

THE FUTURE OF THE FRENCH BASSOON:
CHANGING PERCEPTION THROUGH INNOVATION

BY

DARYN ZUBKE

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Chairperson Dr. Eric Stomberg

Dr. Stephanie Zelnick

Dr. Margaret Marco

Dr. David Alan Street

Dr. Michelle Hayes

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The Dissertation Committee for DARYN ZUBKE
certifies that this is the approved version of the following dissertation:

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Abstract

Over the past 150 years the French bassoon has experienced great fluctuations in popularity and innovation, but is now at a turning point due to advancements based on recent research and development by musicians and instrument makers alike. A number of contributing factors have allowed the French bassoon to rediscover its place as a significant option to a new generation of bassoonists. The primary reasons for this renewed interest are five-fold: advances in instrument manufacture resulting in increased accessibility; a shift in tone production among professional French bassoonists; unprecedented access to recordings, past and present, of the French bassoon via the internet; a growing interest in performing French works on the instrument for which they were written; an interest by major orchestras to invest in the Ducasse system; and the influence of active French bassoonists promoting their instrument.

Newly developed bassoons, made by Parisian bassoon maker Yannick Ducasse, have been engineered for more flexibility in tone production, allowing musicians to blend effectively with other instruments. My research highlights these new innovations, provides historical context, and allows for a first-hand account of how accessible the French bassoon has become.

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Chapter One – Introduction

Over the past 150 years the French bassoon has experienced great fluctuations in popularity and innovation, but is now at a turning point due to advancements based on recent research and development by musicians and instrument makers alike. Based on source materials used for my research, I have concluded that the French bassoon now experiences a resurgence in interest after a long period of incrementally fewer bassoonists playing the instrument professionally and fewer instruments being produced. A number of contributing factors, discussed later in this paper, have allowed the French bassoon to rediscover its place as a significant option to a new generation of bassoonists. The primary reasons for this renewed interest are five-fold: advances in instrument manufacture resulting in increased accessibility; a shift in tone production among professional French bassoonists; unprecedented access to recordings, past and present, of the French bassoon via the internet; a growing interest in performing French works on the instrument for which they were written; an interest by major orchestras to invest in the Ducasse system; and the influence of active French bassoonists promoting their instrument.

Newly developed bassoons, made by Parisian bassoon maker Yannick Ducasse, have been engineered for more flexibility in tone production, allowing musicians to blend effectively with other instruments. Ducasse also offers customized key work to accommodate German bassoonists while retaining the tone and character of the French bassoon. My research highlights these new innovations, provides historical context, and allows for a first-hand account of how accessible the French bassoon has become for someone like myself who owns a Ducasse bassoon, but has been trained on the German bassoon.

In an attempt to preserve the instrument in an ever-changing sound landscape, the tone of French bassoons has had to change drastically in the last century to avoid extinction. Preserved historical recordings of French bassoonists, however, reveal a style that had an abundance of high frequencies in the sound, as opposed to the more mellow sounding low frequencies of the German bassoon. Cecil James, a renowned British bassoonist who played on the French system, had a mellow tone free from reediness and commented, “one is to avoid that awful ‘buzz’ sound; to my ears this is most objectionable.”¹ This tone is often described disparagingly as having a bright and reedy sound.

Each successive generation of French bassoonists began to favor the lower frequencies in their tone, creating darker and more rounded sounds that were less vibrant and at less risk of being found objectionable. This happened organically in French orchestras due to the demands that were placed upon bassoonists to adapt to certain repertoire requiring a flexible tone color. Philippe Hanon, Principal Bassoonist in the Orchestre National de France reflected, “the sound of the orchestra has completely changed with [Kurt Masur (2002 – 2008)]. We had to adapt thicker and darker sounds [needed] from the bassoons.”² Masur, being German, brought a completely different approach to the orchestral sound in his personal and cultural aesthetic, having conducted at the Gewandhausorchester Leipzig (1970 – 1996) and the New York Philharmonic (1991 – 2002).

The Buffet-Crampon company catered to the growing need for a darker sounding instrument beginning in 1980, when they created the 35RC model; according to James Kopp,

¹ Cecil James, “Life as a “Buffet” Player”, *Double Reed News* 11:4-5. Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 156.

² Philippe Hanon. Personal interview, e-mail. 17 Aug. 2017.

“the new Buffet produced a larger, darker sound.”³ Yannick Ducasse has taken these ideas to the next level and is better able to innovate due to his smaller operations. He and Philippe Hanon worked on a prototype for seven years after Ducasse left work at the Selmer Company.

I attended concerts in Paris in June of 2016 at the Orchestre National de France and heard first-hand how drastically different the French wind playing has become compared to the historical recordings mentioned previously. The overall sound of the orchestra, specifically the wind section, was very dark and homogeneous in tone quality meaning that there are fewer high frequencies in the sounds produced. This section of French wind players may have developed their tones as a reaction to the highly criticized bright and reedy sounds of past generations, which by contrast favored high frequencies resulting in distinct sounds that were difficult to blend with each other. My impression from hearing this orchestra live in 2016 is that they purposefully create their sounds to be warmer and more homogeneous as compared with previous generations. Anthony Baines said of regional differences of French bassoon tone in his 1967 book, *Woodwind Instruments & Their History*, “In England, and also in Italy, the players have sought a rounder, mellower sound, free from reediness (today in England frequently using German-type reeds); vibrato is either not used, or is reserved for very special occasions.”⁴

Concerning the ‘French’ style of playing, Philippe Hanon believes that, “the Internet has considerably changed the view of bassoonists around the world: you can access all styles all schools and archives. For ten years now, I have heard bassoonists play with a ‘French’ style when they have never studied in France, but I suppose they listen a lot on the internet, for

³ James B. Kopp. *The Bassoon*. Padstown: Yale University Press, 2012, 163.

⁴ Anthony Baines. *Woodwind Instruments and Their History*. London, Faber and Faber Limited, 1967, 155.

example, the recordings of the Mozart concerto by Maurice Allard.”⁵ (When referring to the ‘French’ style, Hanon refers to the unique phrasing, use of vibrato, and articulation that is rooted in practices of musicians who have lived and studied in France.) Young students who have enthusiasm for the French bassoon now have access like never before to dozens of recordings thanks in large part to YouTube and social media. While teaching at the Interlochen Advanced Bassoon Institute in 2014, I spoke with students about my interest in the French bassoon, which led to their exploration of the instrument. They listened to a recording of the recital I gave on my Ducasse bassoon (after only having the instrument for three months, which was one of the three full recitals I performed in partial fulfillment for the degree of Doctor of Musical Arts) and other recordings at my suggestion, such as those on YouTube of the renowned French bassoonist Maurice Allard. A few have even expressed an interest in purchasing a French bassoon of their own.

The chief complaint of many serious bassoon students who are learning at the top levels of instruction is that so much of our most prized repertoire, being composed for the French bassoon, makes use of the highest and most difficult range of the instrument. Many pieces, such as Henri Dutilleux – Sarabande et Cortège, Alexandre Tansman – Sonatine, or Roger Boutry – Interférences 1 include only one or two challenging high register notes, but that is enough to limit or hinder performances by many capable young bassoonists and some professionals alike.

The different manner in which French and German bassoons resonate contributes to the unique sound quality from note to note on each instrument. The differences in tone color are rooted in the middle part of the 19th century as the development of the French and German systems became even more distinct. In Carl Almenröder’s *Treatise on Improving the Bassoon*,

⁵ Philippe Hanon.

the author describes the changes he made to the German bassoon, in terms of bore, tone hole placement, and type of wood used.⁶ It is impossible to closely recreate the tone of the French bassoon on a German bassoon because of these differences. While in 2012 James B. Kopp states that, “compared with a variety of Heckel bassoons, a Buffet from 1930 shows the following visible differences: tone holes L1-3 and R1-2 are larger; tone holes L3 and R1 are significantly further apart; most keyed tone holes on the boot joint are smaller and higher on the bore; the A and B-flat vents are single holes; and tone holes on the long and bell joints are significantly narrower.”⁷

Over the last few decades, bassoonists interested in capturing the essence of a work composed with the sound of the French bassoon in mind were limited either to choosing instruments with a significant difference in the fingering system or merely evoking the sound of the French bassoon on their existing instruments. Philippe Hanon suggests, “The French composers had in their ears the sound of the French bassoon and it is obvious that the music of Ravel, for example, sounds better with French instruments.”⁸ This idea can be applied to and expanded upon to include the vast amount of French orchestral, chamber, and solo repertoire written specifically for the French bassoon and not with the German bassoon sound in mind.

The idea behind this opinion creates a parallel to many in the historically informed performance community, that music can be expressed and experienced in new ways by performing on original or replicas of original instruments for which the composer originally wrote. An example of an ensemble creating music in this way is the Parisian orchestra, Les

⁶ William Waterhouse. "Bassoon." *Grove Music Online*. Oxford Music Online. Oxford University Press. Web. 2017. 23 Sept. 2017.

⁷ Kopp, *The Bassoon*, 156.

⁸ Philippe Hanon.

Siècle, conducted by François-Xavier Roth. The orchestra describes itself as “one of a small number of ensembles to employ period and modern instruments, playing each repertoire on appropriate instruments.”⁹ Bassoonist Marc Vallon has played with similar period ensembles, saying he played “in [an] orchestra in Paris that specialized in trying to match the instruments used in other periods.”¹⁰ He has performed works by Debussy, Franck, and Berlioz on much older models of French bassoons from that period, saying that the goal was to recreate a performance of those works that would be “getting close to something that maybe the public of 1893 could have heard.”¹¹ Vallon participated in recreations of late 19th century German works, as well using a pre-serial German bassoon made by Heckel from 1870 to perform *Ein Deutsches Requiem*, op. 45 by Brahms.

Professional bassoonists from two high-profile orchestras have a serious interest in incorporating the French bassoon back into use in German-bassoon-only ensembles. The first is Kim Laskowski of the New York Philharmonic, who had a great influence on me during my undergraduate degree at The Juilliard School. She shared her passion for the French bassoon and once described her interest in playing one for concerts of the New York Philharmonic. She studied on a Buffet bassoon at the Conservatoire National Supérieur de Musique de Paris from 1977 to 1979 and was the first bassoonist to own a Ducasse French bassoon with customized German bassoon key work. After demonstrating her Ducasse bassoon for her colleagues at the New York Philharmonic she said, “people have a really positive reaction to it. The bassoon section would be fine with me playing it, as long as it’s in tune, of course.”¹²

⁹ Les Siècles, François-Xavier Roth. “Biography,” *Les Siècles*. Dec. 2017, Accessed 6 Dec, 2017. <http://lessiecles.com/en/les-siecles-2/biography/>

¹⁰ Marc Vallon. In person interview, 26 Sept. 2017.

¹¹ Ibid.

¹² Kim Laskowski. Personal interview, video chat. 10 Sept. 2017.

In addition to the New York Philharmonic, The Cologne Philharmonic ordered two Ducasse bassoons in 2016 with customized German key work for their bassoon section. Ducasse himself reported the orchestra in Cologne is planning to integrate the instruments into their concert cycle for music that was originally written for the French bassoon, something that the National Arts Centre Orchestra in Canada has done in the past, but with Buffet bassoons.

Former students of the most significant French bassoon pedagogue, Maurice Allard, as well as students of Allard's students have devoted considerable time generating interest in French bassoon playing. During Allard's time teaching, the decline in popularity of the French bassoon was dire, so his reactions were more aggressive than those of his students and their students. For example, he did not admit any German bassoon playing students to the Conservatoire de Paris in an effort to preserve the fragile traditions of the French instrument. The instruments were even referred to by different names! According to James Kopp, "in the Allard era, a 'fagott' (as the French called it, reserving 'basson' for the French instrument) was not allowed in the Conservatory building, let alone the bassoon class."¹³ Dr. Joseph Polisi, the President of The Juilliard School, said to me in a personal interview that, "[Allard] believed deeply in the French system. He would not even discuss the idea of the 'fagott'."¹⁴ Dr. Polisi studied the French bassoon in Rouen and Paris and knew Maurice Allard personally.

The students produced from this "preservation era" went on to advocate more diplomatically for their instrument by giving masterclasses, changing fundamentally the way the sound of the instrument is perceived, and breaking down misconceptions of the French bassoon. These efforts were surely influenced by Allard after he founded *Les Amis du bassoon français* in

¹³ Kopp, *The Bassoon*, 162.

¹⁴ Dr. Joseph Polisi. In person interview. 16 Oct. 2017.

1974, the only advocacy group of its time for the French bassoon. The publication “*Bulletin* (later renamed *Le Basson*) ‘served as the spearhead to respond to the attacks point by point’.”¹⁵ This was in an era when rapid changes provoked strong reactions, or even attacks, from both sides. Kim Laskowski said, “it was a very dark time.”¹⁶

Maurice Allard’s approach to advocating for the bassoon worked well in its own way, but the approach seemed to be somewhat aggressive as compared to the outreach his former students engage in today. In Allard’s time, “the French-system players mounted a show of force at the Geneva Concours of 1974: among the thirty entrants were fourteen Buffet Crampon players (eleven from France; one each from Switzerland, Japan, and Belgium).”¹⁷ The Buffet-Crampon company worked closely with Allard to showcase their “instrument in the most favorable light.”¹⁸ Presently, advocates of the French bassoon are continuing the idea of preservation and are ushering in a new phase of change that could solve the instrument’s poor reception.

¹⁵ Alain Chantauraud, “Le Basson: Ni fleurs ni couronnes.” *JIDRS* 23:83-4, 1995. Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 162.

¹⁶ Kim Laskowski.

¹⁷ Kopp, *The Bassoon*, 163.

¹⁸ *Ibid.*, 163.

Chapter Two – Historical Context

It is important to understand the historical context of the modern French and German bassoons. This chapter provides information on the origin of the bassoons and when there became a distinction between the two modern systems.

Early origins

The dulcian, choristfagott, bajón, pommer, and curtall predate the bassoon and all “have the characteristic folded over conical bore with a bocal attached and an open or semi-open bell pointing upwards.”¹⁹ Early evidence of these instruments can be found from records of instrument repairs, records of payment, inventory lists, and iconographic sources. The first record of a distinction between the dulcian and early bassoon was written in the score of *Proserpine* (1680) by Jean-Baptist Lully, who labelled the part ‘*basson*’.

An early example of a three-key bassoon from 1699 made by Richard Haka (1645 – 1705) serves as a great artifact for the study and reproduction of early bassoons. By 1787, the number of keys had doubled to six, which can be credited to an iconographic source found on the front cover of the will of a German court bassoonist. This would have been the kind of instrument that Wolfgang Amadeus Mozart wrote for in his Concerto for Bassoon in B flat, K. 191 (1774), and according to William Waterhouse “the bassoon had settled into a prominent role as a capable instrument that can hold its own to other upper woodwinds.”²⁰ This would be the

¹⁹ William Waterhouse. "Bassoon." *Grove Music Online. Oxford Music Online*. Oxford University Press. Web. 2017. 23 Sept. 2017.

²⁰ *Ibid.*

position that the instrument would occupy throughout the Classical and Romantic eras and through modern times. By this point the bassoon was expected to perform as well as any other woodwind instrument in the orchestra and was no longer simply a continuo instrument.

French and German development timeline

Musicians and instrument manufacturers evolved as more technical demands were being placed on instrumentalists by composers. Bassoon makers were slow to innovate before the beginning of the 19th century, like some French makers who made “gradual changes to the placement of holes, specifically the G sharp key to below the F key hole.”²¹ Changes came gradually to bassoon makers from Germany, England, and France where “extra keys were slow to become standard.”²²

The French and German bassoons in fact have different origins. The precursor to the modern Buffet bassoon was made by Savary and the precursor to the Heckel bassoon was made by Granser until Carl Almenröder, a German bassoonist and craftsman, who began redesigning the construction of the German bassoon at the beginning of the nineteenth century. His groundbreaking innovations took place while “the French, strictly speaking, retained the old bassoon and simply added more keys to it.”²³ Marc Vallon, a specialist in early music confirms that, “Buffet is very much a continuation of Savary.”²⁴ In 1817 Almenröder joined Gottfried Weber, an acoustician, to develop an instrument different from the bassoon of the day. Six years after

²¹ Ibid.

²² Ibid.

²³ Gunther Joppig. *The Oboe and the Bassoon*. The Bath Press, B.T. Batsford Ltd, 1981, 92.

²⁴ Marc Vallon. In person interview. 26 Sept. 2017.

this partnership, Almenräder would devote his life to documenting their ideas. His *Treatise on Improving the Bassoon* was started in 1823 and would not be published until 1843. In the time between beginning the treatise and the eventual publication, Almenräder joined Johann Adam Heckel to found “their own firm, which proposed to devote itself to the exploitation of Almenräder’s improvements to the bassoon.”²⁵ These improvements addressed problems related to response and articulation and the finished product, which had seventeen keys, would be produced by the Heckel company in Biebrich, Germany. As Waterhouse observes, “this completed model would become the standard German system bassoon.”²⁶ Johann Heckel and his son Wilhelm Heckel carried on improving this instrument, which we now refer to as the German bassoon. The father and son “were both intent on improving the instrument.”²⁷ Richard Wagner “was a frequent guest at the Heckel workshops,” when he lived in Biebrich in 1862. Wagner subsequently showed his liking for Heckel instruments by recommending them to others.”²⁸ This important endorsement would begin the wildly successful advancement in bassoon construction by Heckel. By 1898, it is recorded that Heckel had produced 4,000 bassoons.

Production improvements made to the French bassoon, outside of these new German advancements, were made by companies such as Triébert, Gautrot, Savary, Mahillon, Boosey & Hawkes, Selmer, and Buffet-Crampon. In 1879, French bassoonist Eugene Jancourt, teacher at the Conservatoire de Paris, helped develop a twenty-two keyed French bassoon with the Buffet-Crampon company. This instrument would remain largely unchanged for more than a century. The keys themselves had increased but “there has been no significant remodeling of the bassoon

²⁵ Joppig, *The Oboe and the Bassoon*, 86.

²⁶ Waterhouse, "Bassoon."

²⁷ Joppig, *The Oboe and the Bassoon*, 87.

²⁸ *Ibid.*, 87.

since the beginning of the nineteenth century, especially with regard to the bore and the tone quality.”²⁹ The standard French bassoon model would have to wait until the late twentieth and early twenty-first century for major changes that could eventually be carried out by Buffet-Crampon, Selmer, and other smaller manufacturers. This delayed innovation is confirmed by Anthony Baines: “the *French bassoon* is that which has been altered least since the time of Beethoven.”³⁰ In fact Beethoven personally asked Almenröder about his innovations in 1825, subsequently asking to be sent a bassoon. The advancements made for the German bassoon would be the curiosity of these decades and set the stage for a boom in popularity.

It would take more than a century for the Heckel system to slowly but steadily dominate the markets. During this last era of prominence for the French bassoon, a few companies flourished. Savary, Mahillon, Boosey & Hawkes, and Buffet-Crampon were the leading manufacturers of French bassoons in the early- to mid-twentieth century. Mahillon produced a bell in the style of Savary by 1908 “and a crook key for L4; better models offered more rod-axle keys, including low B1, and covered vents for R3 and RT.”³¹ Savary, a company with an older style of French bassoon that was popular in Britain, “was already under challenge from the new Buffet models” by 1900.³² Regarding what specifications were possible, James Kopp said of Buffet:

All models were offered in maple or palisander, with maillechort (German silver) keys; brass keys were optional on most models. A wing lining of caoutchouc (hard rubber) was recommended: it ‘renders the bore of the small branche [wing joint] absolutely smooth, favoring the emission of sound; also, being waterproof, it conserves the exact proportions of the bore’.³³

²⁹ Joppig, *The Oboe and the Bassoon*, 92.

³⁰ Anthony Baines. *Woodwind Instruments and Their History*. London, Faber and Faber Limited, 1967, 153.

³¹ James B. Kopp. *The Bassoon*. Padstown: Yale University Press, 2012, 152.

³² *Ibid.*, 149.

³³ *Ibid.*, 152.

The American company, Cundy-Bettoney of Boston, “offered a ‘Paris Conservatory model, maple wood, hard-rubber lined throughout’ in a 1927 catalogue.”³⁴ Many American bassoonists who went on to play in prominent orchestras began on the French bassoon, because the Heckel company had not yet reached the markets in the United States. Leonard Sharrow (Chicago Symphony Orchestra, 1951 – 1964) and Stephen Maxym (Metropolitan Opera Orchestra, 1940 – 1976) began on the French bassoon because “students in New York secondary schools were normally taught the French system.”³⁵

Some companies making bassoons began offering instruments with features of French and German style bassoons. For example, James Kopp said, “Oscar Adler offered Heckel and French models, as well as a French-looking model with German fingering patterns on the boot.”³⁶ These strategies were taking advantage of the new popularity of the German system, while also catering to the many musicians who still played the French system. The British company Boosey & Hawkes, who had only previously offered French system bassoons, showed in a “catalogue from after 1931 [that they] offered the ‘Model H.’ [which was] a German system.”³⁷ Other companies were soon to follow the new market for German bassoons like “H. & A. Selmer, Inc., the Elkhart branch of the French firm, in 1931 offered the H. Selmer (Paris) Full Conservatory system model and two models branded Barbier (Paris): the Heckel System, lined or unlined, with automatic crook key; and the French Conservatory System.”³⁸

³⁴ Ibid., 157.

³⁵ Ibid., 167.

³⁶ Ibid., 152.

³⁷ Ibid., 156.

³⁸ Ibid., 157.

James Kopp says of catering to bassoonists in the process of switching systems that, “‘World-System’ Heckel models were still built at times, and the firm [Heckel] continued to respond to personal requests from customers.”³⁹ A so-called “world system” was an instrument whose key work was that of the opposite system. In this case, it would have been a German bassoon wood and bore, but French key work. Heckel was not the only company to offer this customization. James Kopp describes:

In the United States, C. G. Conn of Elkhart, an importer of bassoons since 1880, offered both systems c. 1924. The ‘Professional Model’ (French System, seventeen keys) was ‘considerably cheaper than the Heckel system and for this reason is chosen often by the beginner’, according to the sales brochure. The ‘Symphony Model’ was a Heckel system; ‘professionals choose this model, as it enables them to play difficult passages with great ease, being quick in response and surprisingly agile.’⁴⁰

The most prominent differences between French models and German bassoons made by Heckel began to surface in the first few decades of the 20th century. “The French bassoon remained a narrower-bored instrument than the German, especially in the bell.”⁴¹ Along with this fundamental difference were smaller details pertaining to tone holes which were not as immediately obvious. These differences contributed to the differences in sound and intonation between the French and German bassoons. As time went on, small changes occurred to the “locations and diameters of Heckel’s tone holes [that] show continuing tweaking over time, as [did] the main bores. The wall thickness was increased slightly during the 1930s, especially in the boot joint.”⁴²

A continued effort to fine tune the Heckel instrument was of utmost importance to the company, even after the passing of Wilhelm Heckel. Franz Groffy, who married into the Heckel

³⁹ Ibid., 155.

⁴⁰ Ibid., 157.

⁴¹ Ibid., 155.

⁴² Ibid., 155.

family, was “overseeing subtle changes in the firm’s design,” as he was an engineer.⁴³ During these years, “the wall thickness increased and tone holes on the long and bell joints were no longer undercut.”⁴⁴ Undercutting a tone hole effects the resistance and pitch of the corresponding note. The difference between the two possibilities is minimal. This small change for the instrument’s manufacture indicates how the model had successfully reached a point where it did not need many more major alterations.

Modern times

Very little is seen in the way of innovation and redesign in modern times for either the French bassoon or the German bassoon. However, the marketing and reception of these instruments largely rest on small changes to the design. One major effort from the Buffet-Crampon company was the model number 35RC, which “was introduced in 1980 as ‘a challenge to the Heckel-bassoon’.”⁴⁵ The tone was much more covered and darker than previous models, but did not seem to go far enough to truly answer the criticisms the French system bassoon had faced. One of the minor changes was when, “Buffet introduced a ‘correction key’ to narrow the octave between G#2 and G#3 and a ‘croissant’ key to provide half-hole venting for L2.”⁴⁶ This same year, the Selmer company “resumed production [of French bassoons] in 1980,” according to Yannick Ducasse.⁴⁷

⁴³ Ibid., 160.

⁴⁴ Ibid., 160.

⁴⁵ Ibid., 160.

⁴⁶ Ibid., 165.

⁴⁷ Yannick Ducasse. Personal interview, e-mail. 23 Aug. 2017.

The next major changes to the French bassoon would not be made until the Selmer Company suspended production of bassoons in 2010. Their former bassoon craftsman, Yannick Ducasse, subsequently founded Ateliers Ducasse in collaboration with Philippe Hanon. Major changes to the French bassoon were made with the development of the so-called “Ducasse bassoon,” whose innovations went far further than additional keys. These advanced developments addressed issues in terms of tone, intonation, and resonance in which the previous French bassoon models were deficient.

Conflict among systems

The new German instrument that Almenröder and Heckel produced was now widely popular. The musicians who championed its use contributed to its gradual but widespread adoption. Bassoonists who continued the French system tradition were understandably threatened by this new instrument and it became a source of conflict within the global bassoon community. Many French bassoonists had strong feelings about the new Heckel instruments. Anthony Baines voiced his support for the French system during the mid-century when most bassoonists were changing over to the German system stating that, “[Almenröder] improved the instrument technically in many ways but at the same time spoilt its tone [and it took] two generations of the Heckel family to restore this.”⁴⁸

According to Lyndesay Langwill, A. Edward Wilson who was an English bassoonist employed by the Royal Philharmonic Orchestra, would “not [have] allowed himself to be

⁴⁸ Baines, *Woodwind Instruments and Their History*, 154.

persuaded to transfer from the French bassoon.”⁴⁹ This sentiment of preserving the French system was found all throughout England. It was one of sticking with tradition over joining those who were abandoning the French bassoon. Baines said: “many British players, including several of the finest and most sought-after (headed by Cecil James, principal in the Philharmonia Orchestra) have remained true to the Buffet, and indeed, when one hears them, one wonders why this swing-over to the German instrument should have taken place.”⁵⁰

This statement illustrates the difficulties of being on one side or the other. The conflict it caused among musicians was enormous, with many French-playing bassoonists feeling betrayed or left behind. Baines further articulates how the pro-French bassoon group saw themselves and what qualities were redeeming about these instruments and why it was worth preserving. Baines argues that “the tone-quality of the French bassoon is by nature the more subtle and vocal,” and continues explaining the differences by saying, “the sound of the French bassoon is never uninteresting. That of the German, on the other hand, tends rather to become so, and to lack variety.”⁵¹

Bassoonists in prominent positions did what they could to advocate for the French bassoon and lead their communities. Cecil James said, “one can sing like a bird on the French system bassoon.”⁵² Despite the pressure to switch to the German system, both James and Allard only played the French bassoon for the entirety of their careers. They protected the instrument in their own ways, specific to their country. Maurice Allard had to take a firm stance on protecting

⁴⁹ Lyndesay G. Langwill. *The Bassoon and Contrabassoon*. W. W. Norton & Company, London, 1965, 182.

⁵⁰ Baines, *Woodwind Instruments and Their History*, 153.

⁵¹ Baines, *Woodwind Instruments and Their History*, 155.

⁵² Cecil James, “Life with the French Bassoon,” *Double Reed News* 48:28, 1987. Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 162.

the French bassoon traditions at the Conservatoire de Paris. As mentioned in the previous chapter, German bassoonists were not admitted to the Conservatoire. Allard would spend much of his energy preserving and promoting the French bassoon by forming societies and encouraging his students to enter competitions. But in 1994, the Conservatoire de Paris would admit German bassoon students under the direction of Pascal Gallois as their German bassoon teacher. As Philippe Hanon recalls, “this was the necessary passage for French people to obtain a recognized diploma and to have the same chances as those who play the French bassoon.”⁵³ He stated that this was normal for him and other bassoonists at the time. This demonstrates a great shift in the approach of dealing with conflicts.

French defectors

The popularity of the German system bassoon would come to eclipse the French system, as many players all across Europe abandoned their French bassoons for the new German system. An early example of a bassoonist changing systems was W. H. Foot, who was “almost the first London player to adopt the Heckel bassoon.”⁵⁴ Another English bassoonist, Richard Newton received a “scholarship at the RAM, [but] in 1931... changed over to the Heckel bassoon.”⁵⁵ Anthony Baines said, “early in the 1930s, largely precipitated by the visit to London of the New York Philharmonic Orchestra with Toscanini, players changed over to the German bassoon in dozens, and it has now become by far the commoner of the two.”⁵⁶ James Kopp references this

⁵³ Philippe Hanon. Personal interview, e-mail. 17 Aug. 2017.

⁵⁴ Langwill, *The Bassoon and Contrabassoon*, 171.

⁵⁵ *Ibid.*, 176-7.

⁵⁶ Baines, *Woodwind Instruments and Their History*, 153.

change in Britain because of the tour: “The visit of the New York Philharmonic to London in 1928... inspired some English players to change to the Heckel system. Cecil James, who adhered to the French system through this era, claimed to have no trouble blending with second bassoonists who play German instruments.”⁵⁷ Despite these two early examples, Great Britain remained a stronghold for the French system for many decades, compared to many other countries.

Nearby, the situation in Italy changed as “leading Italian players had adopted the German system after World War II, and within a generation it was firmly ensconced.”⁵⁸ Specifically, with bassoonists in major Italian orchestras such as “the players at the Scala, Milan, [who] have recently changed over to the Heckel.”⁵⁹ Notable Italian bassoonist Aldo Montanari, who had previously been playing in Brazil, returned to Italy playing the German system.⁶⁰ “He converted his pupils at the Milan Conservatory to the Heckel system, including Dall’Oca, Menghini, Danzi, Meana, and Pari, all of whom became teachers at major Italian conservatories. Montanari’s co-principal Enzo Muccetti was another convert in 1951.”⁶¹ This trickle-down effect of a teacher converting their students would certainly escalate the spread of the German bassoon across Europe.

In 1986 the struggle for French bassoonists to keep orchestral positions was described by Alain Chantauraud as “a ‘paradox’... French players win orchestral auditions, then quickly

⁵⁷ Cecil James, “Life with the French Bassoon.” Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 162.

⁵⁸ Kopp, *The Bassoon*, 162.

⁵⁹ Baines, *Woodwind Instruments and Their History*, 153.

⁶⁰ Kopp, *The Bassoon*, 167.

⁶¹ *Ibid.*, 167.

change to the German bassoon if they want the position.”⁶² Even before this, tensions were extremely high in the bassoon community in Paris. Philippe Hanon said on the subject of the tension in Paris and auditions:

I started the bassoon in 1977 and in the French bassoon community there was almost hatred towards those who changed. They were considered traitors. It must not be forgotten that only 30 years after 1945, the Anti-German resentment was still very present, especially among our professors who had suffered from the war! For young people, and this is still the case now, it meant fewer positions available for the French bassoon.⁶³

Conductors influence change

Orchestra conductors also played a significant role in the shift from French bassoon to German bassoon. As early as 1899, Hans Richter, “the conductor of the Hallé Orchestra [had] soon decided to introduce the German-system bassoon.”⁶⁴ This was a massive shock for the French bassoon players in England and it would start a trend of orchestra conductors bringing in foreigners, just as Richter did when “he brought two Viennese players of Heckel bassoons to the orchestra in [the] 1903 – 1904 [season].”⁶⁵

Philippe Hanon said, “a desire to standardize the sounds of orchestras that made French bassoons and horns victims of the globalization of sound. Some conductors are responsible and sometimes they are the musicians themselves.”⁶⁶ Bassoonists of the Orchestre de Paris switched

⁶² Alain Chantauraud (1995). “Le Basson: Ni fleurs ni couronnes.” Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 162-4.

⁶³ Philippe Hanon.

⁶⁴ Langwill, *The Bassoon and Contrabassoon*, 178.

⁶⁵ Archie Camden. *Blow by Blow: The Memories of a Musical Rogue and Vagabond*. London: Thames. 1982 and James, Cecil, “Life as a “Buffet” Player.” Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 153.

⁶⁶ Philippe Hanon.

from French to German bassoons during the late 1960s, though the history is not exactly clear as to why the change was made. Some would suggest that the Principal Bassoonist, André Sennedat, was pressured by the new foreign conductor, Herbert von Karajan, to switch and others like Conservatoire de Paris alumus, Marc Vallon who said, “I think that’s a myth. I think that Sennedat wanted to change and told everyone, ‘Karajan asked me to change.’”⁶⁷ “It was suddenly clear that under jet-setting, non-French conductors, even the most emblematic Parisian ensembles were no longer sanctuaries for the revered French instrument.”⁶⁸ James Kopp describes the situation further:

The prospects of the French instrument took a startling plunge in 1969, when the bassoon section in the Orchestre de Paris changed over to German models. André Sennedat, principal in the orchestra since 1967, had reportedly been contemplating a change for some years. After the death in 1968 of the orchestra’s founding music director, the Frenchman Charles Munch, Sennedat effected the change under Munch’s successor, the Austrian Herbert von Karajan.⁶⁹

It would seem that even musicians in France were curious to make the change from French bassoon to German bassoon. These curiosities lead to preferences of those making major decisions and setting examples of taste; for instance “Pierre Boulez, perhaps the most eminent French conductor of the later twentieth century, preferred the Heckel bassoon.”⁷⁰

In 1988 Joppig commented on the situation in his book, *The Oboe and the Bassoon*, “Recently two French bassoonists have changed instruments, partly under pressure from those guest conductors at the Opéra de Paris who conceive of bassoon tone in terms of the Heckel model.”⁷¹ Whether these pressures were direct or indirect, another example of the culture shift to

⁶⁷ Marc Vallon. In person interview. 26 Sept. 2017.

⁶⁸ Kopp, *The Bassoon*, 162.

⁶⁹ *Ibid.*, 162.

⁷⁰ Kopp, *The Bassoon*, 162.

⁷¹ Joppig, *The Oboe and the Bassoon*, 94.

favoring German bassoons was recounted by English bassoonist William Waterhouse, “[who] reported in 1989 that under the conductor Daniel Barenboim, ‘only players able and willing to play the German instrument would be re-engaged’ at the Opéra [de Paris].”⁷² This forced many young musicians and active freelancers to question how they would be making a living if French bassoon opportunities were so drastically diminishing.

The focus on homogeneity and standardization during this era would have an impact that could be felt for decades. “Arthur Grossman, a Heckel-playing American, in 1981 lamented the passing of regional differences among orchestras of the world ‘due to the internationalism of conductors, who want orchestras everywhere to have the same sound’.”⁷³ Dr. Joseph Polisi, son of the former Principal Bassoonist of the New York Philharmonic, William Polisi (1943 – 1958), shared a similar view stating that “homogeneity of sound is not, in my opinion, a good goal. You want as diverse of a sound as possible and you want different nationalities and orchestras to have different sounds. I think that it’s a shame for the Orchestre de Paris to sound just like the BBC Symphony, or like the Berlin Philharmonic or Chicago Symphony.”⁷⁴ This idea of rejecting anything that is non-homogeneous is evident whenever musicians frown upon the earlier recordings of wind players. Philippe Hanon said, “the sound of Maurice Allard was a reflection of an aesthetic of the time: the sound of oboes and clarinets was also very different from today.”⁷⁵

⁷² “William Waterhouse Column.” *Double Reed News* 6, Feb: 5-6. Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 164.

⁷³ Arthur Grossman. “Ce qu’ils en pensent.” *Le bassoon* 7, March:12, 1981. Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 163.

⁷⁴ Dr. Joseph Polisi. In person interview. 16 Oct. 2017.

⁷⁵ Philippe Hanon.

Geographic changes

There were many changes happening geographically during the mid-twentieth century in respect to the distribution of French and German bassoons. In 1957 Baines said, “In France, Spain and Italy, the Buffet is standard. Elsewhere west of the Rhine it has lost ground, or is beginning to lose ground, to the German bassoon.”⁷⁶ Joppig echoes Baines’s comments: “around the world the German bassoon continued to gain ground. In Britain, the decision to adopt this model was taken in the 1920s; and in the United States it is now also the prevalent instrument.”⁷⁷ Of course, in modern times we have seen the advance of the German bassoon even further than when Joppig said, “The French model predominates only in the Romance countries, in parts of Canada and in South America.”⁷⁸ This has now been reduced to select orchestras in France. The one remaining French bassoonist in the United States retired and was replaced with a German bassoonist. This would be the beginning of a half century of dormant French bassoon activity. “The year 1953 saw the fadeout of the French instrument in the United States, as the French-born Raymond Allard retired from the Boston Symphony Orchestra.”⁷⁹

The trend for French bassoonists to switch or retire and be replaced by a German bassoon player was not specific to the United States. In Belgium, “Leo van de Moortel, professor at the Royal Conservatory in Brussels, exchanged his Mahillon for a Heckel in 1958.”⁸⁰ And other “French-system professors who retired in Mons and Ghent (c.1975) and Antwerp (1985) were

⁷⁶ Baines, *Woodwind Instruments and Their History*, 153.

⁷⁷ Joppig, *The Oboe and the Bassoon*, 92.

⁷⁸ *Ibid.*, 92, 94.

⁷⁹ Kopp, *The Bassoon*, 162.

⁸⁰ “Leo Van de Moortel,” *To the World’s Bassoonists* 3/1 (1972-3):2-3. Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 162.

succeeded by German-system professors.”⁸¹ Situations such as these could be seen all over Europe in the 1970s and 1980s.

“The French system prevailed in Spain until 1971, when influential players changed over to the German system. ‘By around 1980 all the bassoonists in Spain had changed to Heckel system instruments.’”⁸² This would be a turning point for many other orchestras as well, ushering in several decades of bassoonists who would only know the German bassoon.

A former student of the Conservatoire de Paris, “Noel Devos in Rio de Janeiro and Alain Lacour in São Paulo – anchored all-French system sections in prominent Brazilian orchestras. (The Brazilian front was breached in 1987/8, when Aloysio Fagerlande, a player in the Orquestra Sinfônica Brasileira in Rio, converted to the German system.)”⁸³ The French bassoon section of this orchestra was one of the last prominent remaining sections in the world, because in Europe, especially France, many orchestras would fold to pressures of the German bassoon preferences.

French bassoon in decline

The decline of the French bassoon is a global situation with many facets, which cannot be reduced to a singular and definitive explanation. Only a variety of ideas can point to any sort of answer for why the French bassoon declined in favor over the German system bassoon. Baines suggests that:

⁸¹ Kopp, *The Bassoon*, 162.

⁸² James D. Hough, “The Evolution of Double Reed Playing in Spain.” *The Double Reed*, vol. 21, 123-9. Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 162.

⁸³ Ricardo Rapoport, personal communication, 28 Dec. 2010. Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 163.

It is a comparatively easy matter always to have a reed handy [for the German bassoon] that will produce its clear, telling quality reasonably satisfactorily, without the tone becoming forced, nasal or stuffy.” And “...the French instrument, which is the more sensitive to the vagaries of reeds, and has weak spots in each register which a reed that falls short of the optimum will show up. This is the real reason behind the successes of the Heckel outside its home territory; it makes life easier for the orchestral player.⁸⁴

The challenges of finding a good reed that will resonate well on the French bassoon is compounded with the complicated fingering system, making the overall mastery of the instrument notably more difficult than its German system counterpart. Joppig says, “the fingering on the French bassoon is considerably different, especially with regard to the long joint, and it requires some getting used to when changing from one system to the other.”⁸⁵

The availability of jobs for young French bassoon players is an important factor effecting many musicians in France today. In the 1980s and 1990s, young musicians were faced with difficult decisions: whether to study music in their home country and risk unemployment or leave to other opportunities and most likely have to switch instruments, an undertaking that is quite engrossing and time consuming. Fewer and fewer orchestras would hold positions for the French bassoon, however “a lot of regional orchestras are still strongholds of the French *basson*,” says Marc Vallon, but major orchestras in Paris would change. For example, “the Orchestre de Paris is now German. The Ensemble Orchestre de Paris is also German.”⁸⁶ As Joppig observes:

The prospects for French bassoonists are not particularly good, for at French conservatories they can only learn the French bassoon. But specializing on this instruments usually prevents them from accepting invitations to play in countries where the German bassoon prevails.”⁸⁷ Joppig further states, “...it is a deplorable, though possibly inevitable consequence of our media-dominated age that radio, records and

⁸⁴ Baines, *Woodwind Instruments and Their History*, 154-155.

⁸⁵ Joppig, *The Oboe and the Bassoon*, 94.

⁸⁶ Marc Vallon.

⁸⁷ *Ibid.*, *The Oboe and the Bassoon*, 94.

television have obscured the salient differences. As a result the national idiosyncrasies in orchestral sound seem doomed to disappear.⁸⁸

Cecil James (1913-99), a bassoonist who stayed true to the French system in London, noted the shifting tastes of English bassoonists during this period:

In my early days of bassoon playing most players used the ‘Buffet’ bassoon, except for a few who used the French system made by Mahillon in Belgium and Morton in England... [around 1930] began in London the first real stirring of interest in the German system bassoon, triggered off I believe by a visit of the New York Philharmonic and their excellent bassoon department, all playing Heckel bassoons.⁸⁹

Principal Bassoonist of the Philadelphia Orchestra, Sol Schoenbach said, “the advent of sound movies helped the German bassoon gain dominance over the French because the German bassoon recorded better than the French bassoon on the equipment they had in those days. The engineers would complain that they couldn’t pick up the French bassoon clearly on their microphones.”⁹⁰ This is an issue that can be found in many scenarios with the bassoon. The acoustics of the bassoon are such that one could hear a bassoon solo in an orchestra live, but if the early recording equipment recorded the same concert or rehearsal, the bassoon solo would not be heard. The French bassoon was simply more difficult to deal with of the two problematic instruments to record, with the German bassoon being a slight improvement.

James Kopp quotes from *Le Basson* describing a unique situation of one musician having experience playing both instruments and then returning to his original instrument.

Fernand Corbillon, a Buffet player who was doubtless mindful of his professional prospects, took up the German Fagott alongside his Buffet in 1974. In 1980, he chose to return to the French system, but he now viewed his Buffet through new eyes: ‘Ah! If it

⁸⁸ Joppig, *The Oboe and the Bassoon*, 94.

⁸⁹ Cecil James. “Life as a “Buffet” Player.” Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 156.

⁹⁰ William Dietz, “A Conversation with Sol Schoenbach.” Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 157-8.

had a little of the breadth in the low register and above all if it had the double B[-flat] spatulas of the fagott!”⁹¹

Commenting on present day situations, Philippe Hanon has a unique, first-hand experience. In a personal interview, he discussed the differences in sound from orchestra to orchestra in present day France: “Now there are differences of sounds between the French orchestras: the sounds of the orchestra of the Opéra de Paris (for those who play the French system) and the Orchestre National du Capitole de Toulouse are clearer than those of the Orchestre National de France or the Orchestre Philharmonique de Strasbourg, for example.”⁹² The Opéra de Paris bassoon section, according to Marc Vallon, is divided in two sections, as an essentially doubled section with eight bassoonists: four French bassoon and four German bassoon.⁹³ One co-principal plays French (Audin) and the other co-principal plays German (Lefèvre). This prompted my question to Hanon concerning the importance of some French orchestras playing only the French bassoon. Hanon responded, “this is essential because it is the DNA of these orchestras and the other musicians are aware of it. It is already difficult to marry two sounds of bassoons of different brands even if they are bassoons of the same system so if one desires the best result it is better to have the same instruments. It is also valid for other sections elsewhere.”⁹⁴

The struggle to keep the traditions of the French bassoon intact have been and still are extremely challenging. The next chapter will discuss some important developments in bassoon construction. The instrument made by Yannick Ducasse is a proposed

⁹¹ *Le Basson* 1983:20. Quoted in James B. Kopp *The Bassoon*. (Padstown: Yale University Press, 2012), 163.

⁹² Philippe Hanon.

⁹³ Marc Vallon.

⁹⁴ Philippe Hanon.

compromise in terms of balancing tradition with innovation. He and Philippe Hanon intended to make an instrument with the flexibility of the German bassoon, while retaining the core sound and resonance of the French bassoon.

Chapter Three – New Innovation

Buffet and Selmer

Starting at the turn of the century, decades of decline in usage of the French bassoon had slowed the markets for the instrument to nearly a halt. When faced with the dilemma of investing money into research and development or restricting production of French bassoons, woodwind manufacturers have largely been forced to make difficult business choices. The Selmer company eventually suspended production of French system bassoons and current production of Buffet-Crampon has dwindled to one or two instruments per month. I saw first-hand on a trip to these factories in Paris in June of 2016 that Selmer no longer made bassoons and Buffet-Crampon has only one craftsman who can only produce one or two instruments per month. Although advancements were made in the 1980s for the preservation of the French bassoon, they were not innovative enough to increase sales and/or acceptance of the instrument by the music world as a whole.

Yannick Ducasse says that “for Buffet-Crampon and Selmer, the reasons for their lack of innovations are first of all that bassoon production is limited. They only produce two bassoons per month at Buffet and when Selmer still made two bassoons per month, they limited investments.”⁹⁵ He knows the situation well because before Selmer suspended production of French bassoons, Ducasse was a bassoon craftsman for the company. He explains that “Selmer

⁹⁵ Yannick Ducasse. Personal interview, e-mail. 23 Aug. 2017.

stopped the manufacture for economic reasons and also because it was always difficult to produce a small series of instruments in a factory.”⁹⁶

While Ducasse was at Selmer, they made some changes to the French bassoon model that Buffet had not. He says of the Selmer instruments produced, “the instruments are more open [in tone] and [have] easier [response] in the low register than the Buffet bassoons.”⁹⁷ Changes were made on the U-bend, the device connecting the folding bore of the bassoon at the bottom of the boot joint to replace a cork stopper, which improved low note intonation and response.

According to Ducasse, the reasons Buffet did not make further innovations as Selmer had was because, “it suited Buffet to not change anything in its production and to continue manufacture without investing.”⁹⁸ The market for French bassoons, while small, still made enough money for Buffet to manufacture on a very limited scale.

Innovations by Ateliers Ducasse

Ducasse went into business for himself, founding Ateliers Ducasse when Selmer suspended production of bassoons in 2010. Ducasse relied on the consultation of Philippe Hanon, Principal Bassoonist of the Orchestre National de France to help develop the new instrument. They have been producing instruments that are considerably different from the traditional French bassoon model. One notable owner of a Ducasse bassoon is Kim Laskowski, Associate Principal Bassoon of the New York Philharmonic, who said, “[their work] is a major

⁹⁶ Yannick Ducasse.

⁹⁷ Ibid.

⁹⁸ Ibid.

evolution that's bringing people back to the French bassoon."⁹⁹ Ducasse, with Hanon's artistic assistance, have attempted to make an instrument that solves the long-standing problem French bassoonists faced in professional orchestra settings: how to get a darker and more homogeneous sound. The goal of retaining the French tone while sounding darker is rooted in a need to blend. Marc Vallon commented, "the idea of blending is actually more important than the idea of playing dark. Why do you play dark? To blend. That's the new concept that has arrived to French orchestras in the last forty years."¹⁰⁰

These innovations take place at Ateliers Ducasse, where they are free to make rapid advancements because of their smaller production. Only Ducasse and a few apprentices account for the workforce there in a suburb called Romainville, just outside of Paris. Ducasse says, "our production allows us to customize the instruments. We can make key systems that adapt to a variety of structures."¹⁰¹

The Ducasse bassoon was developed working closely with Philippe Hanon over the course of seven years. Ateliers Ducasse was able to make further customizations from one prototype to another that Buffet and Selmer could not. "This gives less freedom in the manufacture," Ducasse said of the large-scale operations. Though his workshop is small, Ateliers Ducasse also uses "some modernization machines to go with CNC digital machines." This allows for 3D design and computer generated models, which he says, "helps us a lot to save time."¹⁰²

⁹⁹ Kim Laskowski. Personal interview, video chat. 10 Sept. 2017.

¹⁰⁰ Marc Vallon. In person interview. 26 Sept. 2017.

¹⁰¹ Yannick Ducasse.

¹⁰² Yannick Ducasse.

I visited Ateliers Ducasse in June of 2016. He was able to make major changes to the key work of my Ducasse bassoon that I requested after having the instrument for six months. He added a whisper key lock, L4 whisper key or a so-called “French” whisper key, and mounted a distance guard made by Moosmann to make standing while playing easier. These custom alterations were all completed within a few days. Adding the L4 “French” whisper key required Ducasse to reposition the L4 low E-flat and C-sharp keys. The new placement required a different design of the keys themselves, which took several hours to shape them by hand with a file. Some of the more minor alterations were done as I waited in his shop, which is right next to his family home. Ducasse was always receptive to new ideas and was willing to work with my desired customizations.

The Ducasse bassoon is offered with French key work or German key work, a feature especially interesting to German bassoonists who wish to experience the French bassoon but in a more user-friendly format. Though the idea is not new, it is the only French bassoon made now with this alternate fingering system available. Ducasse says, “the bassoon model with the German key work is a different option for musicians who desire to play a French bassoon while retaining the fingerings of the German system. This option remains unique to my knowledge and begins to arouse much curiosity.”¹⁰³

Ducasse tapped into a unique market of bassoonists who are curious about the French bassoon, but who can only play with the German key system. Prior to Ducasse offering the German key customization, Kim Laskowski conversed with Ducasse and Hanon saying, “I really want to play the French bassoon, but it’s just too much to switch back and forth.”¹⁰⁴ She went on

¹⁰³ Yannick Ducasse.

¹⁰⁴ Kim Laskowski.

to say that “[the Ducasse bassoon] was easier than switching to the [Buffet] French bassoon,” since she herself had studied on a Buffet bassoon at the Paris Conservatory.¹⁰⁵

The principal differences between the two options are on the long joint. A French bassoon has the keys for low E-flat and low C-sharp neighboring the low C and D keys on the side of the bassoon facing the player. Having these notes operated by the left thumb allowed for the control of the whisper key by L4. This has been the format of the keys since very early on and is a major reason why it is not easy for a German bassoonist to play a French bassoon, or vice versa. Carl Almenröder moved the low E-flat and low C-sharp keys to the opposite side of the long joint to have them controlled by L4. In the German key version of the Ducasse bassoon, it is the same as the Almenröder/Heckel style. This means the whisper key is controlled by the thumb instead of L4, a difference that creates considerably different fingering technique between the two systems.

The one mechanism for the German customized long joint Ducasse retained from the French system is the low B-flat and low B mechanism. The pad for low B-flat is always in a closed position by default, unlike the German system which is open. This contributes to the unique set of overtones resonating through the body of the instrument, leading in part to differences in tone qualities. The low B-flat and B are produced with one key on the Ducasse bassoon and are like any other French bassoon. Low B-flat is produced by depressing the single key and low B is produced by adding the low C key, thereby providing the main difference between that and German system.

The design of the vent keys is a hybridized aspect the German-key Ducasse bassoon. When playing tenor register notes on the French bassoon, one has to press and hold the key for

¹⁰⁵ Ibid.

the duration of the note in addition to closing the hole on the bocal by the whisper key. This is usually accomplished on French key systems by holding L4 and pressing the vent key needed. With the exception of a bridge key for the A vent key on some German bassoons, the operation of vent keys usually takes place without needing to depress the whisper key. Ducasse has added a rod for the German-key instrument that is attached to the thumb whisper key that is activated (closing the whisper key) when the A and C vent keys are used. This has reconciled the unique problem of displacing the whisper key of the tradition French key system.

Ducasse has experimented with the use of palisander (*dalbergia spruceana*), which according to him, “is the same [wood used] as Buffet-Crampon.”¹⁰⁶ However Ateliers Ducasse has also experimented with another type of wood saying, “Seven years ago we experimented with another wood with a good acoustical and mechanical result. I just redid the long joint of Philippe [Hanon]’s instrument. The playing at the moment is very enjoyable. In the future we will work with this wood: santos rosewood (*machaerium villosum*).”¹⁰⁷

Other important differences in the production of his bassoons compared to the French bassoons made by Buffet-Crampon are summarized in an excerpt from an interview with Mr. Ducasse:

First of all, the changes in terms of manufacturing are the treatment of wood that is injected with oil, the wing joint as well as the boot joint have lining produced by injection, most of the time manufacturers add ebonite tubes in these two parts of the bore of the instrument entirely. The key system has been completely redesigned: ergonomic aspects as well as mechanical aspects. Acoustically speaking, we mainly seek to have a more homogeneous instrument with regard to accuracy and tuning. All this research work was carried out with the collaboration of Philippe Hanon.¹⁰⁸

¹⁰⁶ Yannick Ducasse.

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

The instrument that Ducasse produces is accessible to German bassoonists who can customize the key work, which has been a major factor in the division between the two systems. This specialized key work option that Buffet-Crampon and Selmer never offered, eliminates the barrier that prevents German bassoon players seeking to experiment with the other style. The importance of their work cannot be understated. By taking great risks to change the French bassoon model to attract a wider market of musicians, they stand to gain the honor of preserving the French bassoon tradition and opening up a vast area of exploration for bassoonists curious about the origins of the music originally written for the French bassoon.

Chapter Four – Demonstration

The demonstration of works will be performed on my Ducasse French bassoon (#1116) with German customized key work and my Heckel German bassoon (#8477). The goal of performing each excerpt side by side is to illustrate the similarities and the differences in sound production and in some cases, how specific notes resonate differently. Examples were chosen from chamber and orchestral works composed specifically for the French bassoon as Philippe Hanon was quoted before, “the French composers had in their ears the sound of the French bassoon.”¹⁰⁹ Stylistic details such as articulation, range, and differences in fingering will be discussed.

Camille Saint-Saëns – *Sonate pour basson et piano, op. 168*

Example 1 – movement II, mm. 146 - 167

This sonata for bassoon and piano was written in 1921 in the last year of Saint-Saëns life. It was written when the French bassoon was still very popular in France and Europe, but was starting to see a greater number of German system users. The dedication is to French bassoonist, Léon Letellier, Principal Bassoon in the Opéra de Paris and the Société des Concerts.

This excerpt was chosen for its range and the difficulty German bassoons have with the last two notes of the movement and comparatively, the relative ease French bassoons have with the notes. Another feature of this excerpt is the articulation, which is partly *staccato* and partly small groupings of slurs. The Ducasse bassoon requires a longer reed and the resistance must be increased by sanding down the tip of the reed with a file held perpendicular to the tip opening.

¹⁰⁹ Philippe Hanon. Personal interview, e-mail. 17 Aug. 2017.

This technique is widely used by French bassoonists and has been for decades. Marc Vallon, a student of Maurice Allard, said of this technique, “what it does is it kills a lot of the high register frequencies.”¹¹⁰ It allows for more air pressure and support to ensure a fully resonant note, without making the tone too harsh or brittle. The articulation in this excerpt will serve as a good example of this distinction between the two instruments.

A noticeable difference in tone color and pitch tendency, specific to my Ducasse and my Heckel, is the dotted half note, C5, in m. 161. On the Ducasse the pitch tendency is to be flat, so a manipulation of air, embouchure, and throat voicing is required to bring the pitch up, whereas the Heckel has the opposite tendency. The Heckel has a very sharp C5 and needs considerable care given to keeping the throat open and relaxed, thereby bringing the pitch down. Approaching these kinds of opposite tendencies can be a challenge at first, but like Kim Laskowski says, “learning how to deal with [the different pitch tendencies is] just like learning how to deal with any instrument, even from instrument to instrument,” for example, switching between a Püchner brand German bassoon and a Heckel bassoon.¹¹¹

The final chromatic scale to E5 contains the range of the most disparate fingerings. See the fingering chart located in the appendix comparing the two systems: Ducasse and Heckel.

¹¹⁰ Marc Vallon. In person interview. 27 Sept. 2017.

¹¹¹ Kim Laskowski. Personal interview, video chat. 10 Sept. 2017.

Example 1 – Saint-Saëns – *Sonata*, movement II

mm. 146 - 167

146 *p*

153

157 *cresc.*

160 *mf* *dim.* *p*

164 *sempre p*

The image shows a musical score for the second movement of Saint-Saëns' Sonata, measures 146 to 167. The score is written in bass clef with a key signature of one sharp (F#) and a time signature of 6/8. The music features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. Dynamic markings include *p* (piano), *mf* (mezzo-forte), *dim.* (diminuendo), *cresc.* (crescendo), and *sempre p* (sempre piano). The score is divided into five systems, with measure numbers 146, 153, 157, 160, and 164 marking the beginning of each system. The first system (measures 146-152) starts with a piano (*p*) dynamic. The second system (measures 153-156) continues the melodic line. The third system (measures 157-159) features a crescendo (*cresc.*) and a dynamic of piano (*p*). The fourth system (measures 160-163) includes dynamics of mezzo-forte (*mf*), diminuendo (*dim.*), and piano (*p*). The fifth system (measures 164-167) is marked *sempre p* and concludes with a double bar line.

Camille Saint-Saëns – *Sonate pour basson et piano, op. 168*

Example 2 – movement III, mm. 1 - 13

Evenness of tone color and homogeneity are the featured reason for this example. The third movement of the Saint-Saëns *Sonata* is a long lyrical line with moving notes in between a slowly moving line with a slow harmonic rhythm. Each eighth note tied to the thirty-second note of the same pitch allows for a comparison of tone between the Ducasse bassoon and the Heckel bassoon.

A note with a particularly different tone quality is A4 in m. 5. On the French bassoon the fingering is very minimal (see appendix for fingering) and the resonance is a bit weak, but with that weakness comes an opportunity to manipulate the sound for a pleasing result. The Heckel fingering for A4 is much stronger and stable, but does not allow for as much tone color manipulation. Perhaps Saint-Saëns used this note as the top of the phrase for its expressive quality. This is conjecture, as there is not a definitive way to prove what a composer was thinking on any given note, but it is safe to assume that Saint-Saëns was familiar with the tone colors of the French bassoon, so this may have been a deliberate choice. Another note that highlights a significant difference in resonance between the two bassoons, which in this case, the note favoring the French bassoon is F4 in m. 11.

This excerpt lies mainly within the tenor register of the instrument, meaning the use of vent keys will be a major part of the technique for the French bassoon, but since most everything is slurred, vent keys will not be used nearly as much on the German bassoon. The vent keys must be pressed on the French bassoon for the full duration of the note on A3, B-flat3, B3, and C4, because otherwise they would be weak in tone and have poor intonation.

Example 2 – Saint-Saëns – *Sonata*, movement III

mm. 1 - 13

1 Adagio

p espressivo

4

6 *poco cresc.*

8 *dim.*

10

12 *p*

Igor Stravinsky – *Le sacre du printemps*

Example 3 – Introduction, mm. 1 – 3

Le sacre du printemps, or “the Rite of Spring,” is one of the most recognizable bassoon solos in the orchestral repertoire. Its flexible nature and high tessitura allow for many varied interpretations. Both instruments provide the desired “strained” sound because of the range for which Stravinsky was looking. The French bassoon, however, has a somewhat easier time with beginning the first C5 quietly, mainly due to its lower pitch tendency, allowing for a more secure entrance. To accommodate the higher pitch tendency of the German bassoon C5, entering quietly at pitch is much more of a challenge.

Example 3 – Stravinsky – *Le sacre du printemps*, Introduction

mm. 1 – 3

Lento tempo rubato

Colla parte

Solo ad lib.

Gaetano Donizetti – *L'elisir d'amore*,Example 4 – No. 11 – *Una furtiva lagrima*, mm. 2 – 9

L'elisir d'amore by Donizetti is very popular Italian opera that premiered in 1832, with an iconic bassoon solo in the aria *Una furtiva lagrima*. The contemplative and sorrowful character of the aria is first presented by the bassoon after an arpeggiated harp introduction. Hearing this excerpt on both instruments will highlight the similarities in overall evenness and homogeneity. The resonance of F4 and A-flat 4 differs from Ducasse to Heckel, but both instruments can equally display a dark, resonant sound much like the tenor for whom this theme is introducing.

Example 4 – Donizetti – *L'elisir d'amore*, No. 11 – *Una furtiva lagrima*

mm. 2 – 9

No. 11 - Romanza
Larghetto

1

p solo

6

cresc. calando

67

Maurice Ravel – *Piano Concerto in G major*Example 5 – movement I – *Allegramente*, rehearsal 9 to 9 m. after reh. 9

The excerpt by Ravel is particularly notorious for bassoonists because of its range, reaching up to E5. This passage highlights music clearly composed with the French bassoon in mind, as this range is easy to perform relative to the German bassoon. German bassoonists will often own a special so-called “high-note bocal” for just such occasions. This is due in large part because German bassoonists will on average miss an E5 much more often than their French bassoon colleagues.

Example 5 – Maurice Ravel – *Piano Concerto in G major*, mvt. I – *Allegramente*

rehearsal 9 to 9 m. after reh. 9

9

mf vibrato

Hector Berlioz – *Symphonie fantastique*, Op. 14Example 6 – movement IV – *Marche au supplice*, rehearsal 52 to 53

The articulation of this excerpt from *Symphonie fantastique*, depicting a march to the scaffold, highlights the differences between the Ducasse and Heckel. The main difference lies within the construction of the reed, which addresses how the different type of wood vibrates in each instrument. The palisander of the Ducasse bassoon is much denser and requires more air and more vibration of the reed to get the same effect as on the Heckel, which is much lighter and made of maple.

Example 6 – Berlioz – movement IV – *Marche au supplice*

rehearsal 52 to 53

The image shows a musical score for bassoon, rehearsal 52 to 53. The score is written on three staves in bass clef with a key signature of two flats (B-flat and E-flat). Rehearsal 52 begins with a dynamic marking of *p* (piano) and a fingering of *a2*. The first staff contains the first measure of rehearsal 52, followed by the second staff which contains the remainder of rehearsal 52 and the first measure of rehearsal 53. Rehearsal 53 begins with a dynamic marking of *f* (forte) and ends with a fermata over a whole note. The score includes various articulations such as slurs and accents.

Piotr Tchaikovsky – *Symphony No. 4*Example 7 – movement II – *Andantino in modo di Canzone*, mm. 374 - 390

This symphony was composed for orchestras which used the French bassoon. Russian orchestras have changed a great deal over time, just as those in Europe have, favoring a darker sound with each new decade. The resonance of the French bassoon which particularly has an interesting effect on this solo in the second movement.

Example 7 – Tchaikovsky - movement II – *Andantino in modo di Canzone*

mm. 374 - 390

The image shows a musical score for a French bassoon solo. It consists of three staves of music, numbered 374, 379, and 385. The key signature is three flats (B-flat, E-flat, A-flat) and the time signature is 2/4. The first staff (374) begins with a rest followed by a note with a fermata, then continues with a melodic line. The second staff (379) continues the melodic line with a fermata and an accent. The third staff (385) continues the melodic line with a fermata and an accent, ending with a rest. Performance markings include *solo*, *pp*, and *espress.*

Chapter Five – Conclusion

The French bassoon nearly became extinct during the 20th century following a sharp decline in usage of the instrument. Luckily, the remaining community of French bassoonists have made efforts in many different forms to preserve the traditions of their instrument. These efforts take the forms of promotional efforts of prominent French bassoonists, bold innovation from bassoon makers such as Ateliers Ducasse, a cultural shift in tone production, a community of musicians who are interested in historically informed performances, and recordings of the French bassoon and its finest players readily available online.

A critical element of the future success of the French bassoon lies within the developments of Yannick Ducasse with the consultation of Philippe Hanon. They have presented a bold solution to the criticisms of the 1970s and 1980s wherein French bassoonists were told that their tone was no longer desirable in the rapidly globalizing classical music market. To date, Ateliers Ducasse has sold eighteen instruments with French key work and four with German key work. There has been much interest in the innovations of the Ducasse bassoons and it is only a matter of time before bassoonists around the world begin to use bassoons in a manner similar to the use of rotary and valved trumpets for different repertoire.

It is important to understand the historical context of the French bassoon in order to reverse the decline of its usage. Identifying why it happened is at the core of addressing the problem. The reasons for this trend are various, yet cumulative. To begin with, the issues of sound and inability to blend or alter tone color when required was a significant deficiency with French bassoons in the 19th and 20th centuries. Secondly, recordings that reached worldwide audiences and musicians greatly shaped the way people perceived the French traditions in comparison with, for example, the dark sounds of the Berlin Philharmonic or other notable

orchestras around the world. Additionally, many conductors were instrumental in facilitating the change from French bassoon to German bassoon. They wanted any orchestra that they conducted or guest conducted to have a similar sound, and the French bassoon did not fit in with their conceptualized orchestral sound. The innovations of Carl Almenröder were fully adopted by the bassoon community worldwide and the French bassoon would now be compared to an instrument that was far easier to play due to its improved intonation, resonance, low register response, and ease of blending. Finally, in the aftermath of French bassoonists abandoning their instrument due to the myriad of reasons stated above, young musicians who *only* played the French bassoon had very limited possibilities for employment.

Regarding the instrument manufactures, as the numbers of musicians playing French bassoons dwindled to an all-time low, these manufacturers were put into a difficult financial situation. Their choice was to innovate with great financial risk or stagnate and continue to serve a product largely unchanged for almost 150 years to a dwindling community of bassoonists with few other options to purchase instruments. Therefore, there is one *major* instrument manufacturing company left standing, Buffet-Crampon, as Selmer suspended production of French bassoons. However, the opportunity was seized by Yannick Ducasse when he left the Selmer company to found Ateliers Ducasse, which is the source of the great advancements and innovations the French bassoon needed to survive.

The demonstration of standard French repertoire on the Ducasse French bassoon and the Heckel German bassoon helps to illustrate the differences in sound while comparing the desirable attributes of a homogeneous sound throughout the range of the instruments, a trait severely lacking in previous French bassoons. The demonstration also illustrates how certain

notes resonate on the French bassoon and, therefore, may have been favored by composers with the sound of the French bassoon in their mind.

The innovations in French bassoon construction are creating new visibility for the instrument and are helping to preserve the French traditions. Maurice Allard, for example, passed the torch of preserving the French bassoon to his students and they are rekindling awareness and excitement of the instrument. Allard's students Kim Laskowski and Philippe Hanon, remember him saying of his position as an advocate of the French bassoon: "I'm a purveyor of the bassoon and my interest is to sell my product and to make my product known all over the world."¹¹²

To summarize his ideals as a French bassoonist, Allard would often say, "*toujours chanté, jamais vulgaire, toujours élégant,*" which means in English: always singing, never vulgar, always elegant.¹¹³

¹¹² Kim Laskowski paraphrasing Maurice Allard.

¹¹³ Philippe Hanon paraphrasing Maurice Allard.

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Appendix - Image Comparison of Heckel (#8477) and Ducasse (#1116) bassoons

Heckel



Ducasse



Heckel



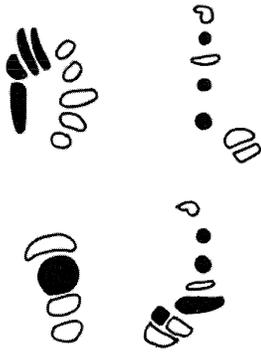
Ducasse



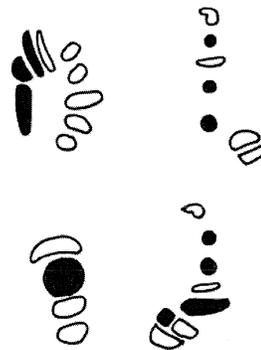
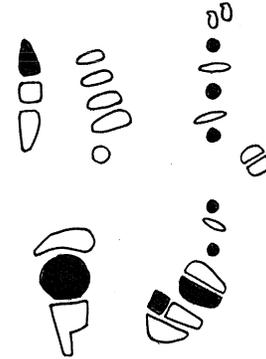
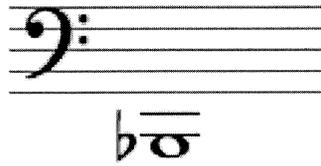
A Basic Fingering Chart for the standard Heckel German bassoon and the Ducasse French bassoon with customized German system keywork

German

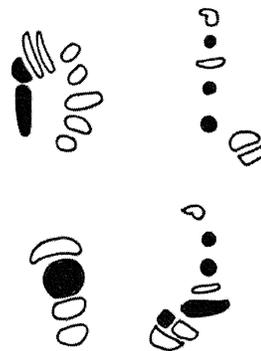
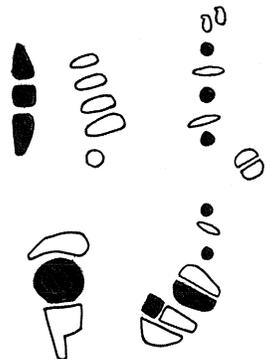
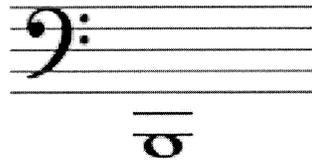
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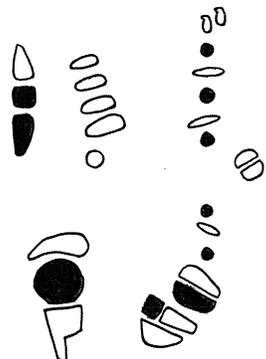
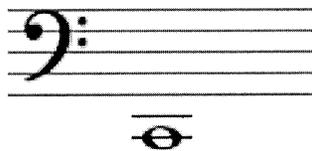
B \flat 1



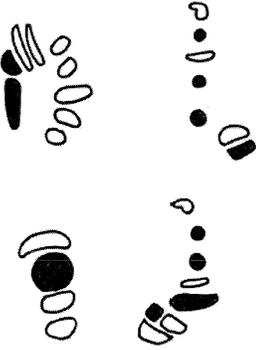
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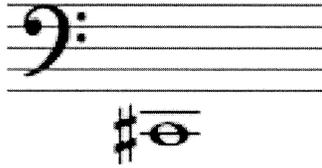
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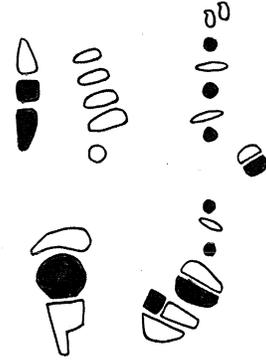
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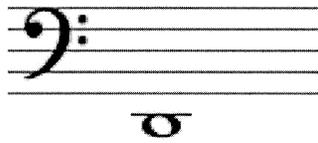
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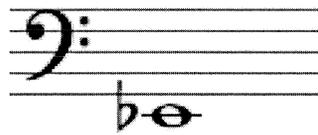
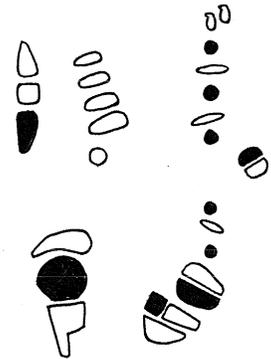
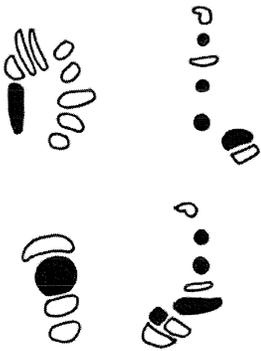
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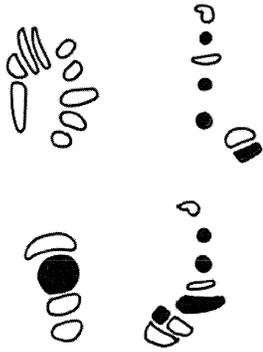
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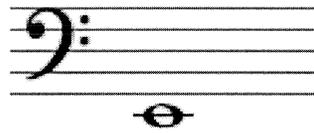
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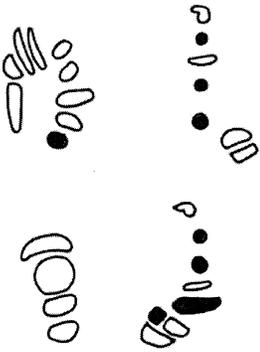
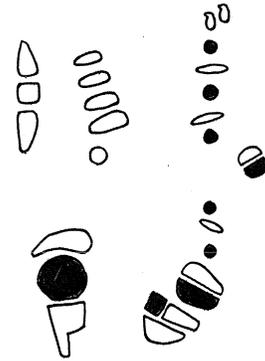
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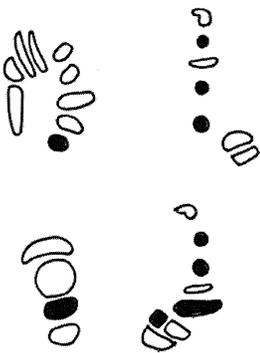
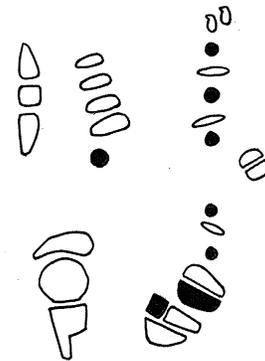
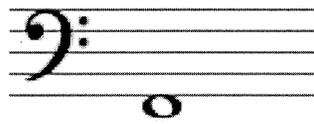
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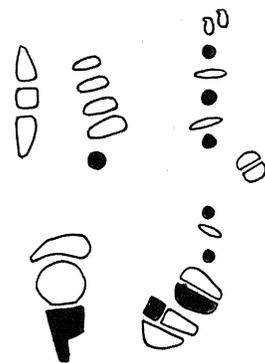
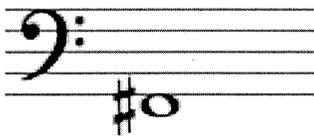
French



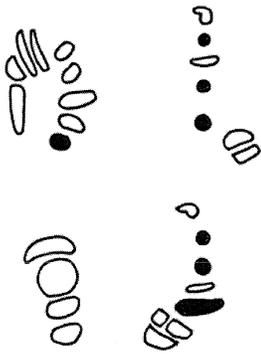
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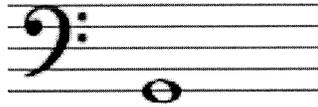
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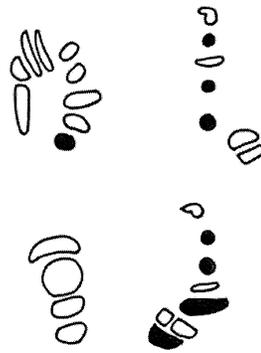
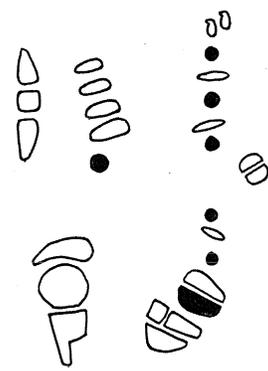
German



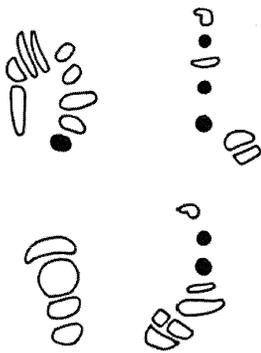
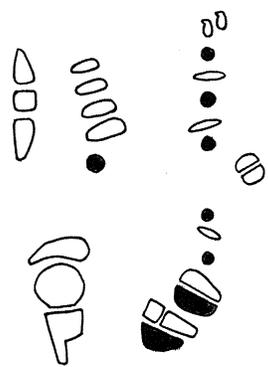
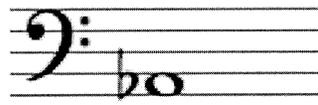
G2



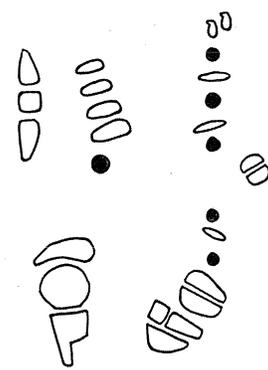
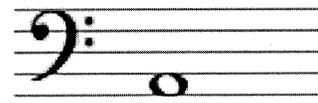
French



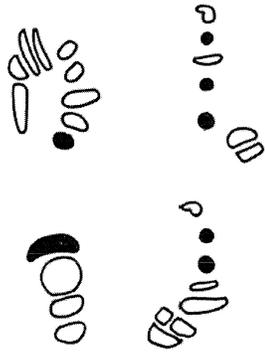
Ab2



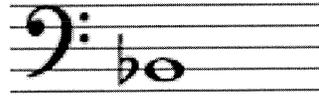
A2



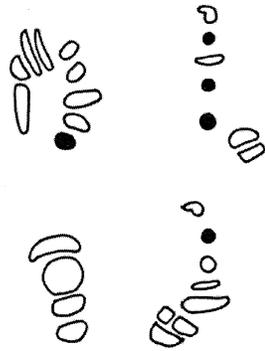
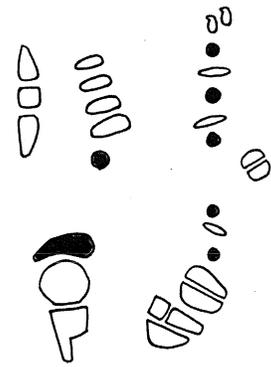
German



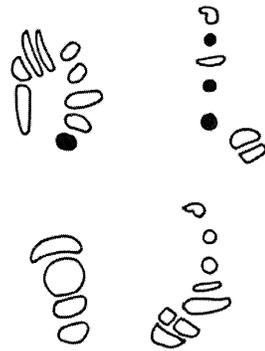
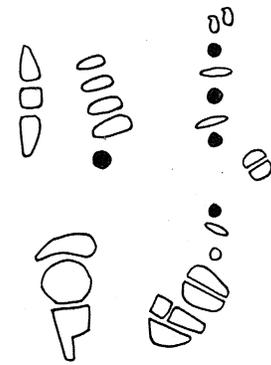
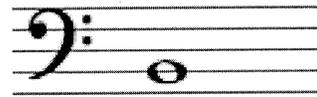
B \flat 2



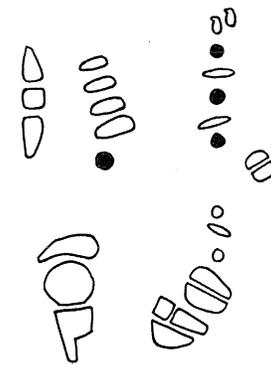
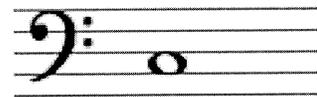
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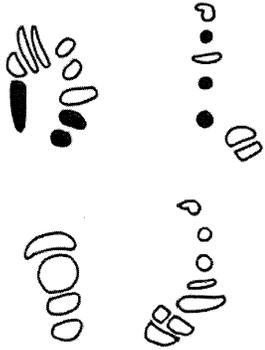
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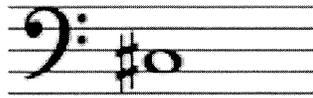
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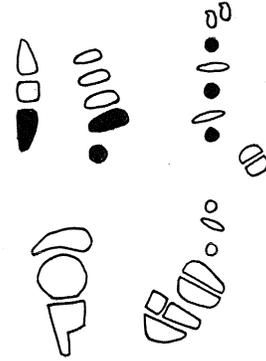
German



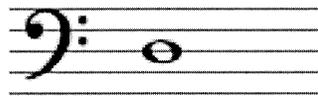
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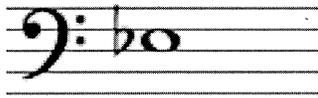
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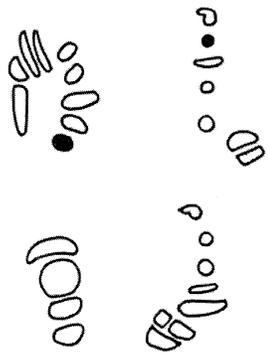
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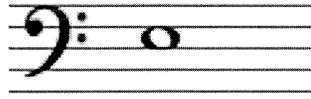
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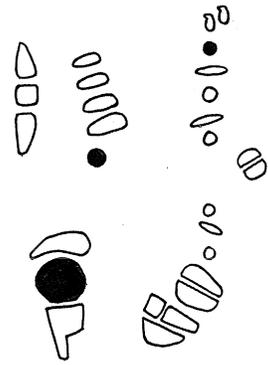
German



E3



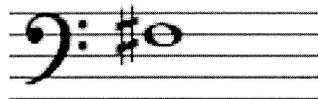
French



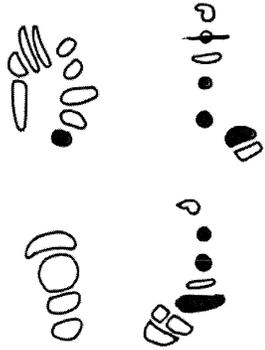
F3



F#3



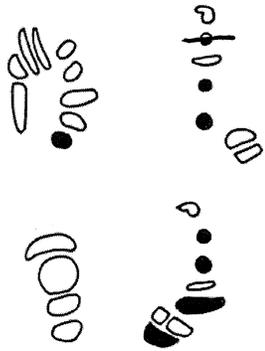
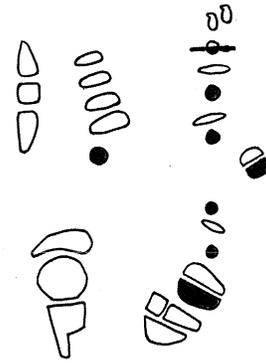
German



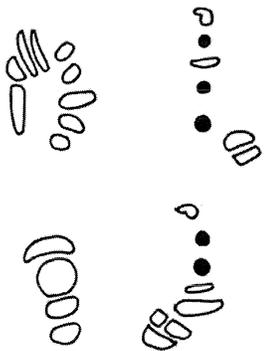
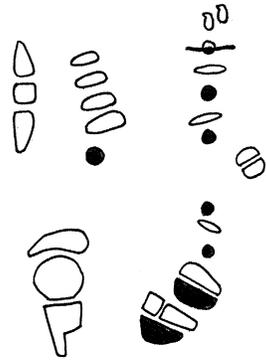
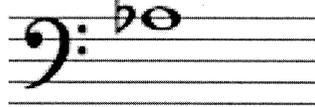
G3



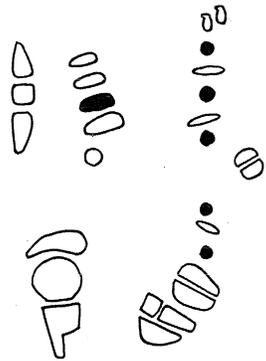
French



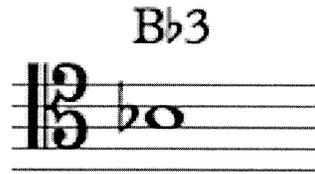
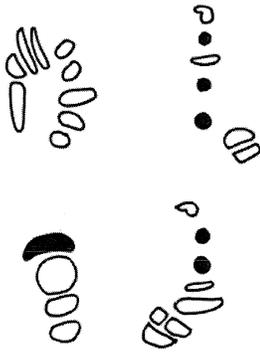
Ab3



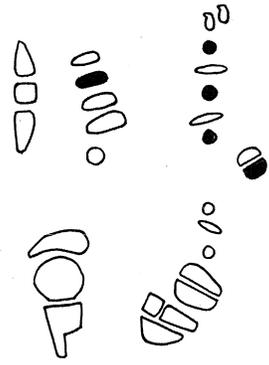
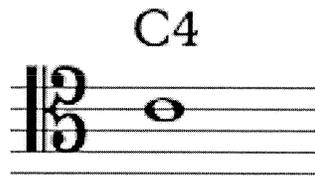
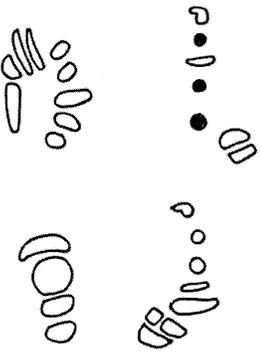
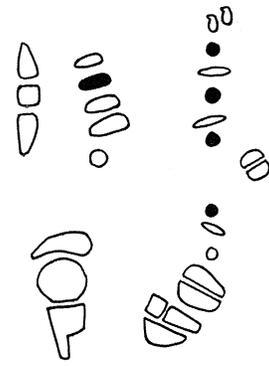
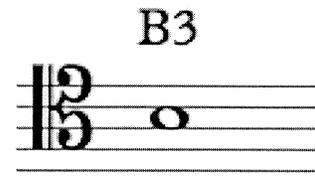
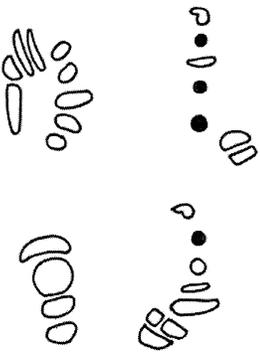
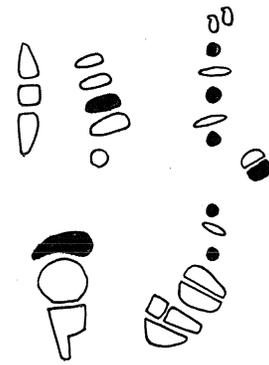
A3



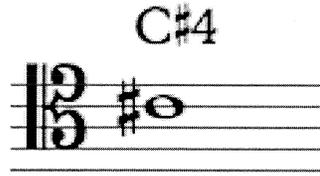
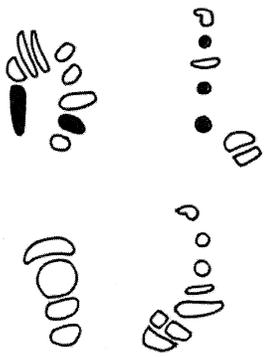
German



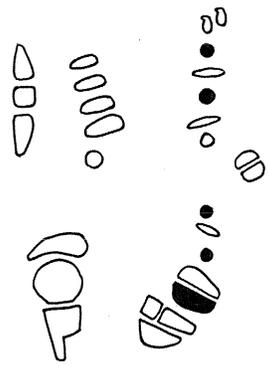
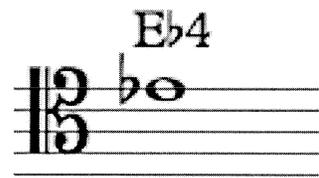
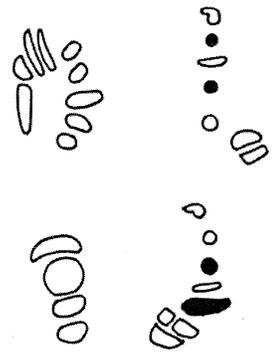
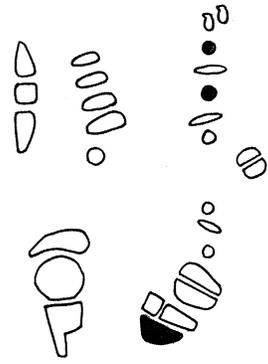
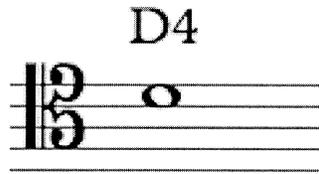
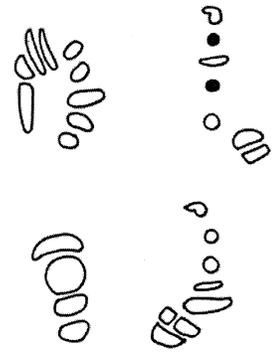
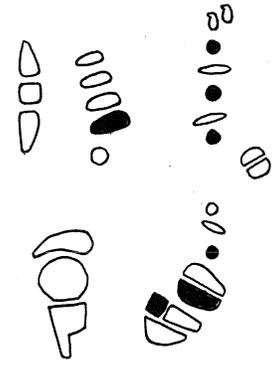
French



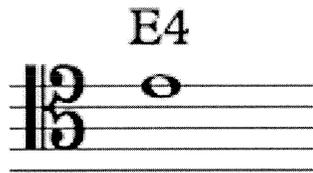
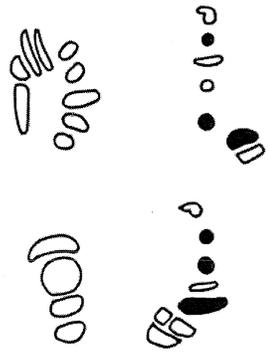
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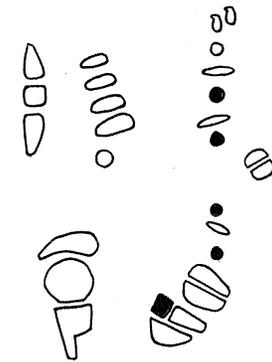
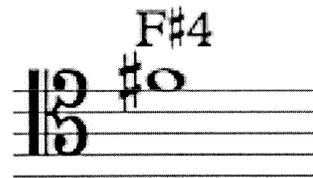
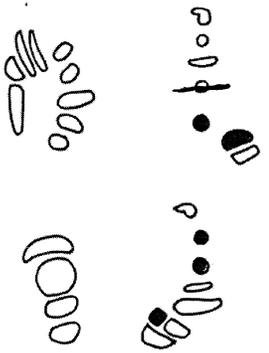
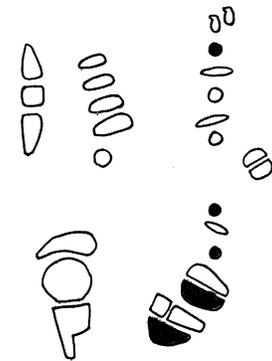
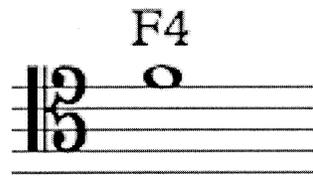
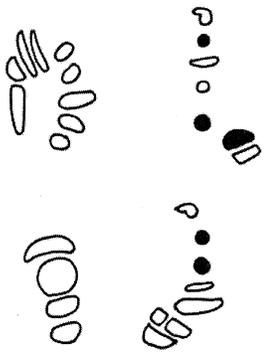
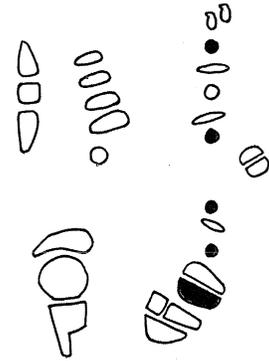
French



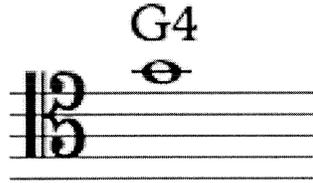
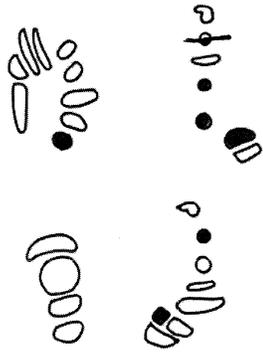
German



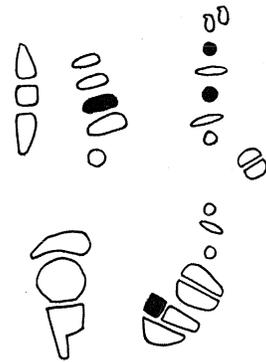
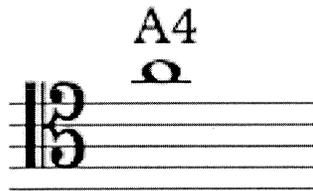
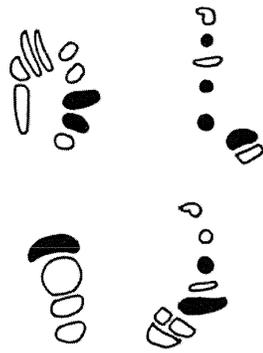
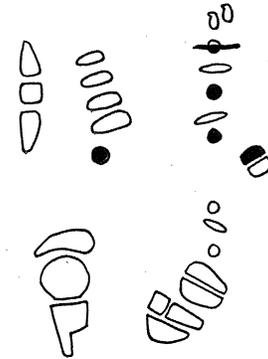
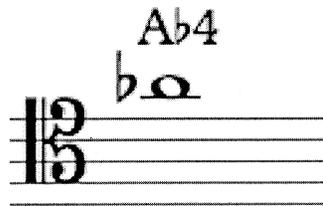
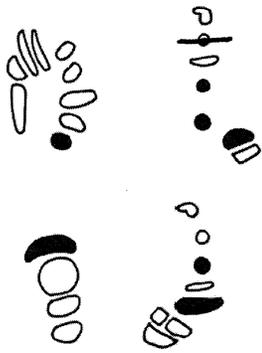
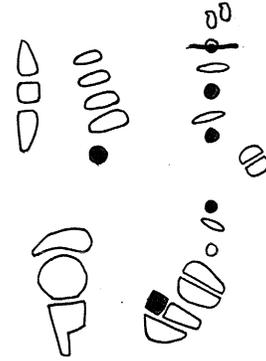
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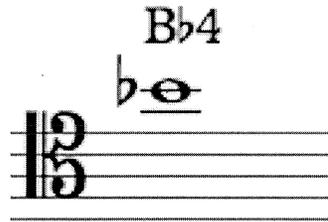
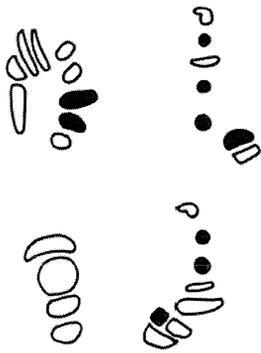
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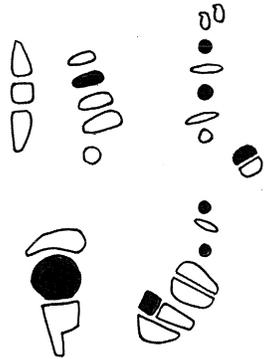
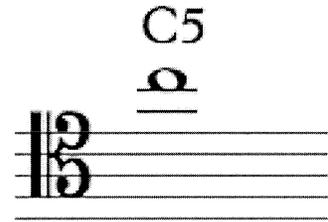
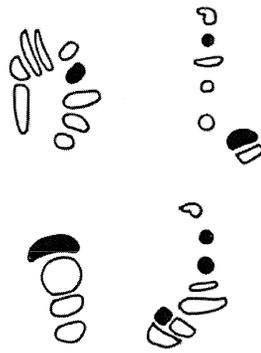
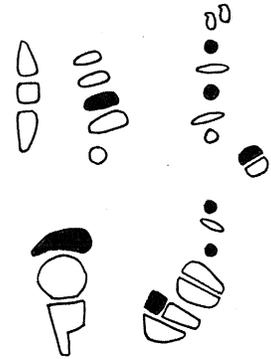
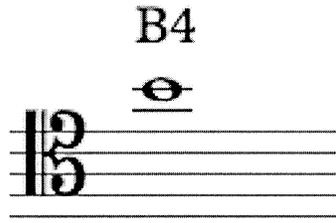
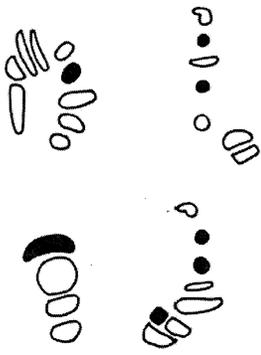
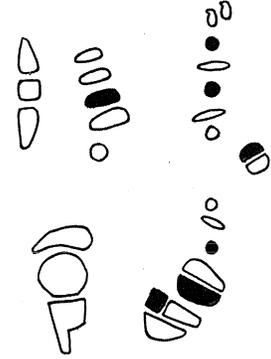
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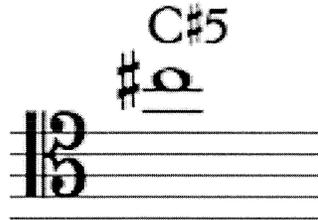
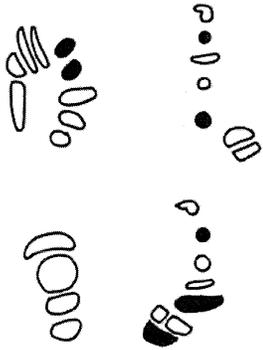
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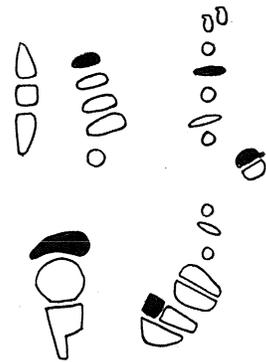
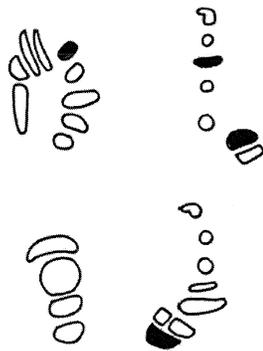
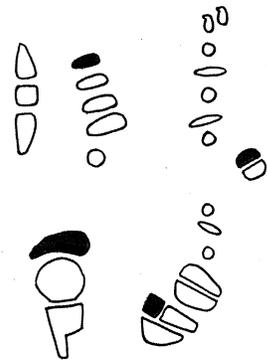
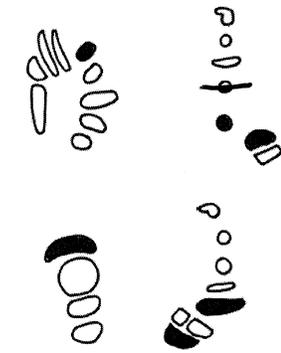
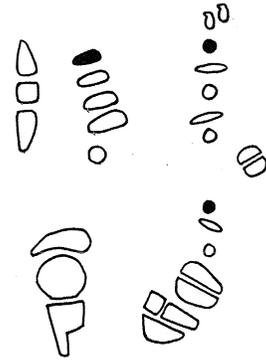
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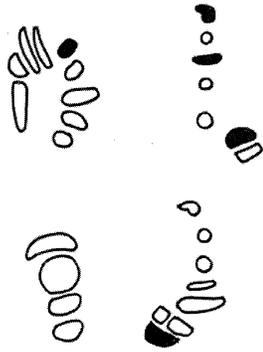
German



French



German



French

