baryton IB* (German, misspelled, should be *Bariton*).

The combination of the names *Baritone* respectively *Baryton* with *Euphonium* (*Theme from Shaft* and *Music*) suggests that these parts could be played with a *saxhorn baryton* AND with a *saxhorn basse*. Here the names are not mixed up.

Alas, concerning the clarifications above, we are far away from a comprehensive solution of terminological problems in relation to tenor brass instruments. The example of Germany and Austria makes clear that the plenitude of the tenor register, their labeling and their usage in the repertoire in the 19th and the beginning 20th century is extremely complex.¹² Bernhard Habla mentions a multitude of terms. Some of them are also listed within this text: *Bombardino*, *Tenortuba*. Some are completely out of use today: *Schwanenhorn*, *Basshorn*, *Althorn in B*, *Bass-Bariton*, *Tenortrompetenbass*, *Bass-Bariton*¹³, *Tenor Bombardon*, *Bombarno* and *Tenorbombardon*.

While in Germany tenor parts combine *Tenorhorn* and *Bariton*, in Austria the corresponding instruments are called *Bassflügelhorn* and *Euphonium*.¹⁴ The *Bassflügelhorn* is still in use today. It is tuned in the same octave as the *Tenorhorn*.

¹² Bernhard H a b 1 a, *Besetzung und Instrumentation des Blasorchesters (=Alta Musica*, vol. 12), p.254-260, p.345-361.

¹³ Habla 1990, p.256-259.

¹⁴ Habla 1990, p.352ff.

Terminological inconsistencies in relation to tubas

The designation of *tubas* in the Sax terminology being more or less stringent and corresponding to a logical organization within his instrument family, wind band conductors and even tuba specialists are often brought into a situation of confusion.

1) Concerning the term *bombardon*

The term *bombarde* dates back to the late Middle Ages and refers to a cannon-like weapon of the earliest type – etymological derivates are *bombardment* and *bomb*. In musical terms it refers to a shawm as used in Breton folk music, for example. The etymological source of the word is the Latin word *bombus*, which means *humming*.¹⁵ While Andreas Nemetz refers to a valved instrument in the shape of an *ophicleide* as a *bombardon*¹⁶, this term also appears in French in relation to a *saxhorn contrebasse mib* (*Eb-Tuba*). In Italy the term *bombardino* labels a *saxhorn basse* (*Euphonium*), and *bombardone*, similar to French, designates the *Eb-Tuba*. While the smaller *saxhorn contrebasse mib* (*Eb-tuba*) is simply called *bombardon*, the larger *saxhorn contrebasse sib* (*BBb-tuba*) has the additional clarification of the pitch added, that is to say in this case *bombardon sib*.

2) Concerning the term *bass*,

As mentioned above, generally this is a more colloquial term for tubas in wind orchestras per se. By way of contrast, in France it designates the *saxhorn basse*, that is to say the *euphonium*.

3) Concerning the term *contrebasse*,

First of all this is the name for the double bass in a symphony orchestra. Only the addition of the pitch qualifies it as a Sax instrument.

¹⁵ cf. Pearsall and Hanks (Eds.) 1998, p.201.

¹⁶ Andreas N e m e t z, *Allgemeine Musikschule für MilitärMusik* (1844), reprint edited by Friedrich A n z e n b e r g e r, (= *IGEB Reprints und Manuskripte. Materialien zur Blasmusikforschung* Band 6), Wien 2004, p.95.



Figure 3a: Bombarde (Shawm)¹⁷

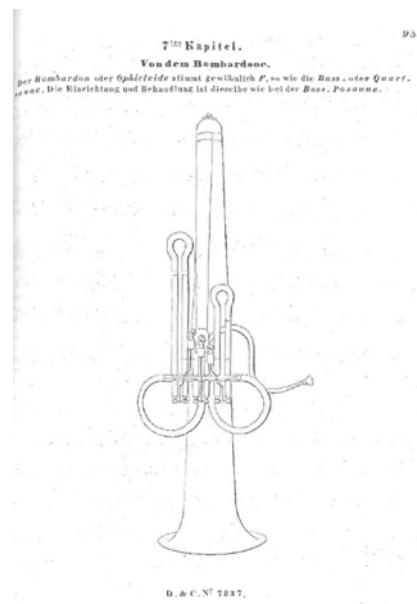


Figure 3b: Bombardone¹⁸

Example 2 in relation to the tuba (saxhorn contrebasse)

In the examples in Figure 4 every tuba (*saxhorn contrebasse*) part is labeled differently. Even within one publishing house (Molenaar) the labeling is far from being uniform, the use of languages inconsistent and the confusion total.

¹⁷ Private picture taken at an instrument exhibition in Syren / Luxembourg.

¹⁸ Nemetz [1844], p.75.

This causes problems even to experts. In *Marche Hongroise* the transposing tuba part is called *Bb Bas* (Dutch) and *Contrebasse sib* (French). In *Forza del Destino* the tuba part is called *Basses C* (English). This is a more recent arrangement. In *Arnhem* the non-transposing part is called *BASSES (TUBA) II* (English) and *Contrebasse ut* (French).

While the transposed tuba part in E-flat in the arrangement of *Music* (Tierolff) is indicated in three languages, *Es Bas* (Dutch), *Contrebasse mib* (French) and *Bass Es* (German), the transposed tuba parts in B-flat are most ambiguous and even misspelled: *Bes Bas* (Dutch), *Contrebasse* (French) and *Bass B* (German) designate the B-flat tuba (*saxhorn contrebasse sib*) part and *2e Tuba* (every language), *2e Basse sib* (French) and *Baryton I B* and *II B* (French, but should be German *Bariton*) designate a 2nd part for Euphonium (*saxhorn basse*).

In the more modern arrangement *Theme from Shaft* the publisher (Bernaerts) adopts a globalized English terminology of the parts which is close to the labeling of brass bands, that is to say *Baritone*, *Euphonium* and *Bass* with the only exception of the combined labeling *Euphonium/Baritone* for the Euphonium (*saxhorn basse*) part.



Figure 4: Labeling of larger saxhorns in wind bands¹⁹

¹⁹ Excerpts: Isaac Hayes, *Theme from Shaft*, arr. by Jan v. Kraeydonck, Bernaerts Music; Albert Edward Kelly, *Arnhem*, Molenaar Edition; Giuseppe

The Situation of Saxhorns in Today's Wind Bands

While the *Eb-flugelhorn* disappeared in so-called 'globalized' wind bands, it still exists in fanfare bands and, for example, in the military bands of Italy which continue to preserve their own, rich instrumentation. In return, in brass bands, melody parts being played by cornets, *Bb-cornets* are augmented by an *Eb-cornet*. Almost the same is the case with the *Bb-Flugelhorn*. While it has disappeared in today's wind bands, it constitutes the main melody instrument in fanfare bands; it continues to have a firm place in Austrian, Italian and probably also in Spanish and in Russian wind orchestras. The destiny of *alto* and of *baryton saxhorns* is quite similar.

While the former is replaced by the French horn, the latter is replaced, together with the *saxhorn basse*, by the *euphonium* British style in professional (military) bands as well as in community ensembles of most countries with the exceptions enumerated above. A further curious exception remains the compensated *saxhorn basse* manufactured by the *Antoine-Courtois*-company. It follows the non-compensated four and five valve instruments, is more compact in shape than an euphonium, but at least equal in bore and is played at the Paris conservatoire and at the *Orchestre de la Garde Républicaine*, while the *Gardiens de la Paix* may also play the euphonium. The *French tuba (tuba français)* with six valves and pitched in C, in use in French or Belgian symphony orchestras until the middle of the 20th century, was substituted by larger bass and double bass tubas in F, E-flat, C or B-flat.

The use of double bass saxhorns is often limited to E-flat, and B-flat-tubas in modern wind bands, with the exception of brass bands, where both are required, while in music schools the smaller tubas are taught. We have to observe that in 'globalized' wind bands most saxhorns have disappeared or have been substituted with so-called standardized instruments. This leads inevitably to an impoverishment of tone colors. However, the preservation of the latter is guaranteed, for example, in South and in East European band traditions (as mentioned above).

V e r d i, *La forza del Destino* (Overture), arr. by P. S t a l m e i e r, Molenaar Edition; Hector B e r l i o z, *Marche Hongroise*, arr. by Ton van G r e v e n - b r o e k, Molenaar Edition; John M i l e s *Music*, arr. by Randy B e c k, Tierolff Edition.



Figure 5a: *Saxhorn basse Courtois 366*²⁰ Figure 5b: *Tuba français*²¹

Instrumental Methods for Larger Saxhorns

We have to disagree partially with Wally Horwood arguing that those concerned with the violin, the French horn, the flute, the guitar, the highland bagpipe and indeed any orchestral or band instrument will find in print a wealth of detail in the form of methods, tutors, treatises and studies which leave few,

²⁰ Downloaded <http://www.flipbooks.buffet-group.com/courtois/FR/> (access 11 / 2014).

²¹ Downloaded http://saxhorneuphoniumtuba.free.fr/images/tuba_francais.jpg (access 11 / 2014).

'if any, aspects of the subjects undiscovered. The search for anything comparable on the saxhorn would be long indeed.'²²

While it may be true that in Anglo-Saxon pedagogical brass literature saxhorn methods are missing, Horwood does not take into account that there exists pedagogical material in abundance in French-speaking countries after Sax has invented his brass instruments. Arban's method, printed first in 1864, has been entitled *Grande Méthode de cornet à pistons et de saxhorns*. It barely would have been conceivable without the inventions of Sax giving pre-existing valved brass instruments more technical perfection.

Chronology

The comprehensive lists of methods for small brass instruments provided by Friedrich Anzenberger in his monograph about trumpet methods may be a proof that the inventions of Sax in the 1840s had their repercussions also on the level of pedagogical material. From that moment on, for the following two decades, methods for small brass instruments branch out substantially.²³ Most of them had their origin in France (Belgium).²⁴

Methods for brass instruments were first published between 1800 and 1850. The *Trompetenschule* of Andreas Nemetz, although only 19 pages long, must be considered as a first milestone concerning pedagogical material for brass instruments. Published in 1827,²⁵ it covers the most important trumpet types available at this time, the natural trumpet, the keyed trumpet and the valve

²² Horwood 1983, p.151.

²³ Friedrich A n z e n b e r g e r, *Ein Überblick über die Trompeten- und Kornettschulen in Frankreich, England, Italien, Deutschland und Österreich von ca. 1800 bis ca. 1880*, Diss Wien 1989, p.559.

²⁴ Anzenberger 1989, p.560.

²⁵ The date doesn't appear on the publication, but Friedrich Anzenberger deducts it from a newspaper in Vienna from 1827, c.f. Friedrich A n z e n b e r g e r, *Andreas Nemetz schrieb die früheste Lehrmethode für Ventiltrompete - Ein Ergebnis jüngster Forschung*, in: *IGEB Mitteilungsblatt* 2000 / 2-3, pp.91-94.

trumpet.²⁶ Nemetz' *Allgemeine Musikschule für MilitärMusik* (1844) included instruction for the common wind instruments of his time. An *ophicleide*, also referred to as *bombardon* (as mentioned above), was only listed; but this was a keyed instrument, and etudes were not added.²⁷

Concerning trombone methods and due to the age of the instrument with its first origins in the 14th century²⁸, one could imagine an earlier date for the publication of the first pedagogical material, and indeed, the date 1794 is regarded in relation to the first trombone class at the Paris conservatoire²⁹, which was officially founded in 1795.³⁰ The first method was published probably somewhat later by André Braun.³¹

Methods for Larger Saxhorns

(A chronological list of pedagogical literature for larger saxhorns is provided in Table 2.)

According to Evgenia Mitrouila the first methods including the name of Sax, were published ca. 1845, i.e. *The cornopean or cornet-a-piston & Sax-horn preceptor ...* by Joseph Forestier and in 1846 the first method including larger saxhorns, i.e. Muler's *Nouvelle méthode de Sax-horn, basse renfermant des*

²⁶ Bernhard H a b l a, *Foreword* to Andreas N e m e t z, *Trompetenschule*, (= *IGEB Reprints und Manuskripte. Materialien zur Blasmusikforschung* vol. 6), Wien 2011, p.VII.

²⁷ Nemetz [1844], p.95.

²⁸ David M. G u i o n, *A Short History of the Trombone. The Alta Band Tradition*, in: *Online Trombone Journal*, 10/2/2004, <http://trombone.org/articles/library/sh1-alta.asp> (access 11/2014).

²⁹ Benny S l u c h i n and Raymond L a p i e, *Slide Trombone Teaching and Method Books in France (1794-1960)*, in: *Historic Brass Society Journal*, vol. 9, 1997, p.4.

³⁰ *Conservatoire National Supérieur de Musique et de Danse de Paris, Histoire*, <http://www.conservatoiredeparis.fr/lecole/histoire/> (access 11/2014).

³¹ Howard W e i n e r, *André Braun's Gamme et Méthode pour les trombones revisited*, in: *Historic Brass Society Journal*, vol. 11, 1999, p.94.

*gammes dans tous les tons*³², only two, three years after Sax was granted his first patent.³³

In 1847 Sax issued his own method, the *Méthode complète pour saxhorn et saxotromba, soprano, alto, ténor, baryton, basse et contrebasse à 3, 4 et 5 cylindres suivi d'exercices pour l'emploi de compensateur*.³⁴ The indication about four and five valves makes clear that this method, conceived as an all-round tutorial, was also envisaged for large saxhorns.

In 1861, i.e. at a relative early stage for tutorials, Luxembourgian composer J. A. Zinnen (also composer of the national anthem of Luxembourg) published the only method for low saxhorns in the German language published by Schott in Mainz.³⁵ Zinnen was favourably disposed to transfer the French tradition of Sax to the German speaking part of Europe, due to the fact that he was born in Germany, spent an important part of his life in Luxembourg and finally moved to Paris at the end of his life.

In 1863 Pierre-François Clodomir published his *Méthode complète de saxhorn basse op. 19 for saxhorn basse* in three parts. It is based on op. 14 for smaller saxhorns. In 1883 Michel Bléger published a set of etudes and duets in a similar vein.³⁶ During the course of the ensuing two decades some more pioneering work in the field of methods for low saxhorns was undertaken, the most comprehensive having been accomplished by Gabriel Parès (1860 - 1934). Parès initially studied the cornet and became conductor of the *Orchestre d'harmonie de la Garde Républicaine* in 1893. Apart from his activities as a

³² Mitroulia 2011, p.509.

³³ Mitroulia 2011, p.105.

³⁴ Adolphe Sax, *Méthode complète pour saxhorn et saxotromba, soprano, alto, ténor, baryton, basse et contrebasse à 3, 4 et 5 cylindres suivi d'exercices pour l'emploi de compensateur*, Paris 1847.

³⁵ Jean Antoine Zinnen, Op. 23. *Vollständige theoretisch-praktische Schule f. d. Messing-Tenor-Instrumente: Ventilposaune, Tenorhorn, Saxhorn, Euphonium (Batyphone) und Tenortuba*, Mainz 1861.

³⁶ Michel Bléger, *Trente Etudes brillantes pour saxhorn, basse ou ophicléide / Douze Duos concertants pour saxhorn-basse ou ophicléide*, Paris 1883.

conductor, he composed and arranged for wind bands and published pedagogical works and, amongst others, works for lower saxhorns.³⁷

Contest and Solo Pieces for Larger Saxhorns

(A chronological list, covering the years between 1847 and 1953, of contest literature for larger saxhorns is provided in Table 3.)

In 1847 Brandus / Paris published a first work for saxhorn and piano by the Strasbourg born French musician Johan Georg Kastner (1810 - 1867), the *Fantaisie et variations brillantes pour Saxhorn et piano*.

Twenty-five years later, in 1872 Amilcare Ponchielli (1834 - 1886) composed his *Concerto per Fliscornobasso*, the first concerto for this new instrument and still an attractive concert piece today. The work is an unambiguous indication of a relatively early technical perfection of this instrument.

It was not until 1914, 42 years later, that further solo material for saxhorn was published, the *Grand Solo de concert pour saxhorn basse Si♭, avec accompagnement de piano* by Jules Watelle. Although written for *saxhorn basse* and of an advanced level of difficulty, it does not explore the low register of the instrument. 18 years later, in 1932, Joseph Edouard Barat published his *Introduction et Sérénade*. After another 18 years Barat published *Réminiscences de Navarre*. These pieces, specially written for low saxhorns with more than three valves, explore the low register. They were commissioned as contest pieces at the Paris conservatoire and are of very high artistic level.

The reason for this relative late moment of solo literature was that, starting from 1948, a tuba and saxhorn class was established at the Paris conservatoire with Paul Bernard as professor³⁸, who also published his own, comprehensive

³⁷ A. C ou e s n o n, *Gabriel Pareès*, in: *Le panorama musical illustré*, 1898, <http://gallica.bnf.fr/ark:/12148/btv1b8423385p/f1.zoom.r=Gabriel%20Par%C3%A8s> (access 11/2014).

³⁸ cf. *Saxhorn, Euphonium, Tuba*, <http://saxhorneuphoniumtuba.free.fr/sections.php?op=viewarticle&artid=21> (access 7/2014).

method especially for French tuba and for lower saxhorns in 1960.³⁹ Bernard was also the commissioner and dedicatee of numerous pieces.

In 1864 Jean-Baptiste Arban published probably the most wide-ranging tutorial for trumpet and high saxhorns. In general successful, methods for trumpet are not arranged, nor adapted for lower saxhorns, such as for example *Clodomir op. 14*, mentioned above, but often only provided with a bass clef and sold. Furthermore, methods are conceived for the whole range of saxhorns.

A look behind the façade of saxhorn methods reveals common or even stereotype pedagogical and structural aspects, such as brief introductions to music theory, explications about the instrument, its shape, its use in the orchestra, its technical facilities and difficulties, fingering charts, etc. Very few methods, although designated for lower saxhorns, provide exercises where the use of a fourth and a fifth valve is demanded and where the specific low register is explored. This was ensured only decades later by contest and solo pieces with piano accompaniments. Some tutorials, such as Clodomir, Cornette and Bléger are augmented by duets to emphasize the artistic aspiration of the pedagogical works.

Outlook

Further research could provide a more complete overview of methods which transcends language and national barriers, carving out differences and common features. A more profound insight into pedagogical aspects would be desirable, and this could be achieved in addressing the progress in pedagogical methodology covering a longer time span up until today's methods.

³⁹ Paul Bernard, *Méthode complète pour trombone-basse, tuba, saxhorns basses et contrebasse*, Paris 1960.

TABLE 1 - THE NAMES OF SAXHORNS IN DIFFERENT LANGUAGES

Pitch	Sax	English	French	Spanish
E-flat	Saxhorn soprano	Eb-Flugelhorn	Bugle mib	F(l)iscorno mib
B-flat	Saxhorn soprano	Flugelhorn	Bugle	F(l)iscorno
E-flat	Saxhorn alto	Alto horn (US)	Alto	Trompa alto
		Tenor horn (GB)		
B-flat	Saxhorn baryton	Baritone	Baryton	Bombardino barítono
	Saxhorn basse			
(rarely)		Tenor tuba	Tuba ténor	Tuba tenor
			Petite basse	
			Petite basse compensée	
(recently)		Euphonium	Euphonium	Eufonio
				Bombardino
C & B-flat			Tuba français	
E-flat	Saxhorn contrebasse mib	Eb-Bass	Contrebasse mib	F(l)iscorno bajo
		Eb-Tuba	Tuba basse	Tuba Mib
(colloquial)			Basse mib / Bombardon	
B-flat	Saxhorn contrebasse sib	BBb-Bass	Contrebasse sib	F(l)iscorno contrabajo
		BBb-Tuba	Tuba contrebasse	Tuba Sib

(colloquial)			Basse sib / (Bombardon sib)	
E-flat	Flicorno soprano	F(l)iscorno mib	Es- Flügelhorn	<i>Bügel mib</i>
B-flat	Flicorno soprano	F(l)iscorno	Flügelhorn	<i>Bügel</i>
E-flat	Flicorno contralto	Trompa alto	Althorn	<i>Alto</i>
B-flat	Flicorno baritono	Bombardino barítono		<i>Bariton</i>
	Flicorno tenore		Tenorhorn	
	Flicorno basso		Bariton	<i>Tuba</i>
(rarely)		Tuba tenor	Tenortuba	
(recently)	Eufonio	Eufonio	Euphonium	<i>Euphonium</i>

Pitch	Italian	Spanish	German	<i>Luxembourgish</i>
	Bombardino	Bombardino		
C & B-flat				
E-flat	Flicorno basso	F(l)iscorno bajo	Es-Bass	<i>Mib-Bass</i>
	Tuba	Tuba Mib	Es-Tuba	
(colloquial)	Bombardon e			
B-flat	Flicorno contrabasso	F(l)iscorno contrabajo	(B-Bass)	<i>Sib-Basse</i>
	Basso-tuba	Tuba Sib	B-Tuba	
	Flicorno basso grave			

TABLE 2 - METHODS FOR LOWER SAXHORNS

1846	Muler, H.	<i>Nouvelle méthode, basse renfermant des gammes dans tous les tons, Paris*</i>
1852	Carnaud, Jeune	<i>Méthode complète pour basse et contrebasse, 3-5 pistons, Paris*</i>
1852- 53	Chertier, Eduard et Carnaud, Jeune	<i>Méthode pour les sax-horns contrabasse, basse et Barytons, Paris*</i>
1861	Zinnen, Jean Antoine	<i>Vollständige theoretisch-praktische Schule für die Messing- Tenor-Instrumente: Ventilposaune, Tenorhorn, Saxhorn, Euphonium (Batyphone) und Tenortuba (Baryton). (Méthode complète des Instruments Ténor en cuivre.) [op. 23] Mainz, Schott</i>
1863	Clodomir, Pierre- François	<i>Méthode complète de saxhorn basse op. 19</i>
1868	Cornette, V.	<i>Méthode complète de sax-horn soprano, contralto, ténor, baryton basse et contrebasse (ou bombardon), S. Richault, Paris</i>
1869	Bouché, P. J.	<i>Principes de musique et méthode élémentaire pour instruments de cuivre, bugle, cornet, alto, baryton, trombone et ophicléide, Emile-Menesson, Reims</i>
1870	Forestier, Joseph	<i>Monographie des instruments a six pistons et tubes indépendants: Etudes pratiques et théoriques pour le nouveau système de Mr. Adolphe Sax, Paris</i>
1870- 74	Guilbaut, E.	<i>Méthode très facile pour le saxhorn basse, 3 fasc.</i>
1875	Boscher, A.	<i>Méthode de saxhorn (extrait de la méthode générale d'ensemble), V. David, Paris</i>
1881	Tilliard, Georges	<i>Méthode de Basse à 4 pistons (saxhorn à 4 cylindres), Tilliard, Paris</i>
1882	Tilliard, Georges	<i>Méthode de contre-basse ou sax-horn basse, Tilliard, Paris</i>
1883	Bléger, Michel	<i>Trente Etudes brillantes pour saxhorn. basse ou ophicléide, Margueritat, Paris</i>

		<i>Douze Duos concertants pour saxhorn-basse ou ophicleide</i> , Margueritat, Paris
1895	Parès, Gabriel	<i>Méthode de baryton ou saxhorn-baryton</i> , Henry Lemoine, Paris
1895	Parès, Gabriel	<i>Méthode de basse ou saxhorn-basse</i> , Henry Lemoine, Paris
1896		<i>Gammes et exercices journaliers pour les instruments en usage dans les harmonies et fanfares</i> , Henry Lemoine, Paris
1896		<i>Gammes et exercices journaliers pour Basse (ou Saxhorn basse)</i> , Henry Lemoine, Paris
1896		<i>Cours d'ensemble instrumental à l'usage des musiques militaires, d'harmonie et de fanfare</i> , Henry Lemoine, Paris
1898	Prévet, Albert	<i>Méthode de saxhorn</i> , Emile Gallet, Paris
1899	Hergoux, D.	<i>Nouvelle méthode élémentaire, théorique et pratique de Saxhorn-basse à 3 et 4 pistons, en clef de D</i> , Hergoux, Paris, 54 pages
1902	Prévet, Albert	<i>Méthode de saxhorn-basse, contrebasse ou bombardon (clé de sol) à 3 ou 4 pistons (ou cylindres) contenant l'ancien et le nouveau doigté, avec vignette et description de l'instrument</i> , E. Gallet, Paris
1907	Blémant, L.	<i>Nouvelle méthode pratique pour basse ou saxhorn en 3 parties</i> , Z. Bajus, Avesnes-le-Comte
1908	Fontbonne, Léon	<i>Méthode complète théorique et pratique de [saxhorn] (aussi basse et contrebasse)</i> , Costallat et C.ie, Paris

TABLE 3 - CONTEST AND SOLO PIECES FOR LOWER SAXHORNS

1847	Kastner, Johan Georg	<i>Fantaisie et variations brillantes pour Saxhorn et piano</i> , Brandus, Paris
1872	Ponchielli, Amilcare	<i>Concerto per Flicornobasso</i> (first known solo piece for <i>saxhorn basse</i>)
1914	Watelle, Jules	<i>Grand Solo de concert pour saxhorn basse Si b, avec accompagnement de piano</i> ..., A. Dubois, Paris
1932	Barat, Joseph Edouard	<i>Introduction et Sérénade, pour tuba en ut ou saxhorn basse si bémol, avec accompagnement de piano</i> , éditions musicales Buffet-Crampon, Paris
1950	Barat, Joseph Edouard	<i>Réminiscences de Navarre [Musique imprimée]. Pour tuba en ut ou saxhorn basse si bémol et piano. Concours du Conservatoire national de musique</i> , A. Leduc, Paris
1953	Beaucamp, Albert	<i>Cortège pour tuba ou trombone basse en ut ou saxhorn basse si bémol et piano</i> , Leduc, Paris
1953	Semler-Collery, Jules	<i>Barcarolle et Chanson bachique [Musique imprimée]</i> , pour  ba ou  trombone basse en ut ou  saxhorn basse si bémol et piano, Leduc, Paris
1953	Pierre-Petit	<i>Fantaisie, pour tuba ou trombone basse en ut ou saxhorn basse si bémol et piano</i> , Leduc, Paris