

EIGHTEENTH-CENTURY FRENCH OBOES:

A COMPARATIVE STUDY

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The oboe, which first came into being in the middle of the seventeenth century in France, underwent a number of changes throughout the following century. French instruments were influenced both by local practices and by the introduction of influences from other parts of Europe. The background of the makers of these instruments as well as the physical properties of the oboes help to illuminate the development of the instrument during this period.

The examination of measurements, technical drawings, photographs, and biographical data clarify the development and dissemination of practices in oboe building throughout eighteenth-century France. This clarification provides new insight into a critical period of oboe development which has hitherto not been exclusively addressed.

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CHAPTER 1

INTRODUCTION

Mid-seventeenth century Paris provided a rich environment conducive to wind instrument playing and building. Families, such as the Hotteterres, the Chédevilles, and the Philidors specialized in the performance and manufacture of wind instruments at the court of Louis XIV. As members of Lully's *Grande Ecurie*, they gained positions which were both secure and financially rewarding. In the earlier part of the century, trumpets, sackbuts, and, originally, shawms were an important part of the outdoor music performed for the King. Indoor music, however, tended to be quieter and more expressive. Such music made extensive use of strings, and accompanying instruments needed a delicate sound with less volume than the raucous sound of the shawm. Furthermore, the emphasis on the declamatory style, even in instrumental music, during the Baroque period made the clamorous shawm an awkward contender, and the more expressive oboe came into use about 1670.

The actual birth of the oboe is somewhat ambiguous. Traditionally, it has been thought that it developed rather directly from the shawm. Indeed, some seemingly characteristic features of the shawm, such as the fontanelle to protect the key and the pirouette shape on the top joint, appear on certain early

oboes as well.¹ Some proponents, particularly Josef Marx, suggest, however, that the oboe did not develop from the shawm, but rather was specifically invented by Jeanne Hotteterre, a member of one of the first dynasties in woodwind instrument building, in order to produce an instrument which would be more musically expressive.² Others, particularly Bruce Haynes, suggest the development of an interim, protomorphic oboe that was used and improved between 1657 and 1664.³

The period between 1670 and 1700 was one of growth and dissemination of the oboe, and indications for use of the instrument begin to appear more and more frequently in the scores of theatrical works and in various writings. While Robert Cambert's opera *Pomone* of 1671 is frequently hailed as the work which introduced the oboe into the orchestra, it has been discovered that Jean-Baptiste Lully's ballet *L'amour malade* of 1657 made use of some sort of oboes even earlier. Indeed, Cambert himself had used the oboe in his 1659 opera *Ariane, ou le Mariage de Bacchus*.⁴ The instrument seems to have been

¹For example, the oboe by Dupuis in the Berlin Musik Instrumenten Museum (no. 2933).

²Josef Marx, 'The Tone of the Baroque Oboe,' *Galpin Society Journal* IV (1951): 12.

³Bruce Haynes, 'Sweeter than Hautbois: Towards a Conception of the Baroque Period,' *Journal of the American Musicological Society* XXVI (2000): 57.

⁴Gunther Joppig, *The Oboe and the Bassoon*, trans., Alfred Clayton (Portland, Oregon: Amadeus Press, 1988), 54.

introduced into England when Cambert, who was supervising the production of *Calisto* by John Crowne and Nicholas Staggins, hired the well-known French oboists Paisible, de Bresmes, Guiton, and Boutet in 1674. This event seems to have helped to establish the oboe quickly, because by 1681, Purcell was regularly making use of it in his works, and in 1695, *The Sprightly Companion*, which is said to contain the first tutor for the oboe, was published in London.⁵ In Germany, the oboe also seems to have taken hold quickly as well, for the term *hautbois* appears as early as 1691 in W. C. Printz's *Musicus Curiosus*,⁶ and J. C. Denner had applied to the Nuremberg Council for permission to make French oboes in 1694.⁷

By 1700, the oboe had taken the form which it would seem to hold for most of the next century: it first had three keys, six finger-holes, and was constructed in three parts, fitted together by tenon-and-socket joints. Later in the eighteenth century, oboes were made with only two keys. Decorative turnings were also a common feature of the eighteenth-century oboe, as were extensively decorated keys. Throughout the century and between diverse makers, there were naturally great differences and variations in the oboes produced. By investigating the backgrounds of the individual builders and the details of the construction of extant instruments, we can observe trends and

⁵Philip Bate, *The Oboe*, 3rd ed. (New York: W. W. Norton & Company, 1975) 41.

⁶Joppig, *The Oboe and the Bassoon*, 54.

⁷Ekkehart Nickel, *Der Holzblasinstrumentenbau in der Freien Reichstadt Nürnberg* (Munich, Emil Katzbichler, 1971), 204.

developments from this critical period in the instrument's history. Specifically, this study will use technical drawings and measurements of thirty-four French instruments built between the early-eighteenth and mid-nineteenth centuries to define particular trends in oboe building during this period and demonstrate how these trends are manifested in the instruments themselves. Furthermore, the study of descriptions and photographs of seven other instruments from the period will help to enrich the details of the study.

CHAPTER 2

BACKGROUND OF THE EIGHTEENTH-CENTURY FRENCH OBOE MAKERS

Phillip Bate calls the year 1700 the beginning of the two- and three-key period in the development of the oboe.¹ This distinction separates the eighteenth-century instruments from their experimental predecessors and from the more complicated multi-key instruments that became popular early in the nineteenth century. By 1700, the oboe had gained general acceptance not only in France, but throughout Europe. Also significant from this year is the publication of the first French tutor for oboe by Freillon-Poncein, indicating the existence of an audience for such materials in France.²

The instrument builders discussed in this study fall into three chronological categories within and extending just beyond the two- and three-key era. The first period spans from the mid-seventeenth century, when the earliest oboes were produced, until approximately 1750. Bate calls this oboe the Baroque type, and describes the instruments as being robust in outline, of good proportion, and with much ornamental turning of almost architectural precision.³ Towards the middle of the eighteenth century, the baroque type

¹Philip Bate, *The Oboe*, 3rd ed. (New York: W. W. Norton & Company Inc., 1975), 45.

²Jean-Pierre Freillon-Poncein, *La Véritable Manière d'apprendre à jouer en perfection du Hautbois* (Paris, 1700).

³Bate, *The Oboe*, 48.

gave way to a plain and practical transitional instrument with simpler turnings.⁴ Indeed, in England, a number of instruments from the middle part of the century abandoned decorative turnings almost altogether.⁵ In the last quarter of the century, the Dresden oboes influenced a return to a more shapely profile, which also had a smaller bore. Figure 1 lists the instrument makers addressed and the dates of their professional activities when known.

French oboe makers of the eighteenth and early nineteenth centuries were concentrated principally in Paris and the area known as La Couture, the region surrounding the royal residences of Versailles and Anet. With its court and international connections, Paris provided an environment conducive to the development of culture in general, and music and instruments in particular. Court musicians were active both as performers and instrument builders. In La Couture, the availability of both water and wood contributed to the arts of wood turning and eventually instrument making.⁶ The trade of woodwind instrument making flourished so well here that while the term *tourneur* generally referred to one who turned wood, in La Couture, it seems to have meant specifically a woodwind maker.⁷ The proliferation of talented woodwind makers in this region was so extensive that the influence of

⁴Ibid., 51.

⁵For a complete discussion of English straight-top oboes, see Cecil Adkins, William Milhouse and the English Classical Oboe, *Journal of the American Musical Instrument Society* 22 (1996): 42-88.

⁶Tula Giannini, *Great Flute Makers of France* (London: Tony Bingham, 1993), xxv.

⁷Ibid., 47, note.

woodwind instrument builders who worked in La Couture has been likened to that of string instrument makers who worked in Cremona.⁸

Early (to 1749)	Transition (1750-1779)	Late (From 1780)
Dupuis (fl. c. 1692 ⁹ -)	Thomas Lot III (fl. 1734-1787)	Deschamps (fl. 1775-1802)
Naust (fl. 1692-1734)	Paul Villars (fl. 1741-1776)	Christophe Delusse (fl. 1781-1789)
Nicolas Hotteterre (d. 1693)	Martin Lot (fl. 1743-1785)	Michel Amlingue (fl. 1782-1830)
Nicolas (I) l aîné Hotteterre (fl. 1660-1694)	Gilles Lot (fl. 1752-1775)	Dominique Antony Porthaux (fl. 1782-1842)
Nicolas (II) Colin Hotteterre (fl. 1692-1727)	Prudent Thieriot (fl. 1765-1782)	Cuvillier á St. Omer (fl. c. 1792-early 19 th c.)
Jean-Jacques Rippert (fl. 1696-1716)		Hypolyte Camus (fl. 1793-1822)
Rouge (fl. early 18 th c.)		Vincent Panormo (fl. late 18 th c., early 19 th c.)
Desjardins (fl. early 18 th c.)		Noblet Frères (fl. early 19 th c.)
Debey (fl. early 18 th c.)		Guillaume Triébert (fl. 1810-1845)
Charles Bizey (fl. 1716-1752)		

Figure 1 Eighteenth-century oboe builders and their periods of activity

⁸Ibid., xxv.

⁹Abraham Du Pradel s *Livre commode contenant les adresses de la ville de Paris, et le trésor des almanache pour l année bissexile* (Paris 1692) provides the first record of the professional activities of many instrument makers. While many of them may very well have been active for some time before this date, sufficient records of their activities have not come to light.

Early Period Oboe Builders to 1749

Dupuis was active in Paris in and around 1692. In this year, Du Pradel listed Dupuis as maître pour le Jeu et pour la Fabrique des Instruments à Vent.¹⁰ His mark appears as his name, DVPVIS, encapsulated in a cartouche surrounded by either three or four fleur-de-lis.¹¹ Dupuis also made recorders and pitchpipes.¹²

Pierre Naust, born most likely in La Couture around 1660, married Barbe Pelletier, daughter of Charles Pelletier and Barbe Fremont, a relative of Etienne Fremont, of whose instruments, only an oboe appears to be extant.¹³ The Fremont workshop, located at an address on the rue de l'Aubre Sec, was apparently taken over by Naust following Fremont's death in 1692, and it is supposed that Naust had already been working there for some time.¹⁴ Following Naust's death in 1709, his widow continued to run the workshop. In 1719, she took on as a partner her foreman and son-in-law Antoine Delerablée, and in 1722, they entered into a formal business partnership. Upon Barbe's death in 1726, Delerablée and his wife, Jeanne *née* Naust took over the

¹⁰Abraham Du Pradel, *Livre commode contenant les adresses de la ville de Paris, et le trésor des almanache pour l'année bissextile* (Paris 1692). Cited in William Waterhouse, *The New Langwill Index* (London: Tony Bingham, 1993), 98.

¹¹William Waterhouse, *The New Langwill Index* (London: Tony Bingham, 1993), 98.

¹²Phillip T. Young, *4900 Historical Woodwind Instruments* (London: Tony Bingham, 1993), 66

¹³Waterhouse, *The New Langwill Index*, 123.

¹⁴Giannini, *Great Flute Makers of France*, 4.

operations of the shop. Delerablée died in April of 1734, and Jeanne continued to run the workshop alone until her marriage to Thomas Lot in November of that same year, at which time he took over operations. A 1734 inventory, for which Charles Bizey served as an expert, included two workbenches, three lathes, 211 borers, about 1000 pounds of boxwood, 26 traversos, nine recorders, ten flageolets, five bass recorders, three bassoons, and a grossbass pommer, indicating an active business.¹⁵ There were five variations in the stamp throughout the history of the workshop: NAVST; NAVST above a lion rampant; NAUST above a lion rampant; NAUST/PARIS adjacent to a walking lion; and NAUST/A PARIS above a walking lion.¹⁶ While the shop produced many fine flutes for clients as distinguished as the virtuoso Michel Blavet, who according to invoices in 1734, had ordered twenty instruments from the workshop, there is no evidence of the production of oboes in the years following the death of Pierre Naust.¹⁷ Extant instruments made by the Naust workshop include flutes, a flute d amore, a soprano recorder, an alto recorder, a French flageolet, a bird flageolet, and clarinets.¹⁸

The Hotteterre family was active in La Couture and in Paris from the early 17th century until the late 18th century, first as woodturners, later as builders of wind instruments. Records indicate that their name is the oldest of the musical instrument makers in the area.¹⁹ They are credited with many

¹⁵Waterhouse, *The New Langwill Index*, 278-279.

¹⁶Ibid.

¹⁷Giannini, *Great Flute Makers of France*, 10.

¹⁸Young, *4900 Historical Woodwind Instruments*, 167-168.

¹⁹Ernest Thoinin, *The Hotteterres and the Chédevilles*, trans. Carol Padgham Albrecht, *Les Hotteterre et les Chédeville: Three Biographical Sketches in Translation* (Master's thesis, University of North Texas, 1980), 34.

innovations in instrument construction, such as initiating the transitions from the integral recorder to the jointed recorder, from the renaissance flute to the baroque flute, from the shawm to the oboe, and from the dulcian to the bassoon. The name is seen in many versions, including Haulteterre, Hauterre, Hauteterre, Hoteterre, Hoterre, and Obterre. Variations on the family's mark include the two spellings, Hotteterre and Hauterre, with, variously, a fleur-de-lis, and anchor, and a star.

Three different builders in this family bore the name of Nicolas.

Figure 2 will help to clarify the relationship.

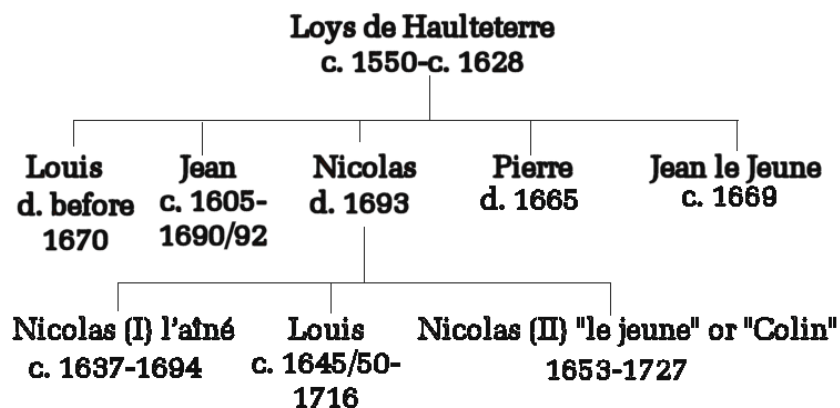


Figure 2 A partial family tree for the Hotteterre family

The first Nicolas flourished in Paris between 1660 and 1693. His first son, Nicolas I aîné, was born in La Couture in 1637, and in 1657 he moved to Paris, where he worked at making instruments, teaching, and playing oboe, recorder, and musette. In 1660, the elder Nicolas joined the newly-formed workshop of Nicolas I aîné in Paris. By 1666, Nicolas I aîné was employed as an oboist and violinist in the Grands Hautbois in the company of his brother

Louis and his cousin Jean. By 1682, he was living in Versailles. The third Nicolas, brother to Nicolas I aîné, was often called Colin. He was baptized in La Couture in 1653, and in 1685 he married Catherine de Chevalier, who was likely related to the flute maker of that name.²⁰ In 1666, he is supposed to have entered the *Grands Hautbois*, where he was active both as an oboist and as a violinist until his death in 1727. He was also oboist in the first and second companies of the *Mousquetaires du roi* in 1672, and in 1713, he played in the *grand chœur* of the orchestra of the Opéra.²¹ Du Pradel listed him as Maître pour le Jeu et pour la Fabrique des Instruments à Vent, with an address on the rue d'Orléans.²² The eldest Nicolas died in 1693, upon which a legal statement on behalf of his widow, Anne née Mauger sheds light on the professional relationship between the three men who bore the same name:

Whereas their eldest son, Nicolas, had worked with his father for several years and then had gone out on his own, Louis, their second son, took his place, followed by Nicolas, their third son, all of whose incomes were received by the said Mauger, including their children's earnings from compositions, giving lessons, and selling instruments, the latter of which they improved, its being determined that their father, the deceased, as well-reputed as he was among all who knew him, was not able to make them perfectly...²³

Nicolas I aîné died soon after his father, on 10 May 1694 in Versailles.

²⁰Waterhouse, *The New Langwill Index*, 182-183.

²¹Ernest Thoinin, *The Hotteterres and the Chédevilles*, trans. Carol Padgham Albrecht, *Les Hotteterre et les Chédeville: Three Biographical Sketches in Translation* (Master's thesis, University of North Texas, 1980), 91.

²²Abraham Du Pradel, *Livre commode*. Cited in Waterhouse, *The New Langwill Index*, 182.

²³Nicolas Mauger, *The Hotteterres, Famous Players and Makers of Flutes, Oboes, Bassoons, and Musettes of the Seventeenth and Eighteenth Centuries Recent Research*, trans. Carol Padgham Albrecht, *Les Hotteterre et les Chédeville: Three Biographical Sketches in Translation* (Master's thesis, University of North Texas, 1980),

The inventory made at his death includes iron tools serving to make wind instruments, such as recorders, flageolets, bassoons.²⁴ Colin continued to thrive on his own. An inventory following the death of his wife in 1708 reveals that he was the wealthy owner of a busy workshop: the shop owned five lathes for wood, two for metal or possibly ivory, c. 900 tools including 70 reamers, a stock of billets sufficient for c. 300 woodwind instruments, together with 32 oboes, and *fluttes*.²⁵ Following his death in 1727, an inventory lists materials to make flutes traversières ou allemandes, hautsbois et autres instrumens, 36 unfinished oboes, together with two dozen unfinished flutes, and two each of bassoon and musette.²⁶ Extant instruments that bear the mark of the Hotteterre family include flutes and recorders, and contemporaneous accounts also mention their musettes, flageolets, and crumhorns.²⁷

Jean Jacques Rippert flourished in Paris between 1696 and 1716. Documents of 1696 indicate that he was Maître faiseur d instruments à vent and Faiseur de Flûtes and that he had been established in Paris in that profession for some time.²⁸ In 1701, Saveur listed him, in the company of Jean Hotteterre, as one of the ablest instrument makers in Paris.²⁹ Letters of the day

²⁴Waterhouse, *The New Langwill Index*, 182-183.

²⁵Ibid.

²⁶Ibid..

²⁷John Solum, *The Early Flute* (Oxford: Clarendon Press, 1992), 38.

²⁸Waterhouse, *The New Langwill Index*, 329.

²⁹Joseph Sauveur, *Principe d acoustique et de musique* (Paris 1700/01). Cited in: William Waterhouse, *The New Langwill Index* (London: Tony Bingham, 1993), 329.

refer specifically only to production of flutes and bassoons.³⁰ There are three variations on the Rippert stamp: RIPPERT below a shield bearing six lozenges with a dolphin below; RIPPERT above a dolphin; and RIPPERT (diagonal left to right) above a dolphin. Other surviving instruments by Rippert include sopranino, alto, tenor, and bass recorders, as well as flutes.³¹

Rouge flourished in France in the early 18th century. His mark consisted simply of his name: ROUGE.³² The only other extant instrument attributed to Rouge is an alto recorder.³³

Baptiste Desjardins was active in Paris in the early 18th century. His mark consisted of his name with a crude tree below it.³⁴ Other members of his family were prominent oboe players in Paris.³⁵ No other instruments by Desjardins seem to have survived.

Little is known about the maker Debey. Waterhouse cites records from an auction in Middleburg in 1771 list two ivory recorders by a de Bey. This was perhaps also the same person who was listed as De Bye in a 1759 Selhof inventory.³⁶ His mark includes the name, DEBEY, above a flower or tree.

³⁰Giannini, *Great Flute Makers of France*, 45, note 11.

³¹Young, *4900 Historical Woodwind Instruments*, 188-189.

³²Waterhouse, *The New Langwill Index*, 338.

³³Young, *4900 Historical Woodwind Instruments*, 194.

³⁴Waterhouse, *The New Langwill Index*, 88.

³⁵Giannini, *Great Flute Makers of France*, 9.

³⁶Nicolas Selhof, Sale catalogue (Den Haag 1759). Cited in Waterhouse, *The New Langwill Index*, 82-83.

Extant instruments include an alto recorder, an incomplete oboe d amore, and perhaps a chalumeau.³⁷

The beginning of Charles Bizey's period of activity is marked by his entrance into the guild of musical instrument makers in Paris in 1716. Documents indicate that he supplied two oboes to the Court at Munich in 1721, and in 1734, he was called in as an expert to appraise the estate of the deceased Antoine Delerablée.³⁸ This document refers to him as a master maker of musical instruments living in the rue Mazarine parish St Sulpice. Rumors of his untimely demise are refuted in a December 1749 advertisement in *Mercur de France*:

Mr. Bizey, inventor of several wind instruments, announces that he continues to work with success and is perfecting such instruments more than ever before. Having for a while been sick, certain jealous colleagues spread the malicious rumour that Mr. Bizey was incapacitated, even dead; this is an untruth. This artist is alive and enjoys perfect health; he has recently even invented an oboe descending to G like the violin, as well as others pitched one octave below the ordinary oboe which perfectly imitate the horn. He lives still in the rue Dauphine, Paris.³⁹

His mark consists of either a fleur-de-lis above his name or a fleur-de-lis above BIZEY/A PARIS with a sun below. From 1728 until 1734, address address was listed on the rue Mazarine, Fauborg St. Germain. In 1749, it was given as rue Dauphine. There are still directory listings for him in 1752, but not as late as 1769.⁴⁰ In addition to his experiments with different oboes, he reportedly

³⁷Waterhouse, *The New Langwill Index*, 82-83.

³⁸Giannini, *Great Flute Makers of France*, 12.

³⁹Waterhouse, *The New Langwill Index*, 34.

⁴⁰Ibid.

also modified the flute and built bass flutes and bassoons.⁴¹ Other extant instruments attributed to Bizey include flutes, an alto recorder, a tenor recorder, a bass recorder, a bass flute, bassoons, and rackets.⁴²

Transitional Period Oboe Builders, 1750-1779

All recognized instrument makers in the Lot family come from the same family in La Couture. Some time around 1650, Pierre Lot, a wood turner, married Marie Vacher, likely a relative of the Le Vacher whom Mersenne called the most excellent maker of flageolets and musettes that we have.⁴³ The couple had three sons: Thomas I, François I, and Nicolas. The grandsons of Thomas I included the brothers Thomas III and Martin, and their cousin Gilles. These three men were the significant woodwind makers of the family in the eighteenth century.⁴⁴

Thomas III was born in La Couture on 1 May 1708. It is likely that Thomas began employment in the workshop of Naust when he was apprenticed there at the age of 14 in 1722.⁴⁵ As previously mentioned, he took over the operations of Naust's workshop upon his marriage to Jeanne Naust, Antoine Delerablée's widow, in November of 1734. Soon afterwards, he began

⁴¹Ibid.

⁴²Young, *4900 Historical Woodwind Instruments*, 22-23.

⁴³Marin Mersenne, *Harmonie universelle*, trans. Roger E. Chapman (The Hague: Martinus Nijhoff, 1975), 302.

⁴⁴Giannini, *Great Flute Makers of France*, 1.

⁴⁵Giannini, *Great Flute Makers of France*, 13.

manufacturing instruments with his own stamp, T*LOT above a rampant lion.⁴⁶

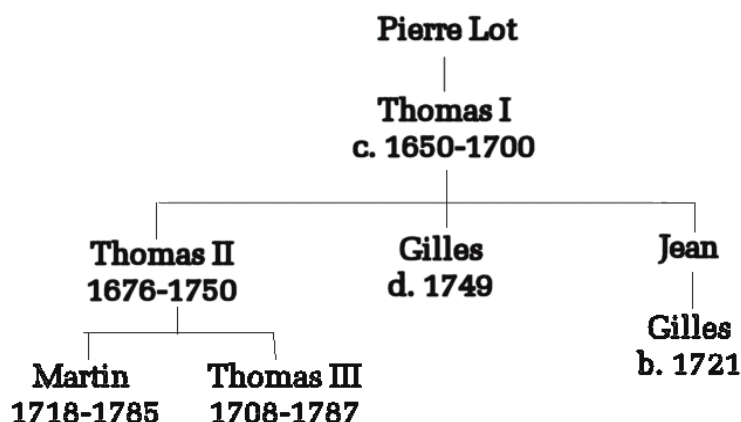


Figure 3 A partial family tree for the Lot family

Thomas's cousin, Gilles Lot, had rather a more difficult introduction into professional life. The objections made by Thomas Lot, Charles Bizey, Paul Villars, Denis Vincent, and Jacques Lusse to Gilles Lot's admittance to the Paris community of master woodwind makers are noted in a document of 27 June 1752 by the Commissioners of the King's Council:

However, the applicant can advance with confidence that if he had not been so talented as to excite the jealousy of these five makers, they would not have had any difficulty in accepting him. One must observe in this matter that the community is composed of subjects that are united in the exercise of four different talents; they are string makers, woodwind makers, organ makers and harpsichord makers. Since, of these four arts, the five named makers who are opposing the acceptance of the applicant's exercise in the art of woodwind-making, and it was with them that he was instructed in that art by an apprenticeship of five years with Thomas Lot, his cousin, next having been a worker

⁴⁶Ibid., 14.

with Bizet for one year, and afterwards, with Sieur Le Clerc, whose daughter he married, and after whose death, maintained the shop and practice of the widow Le Clerc, his mother-in-law. In a word, Thomas Lot, cousin of the applicant, and his master of apprenticeship, was admitted to the community only after having married the daughter of a master, from which it follows that the applicant, who served an apprenticeship of five years with Thomas Lot, was a worker with Sieur Bizet for a year, and after a worker with Sieur Le Clerc, his father-in-law, cannot be refused in the community by these five makers that oppose him, for it is incontestable that he has more right for his admission than they ever had for theirs.⁴⁷

Thus, Gilles Lot was accepted into the community of woodwind builders in Paris against the wishes of even one of his own family members.

On 15 February 1743, Thomas's younger brother Martin married Jeanne Julienne, Jeanne Naust's eldest child from her first marriage to Antoine Delerablée. Following his marriage, Martin set up his own workshop at the enclos de l'Abbaye, St Germain des Prés cour des Moines, parish of St Simphorien, with the mark M*LOT with a dolphin below.⁴⁸ Martin's work reflects the influence of his brother Thomas, particularly his flutes, which follow the same lines of development as his brother's between 1743 and 1785.⁴⁹ Numerous specimens of these men's instruments survive. Among these are: alto and soprano recorders, a flageolet, a double recorder, piccolos, many flutes, a flute d'amore, alto flutes, and a bass flute by Thomas. a flageolet, a galoubet,

⁴⁷Ibid., 13-14.

⁴⁸Ibid., 22.

⁴⁹Ibid., 22.

flutes, a basse tube, and a bassoon by Gilles; and flutes, clarinets, and bassoons by Martin.⁵⁰

Paul Villars was active in Paris from around 1741 until 1776. His early training came through an apprenticeship with Charles Bizey. By 1741, he was a maître faiseur d'instruments de music, in which capacity, he obtained an injunction that banned the manufacture of flutes, flajolets, hautbois et autres instruments de musique by members of the guild of cabinet makers.⁵¹ In 1752, he was among the master-makers who opposed Gilles Lot in his pursuit of election to the guild. In 1765, he was brought in as one of the experts following the death of Jeanne Lot *née* Naust to evaluate the estate. Between 1742 and 1779, his address was listed as rue de Fosse s, St Germain de Pre`s. His mark is comprised of his name with a fleur-de-lis above and A PARIS below.⁵² Other extant instruments by Villars include a recorder, a flute, and a bassoon.⁵³

Prudent Thieriot established his workshop in 1765, and in a fashion not uncommon, signed with his given name, rather than with his family name. He was the other expert to appraise the estate of the widow of Thomas Lot, Jeanne *née* Naust, in 1765. In addition to his work on woodwinds, financial records indicate that he was involved with the luthiers guild between 1772 and 1773.⁵⁴ He shared the rue Dauphine address with Bizey, and indeed the two makers

⁵⁰Young, *4900 Historical Woodwind Instruments*, 147-151.

⁵¹Waterhouse, *The New Langwill Index*, 413.

⁵²*Ibid.*, 413.

⁵³*Ibid.*

⁵⁴*Ibid.*, 312-313.

shared a similar mark, but otherwise, there is no reason to suspect that he was the associate and successor to Bizey, as Jansen has asserted.⁵⁵ While he was active mainly in Paris, a 1774 death record, in which he is described as a master maker at rue Dauphine and husband of Marguerite Chalapst, reveals familial ties in La Couture.⁵⁶ His son, Prudent, eventually succeeded him in the family business. Directory listings for the family include Thierriot fils chez M. son père in 1775, Prudent Thierriot fils from 1776-1779, and Prudent Thériot in 1783.⁵⁷ The stamp appears as a fleur-de-lis above PRUDENT/A PARIS with a sunburst below. Addresses for the family include Prudent Thierriot, rue Dauphine from 1765 to 1785, and Prudent-Thierrot, rue St Denis 353 from 1822 to 1830.⁵⁸ Other instruments by the family include French flageolets, a pitchpipe, flutes, clarinets, and bassoons.⁵⁹

Late Period Oboe Builders from 1780

The Deschamps who was active in Paris between 1775 and 1802 is perhaps identifiable with Jean Deschamps, whose father and grandfather were both also called Jean Deschamps. The family was connected by marriage to the Hotteterres and the Delerablées. There are also familial ties between this family and the Fremonts, the Lots, and the Pelletiers. The youngest Jean

⁵⁵Ibid., 312.

⁵⁶Giannini, *Great Flute Makers of France* , 51, note 64.

⁵⁷Waterhouse, *The New Langwill Index*, 313.

⁵⁸Ibid., 312-313.

⁵⁹Young, *4900 Historical Woodwind Instruments*, 181-182.

Deschamps can be identified as the maker of a two-keyed oboe in the Berlin Museum, and a two-keyed oboe, stamped DESCHAMPS/À/PARIS has also been attributed to this family.⁶⁰ The address between 1775 and 1789 was on the rue de l'Arbre Sec.⁶¹

Christophe Delusse flourished in Paris between 1781 and 1789. Jacques Delusse, possibly his father and master, was a flutist who had already begun making woodwind instruments in 1752.⁶² At some point in the latter half of the century, Christophe took over the workshop. There are three variations on the family's mark: DELUSSE/A/PARIS; a fleur-de-lis above DELVSSE/A PARIS; and a crown above C/DELUSSE/A/PARIS. Contemporaneous documents reveal the widespread use of Delusse instruments: the *Almanach musical* of 1781 reported that the contrebasse d'hautbois, produced by M. Luce for the price of 1000 livres, had replaced the bassoon at the opera for six months;⁶³ Garnier's tutor of 1800 provided an illustration of the modèle du Haut-Bois d'après Delusse, dans ses proportions exactes;⁶⁴ and Brod's tutor of circa 1830 commended the intonation, evenness and tonal beauty of Delusse's instruments.⁶⁵ Between 1783 and 1789, the Delusse workshop had an

⁶⁰Giannini, *Great Flute Makers of France*, 6.

⁶¹Ibid., 87-88.

⁶²Will Jansen, *The Bassoon* (Buren, The Netherlands: Frits Knuf, 1978), 1: 354.

⁶³Waterhouse, *The New Langwill Index*, 85.

⁶⁴Joseph François Garnier, *Méthode raisonnée pour le hautbois* (Paris, c. 1800). Cited in: Waterhouse, *The New Langwill Index*, 85.

⁶⁵Jansen, *The Bassoon*, 1: 353-354. Brod was so fond of Delusse's instruments, in fact, that he purchased the workshop upon Christophe's death and manufactured oboes and cor anglais there until his own death in 1839.

address at quai Pelletier No. 4.⁶⁶ During Christophe's lifetime, the name appears with widely different spellings: Delusse, De Lusse, Deluce, De Luus, and Delouse.⁶⁷ Other surviving instruments by the Delusse family include a galoubet, a bird flageolet, pitchpipes, flutes, bass flutes, an english horn, an octave bassoon, and a bassoon.⁶⁸

The Amlingue workshop was established in 1782 and supplied instruments to the French military. From 1826, Michel, the son or successor, is listed as owner of the workshop.⁶⁹ No records of the workshop appear after 1830. There are two variations on the mark: a lily above AMLINGUE/A PARIS and a five-pointed star above AMLINGUE/A PARIS.⁷⁰ Addresses given for the workshop include: rue du Chantre (1782-1789), rue des Petits Champs (1802), rue Croix des Petits Champs 15 (1809), rue St Honoré, près St Roch (1816-1819, 1820), rue du Roule 1 (1819, 1820-1826), Michel Amlingue, rue Bussi 5 (1826-1830).⁷¹ Other instruments by Amlingue include a piccolo, flutes, clarinets, and bassoons.⁷²

⁶⁶Waterhouse, *The New Langwill Index*, 85.

⁶⁷Jansen, *The Bassoon*, 1: 353.

⁶⁸Young, *4900 Historical Woodwind Instruments*, 53-55.

⁶⁹Waterhouse, *The New Langwill Index*, 8.

⁷⁰Ibid.

⁷¹Waterhouse, *The New Langwill Index*, 8.

⁷²Young, *4900 Historical Woodwind Instruments*, 4-5.

Dominique Antony Porthaux was born around the year of 1751 and died in Paris on 3 February 1839. In 1782, he established his workshop and married Elisabeth Thyériot, possibly a relative of Prudent. In 1785, he was a maker of military instruments to the King.⁷³ Between the years of 1793 and 1802, he also acted as music publisher and dealer. In 1808, he published a notice to all professional and amateur bassoonists, claiming precedence of the invention of a wooden crook, which Savary had apparently imitated.⁷⁴ He is listed in directories until 1824, exclusively as a dealer rather than a maker in the latter years.⁷⁵ By the time of his death at the age of 88 in 1839, he had already been retired for some time. Variations on his mark include a five-pointed star above PORTHAUX/A PARIS; a crown above PORTHAUX/A PARIS; and a five-pointed star above PORTHAUX/A PARIS/R. THIONVILLE. Several addresses are supplied for Porthaux throughout his career: rue des Cordeliers (1782-1789), rue Dauphine 45 (1787-1793), rue Thionville 43-45 (1798-1804), rue de Grenelle St Honoré près celle des Deux Ecus, rue des Deux Ecus 35 (1809-1812), rue Montmartre 131 (1819), rue Buffault 21bis (1820), rue Coquenard (1821), rue Cimitière St André (1824).⁷⁶ Other extant instruments attributed to Porthaux include flutes, a clarinet, a basset horn, and bassoons.⁷⁷

⁷³Waterhouse, *The New Langwill Index*, 307.

⁷⁴Ibid.

⁷⁵Ibid.

⁷⁶Ibid.

⁷⁷Young, *4900 Historical Woodwind Instruments*, 179-180.

The Cuvillier workshop was established in St. Omer sometime before 1792, at which time a Madrid newspaper advertised one of their bassoons for sale.⁷⁸ An 1870 directory listing describes Cuvillier as marchand - depositaire de musique.⁷⁹ There are four variations on the stamp: a fleur-de-lis above CUVILLIER/A/ST OMER; a lyre above CUVILLIER/A St OMER with a hermes staff below; a five-pointed star above and below CUVILLIER/A S^T OMER; and Cuvillier père. Other instruments with the Cuvillier mark include a clarinet, a tenor clarinet, a bassoon, a bass-horn, an alto flute, and a serpent-bassoon.⁸⁰ Cuvillier aîné, presumably the eldest son of the founder, was listed in 1836 and 1837 as maker of flute, oboe, clarinet, bassoon, serpent, etc.⁸¹ His particular mark was comprised of Cuvillier aîné à St Omer, and his address was given in 1836 as Esplanade II.⁸²

Hypolyte Camus flourished in Paris between approximately 1793 and 1822. The 1793 Bruni inventory lists a recorder and two piccolos by Camus.⁸³ Addresses given include quai Pelletier 29 - Arcis (1802), quai Lepelletier 27 (1803-1804), rue du Rempart (1809), and rue du Faubourg Montmartre (1821-

⁷⁸Waterhouse, *The New Langwill Index*, 77.

⁷⁹Ibid.

⁸⁰Ibid., 77-78.

⁸¹Ibid.

⁸²Ibid.

⁸³Ibid., 56.

1822).⁸⁴ The mark consists simply of Camus à Paris. An extant flute also bears this mark.⁸⁵

Vincenzo Panormo was active possibly in London at the end of the late 18th century and beginning of the 19th. He is identifiable with the violin maker of the same name who was active in Naples (1750-1773), Paris (1773-1789), Dublin (1789-1791), and London (1791-1813).⁸⁶ The only other extant instrument attributed to Panormo is a vox humana.⁸⁷

The Noblet family was active in La Couture, Ivry-la-Bataille, and Paris. The Noblet firm was established by Clair Noblet in 1750. The family has ties to the Lot family as far back as 1760.⁸⁸ In the early 19th century, members of the family, identified as Noblet frères worked in Paris, but it is unclear precisely which family members this included.⁸⁹ Throughout its history, the firm produced fifes, flutes, and clarinets in addition to its oboes.⁹⁰

The Triébert workshop was established by Georg Ludwig Wilhelm Triebert, who was born in Storndorf bei Alsfeld, Hessen on 24 February 1770 and died in Paris on the 5 June 1848. He trained as a cabinet-maker, perhaps in Laubach. In 1804, he traveled on foot to Paris and began work for a cabinet-

⁸⁴Ibid.

⁸⁵Ibid.

⁸⁶Ibid., 291.

⁸⁷Ibid., 291.

⁸⁸Giannini, *Great Flute Makers of France*, 56.

⁸⁹Waterhouse, *The New Langwill Index*, 282.

⁹⁰Stanley Sadie, ed. *New Grove Dictionary of Musical Instruments* (London: MacMillan, 1984), s.v. Noblet, by Niall O Laughlin.

maker there. Soon after, he also began working for Nicolas Viennen or Winnen, a woodwind maker in Paris.⁹¹ In 1810, he married and established his workshop, and the following year, he was granted French citizenship. At some point, he Frenchified his name, changing it to Guillaume Triébert.⁹² Some time around 1823, he redesigned Bizet's baritone oboe for the oboe professor at the Paris Conservatoire, Vogt. The Paris Exhibition jury of 1834 declared his oboes to be superior to all others that particular year.⁹³ Two of his sons eventually succeeded him: Charles Louis (b. Paris 31 October 1810 - d. Gravelle St Maurice 18 July 1867), primarily an oboist and teacher who is acknowledged as being responsible for technical development, and Frédéric (b. Paris 8 May or June 1813-d. Paris 19 March 1878), also an oboist who was active at the Opéra comique in 1839, though he had originally been trained as an engraver.⁹⁴ Frédéric had probably succeeded his father by 1845, when upon his marriage, he was described as *facteur d instruments de musique*.⁹⁵ In 1853, he began a partnership under the name Triébert & Cie with Angelo Gaëtan Philippe Marzoli which lasted ten years. 1855 marked the beginning of a collaboration with Boehm to apply the latter's system of keywork for oboes and bassoons. Triébert's prospectus of the same year listed a wide range of oboes and

⁹¹Stanley Sadie, ed. *New Grove Dictionary of Musical Instruments* (London: MacMillan, 1984), s.v. Triébert, by Phillip Bate.

⁹²Waterhouse, *The New Langwill Index*, 403.

⁹³Ibid.

⁹⁴Stanley Sadie, ed. *New Grove Dictionary of Musical Instruments*, s.v. Triébert, by Phillip Bate.

⁹⁵Waterhouse, *The New Langwill Index*, 403.

bassoons, including instruments with the Boehm-system of keywork.⁹⁶ An 1872 patent is in the name of Frédéric's son Raoul, despite the fact that he did not seem to have been involved in the factory.⁹⁷ Sometime around 1875, the factory developed the *système 6"* model of the oboe, which later became known as the *Conservatoire* system. Following the sudden death of Frédéric in 1878, the firm was run by Mme C. Dehais before it was purchased by F. Lorée, a former key-maker in the concern. After the firm went bankrupt in 1881, Lorée left to establish himself independently, but the firm and mark were bought by Gautrot aîné, who in turn were taken over by Couesnon. As late as 1934, Couesnon oboes advertised instruments with Triébert bores bearing the Triébert mark. Guillaume Triébert's mark comprised a barbican-tower with three merlons with *TRIEBERT* above and *A PARIS* below. The mark possibly identified with Charles Louis was: *BREVETÉ* above a barbican with three merlons with *TRIEBERT/A PARIS* below. Between 1878 and 1881, the mark consisted of *TRIEBERT/F. PARIS succr./PARIS*. Instruments from the last years of the workshop's production bear the mark: *BREVETÉ* above a barbican with four merlons with *TRIEBERT/A PARIS* below.⁹⁸ Addresses throughout the firm's history include: rue St Georges 154 (1810), rue Guénégaud 25 (1810-1830), rue Dauphine 26 (1830-1837), rue Montmartre 132 (1837-1855), Rue Montmartre 130 (1855), *Triébert & Cie.*, rue St Joseph 11

⁹⁶Ibid.

⁹⁷Ibid.

⁹⁸Ibid., 404.

(1855-1862), rue de Tracy 6 (1863, 1864-1878).⁹⁹ Inventions attributed to the firm include a metal clarinet mouthpiece, a gouging machine, oboes in a and high e-flat, and an hautbois pastoral, an improved musette.¹⁰⁰ Among other patents, the firm held ones for an oboe thumb-plate key-mechanism from 1827 and improvements to oboe and bassoon from 1872.¹⁰¹ Aside from a plethora of oboes, extant instruments by the firm include flutes, bassoons, and clarinets.¹⁰²

Builders of woodwinds in eighteenth-century France were both independent and interconnected. The extensive intermarriages between the families of builders as well as the apprentice system indicate obvious connections and ties between the families, thus creating professional bonds that were likely translated to similarities in practices as well. Conversely, the divisiveness best exemplified by the resistance to Gilles Lot's acceptance to the profession indicate a high degree of competition and presumably independence. Investigation of the instruments themselves will shed light on the similarities and differences of individual builders and their practices.

⁹⁹Ibid.

¹⁰⁰Ibid.

¹⁰¹Ibid.

¹⁰²Young, *4900 Historical Woodwind Instruments*, 237-243.

CHAPTER 3

ANALYSIS OF THE PHYSICAL PROPERTIES OF
EIGHTEENTH-CENTURY OBOES

The physical attributes of the oboes described in this study will broaden our understanding of the instrument and mark the progress of its development. In particular, detailed investigations of the individual joints, the finger holes, the keys, and the bores will help to illuminate the development of the instrument's design in general. Appendix A provides a complete listing of the instruments studied.

Top Joints

The top joint can be a revealing component of an oboe. The upper baluster—the decorative curve near the top of the upper joint—particularly helps to clarify details about the instrument.¹ Originally, the baluster of the baroque oboe served both to prevent condensation and the development of cracks in the top joint.² Throughout the eighteenth century, this function

¹See Appendix B for a description of the nomenclature used in discussing the oboes.

²Gunther Joppig, *The Oboe and the Bassoon*, trans., Alfred Clayton (Portland, Oregon: Amadeus Press, 1988), 67.

assumed less importance than the merely ornamental nature of the turning, and it underwent a number of changes.

An examination of the external diameter of the baluster of an instrument in relation to the radius of the circle that defines the shape of that baluster helps to put baluster shapes into quantifiable terms. With few exceptions, the radius of the baluster curve in earlier French instruments is larger than the width of the baluster, growing even greater in the middle period, then shrinking to a fraction of the baluster width in the later instruments.

Figure 4 illustrates the stark contrast between the baluster curve radii of a Rouge instrument from the early eighteenth century, an instrument by Gilles Lot from the middle of the eighteenth century, and a Triébert instrument from the end of the eighteenth or early nineteenth century. The Rouge oboe has a baluster ratio () of $1 \frac{1}{5}$, placing it in the middle of the range of diameters of the earliest instruments, which span from $\frac{4}{5}$ to $2 \frac{1}{2}$, with most instruments concentrated in the range between $1 \frac{1}{2}$ and $1 \frac{1}{3}$. With a baluster curve ratio of $1 \frac{1}{2}$, the Lot instrument is on the conservative side for the middle period instruments, which are the least predictable, with ratios that range all the way from $\frac{1}{2}$ to $3 \frac{1}{2}$. The Triébert oboe, with its ratio of $\frac{1}{3}$, is fairly typical of the late period instruments which consistently have small ratios that hover between $\frac{1}{5}$ and $\frac{2}{3}$.³

³This scheme was devised by Cecil Adkins as a simple way of quantifying oboe balusters. It will be published in Cecil Adkins, *The German Oboe in the Eighteenth Century*, *Journal of the American Musical Instrument*

Also evident from the drawings in Figure 4 are the dramatic changes in the decorative turnings on the instruments. While the Rouge instrument has a number of beads and contrasting contours, the Lot has comparatively few, with a much simpler silhouette. The Triébert instrument shows a strong tendency toward more ornate turnings, characterized by some as a return to the earlier style,⁴ though later researches have shown that these more ornate late instruments were the result of German, particularly Dresden, influence.⁵ Oboes of this period are identified by their onion-shaped balusters, extensive beads, and ornaments whose diameters are much larger than that of the areas surrounding them.

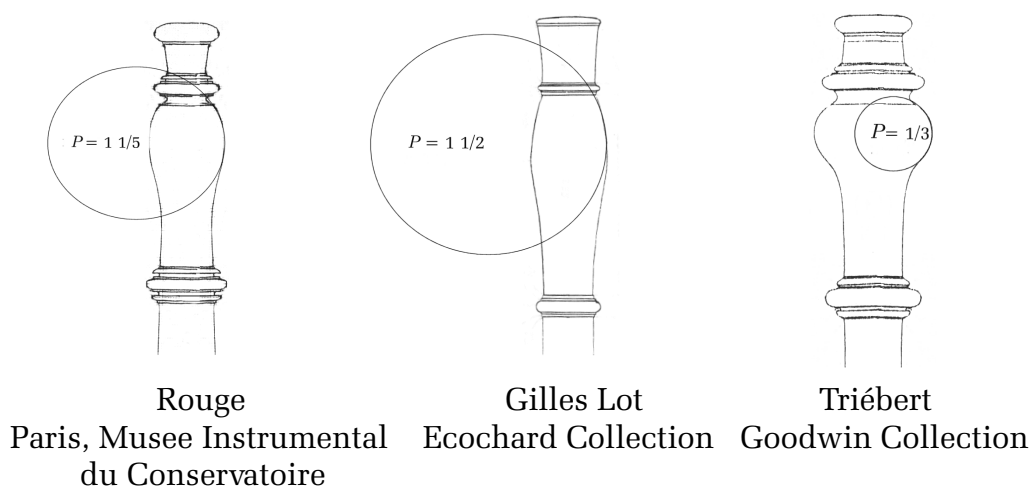


Figure 4 Top joints of three early oboes

Society XXVII (2001), in preparation.

⁴Philip Bate, *The Oboe*, 3rd ed., (New York: W. W. Norton & Company Inc., 1975), 52.

⁵Cecil Adkins, The German Oboe in the Eighteenth Century, *Journal of the American Musical Instrument Society XXVII* (2001), in preparation.

Another trend made apparent by the three instruments illustrated in Figure 4 is the move from the Rouge instrument's pirouette-shaped finial, which mirrored the obsolete pirouette from the shawm. The Lot instrument still hints at this profile, with its slightly concave upwardly-expanding finial cove, but the two sides are closer to parallel than are those on the earlier instrument. The Triébert instrument, on the other hand, shows a distinctive move away from the pirouette design, with its trapezoidal shape and narrower top. This trend will continue throughout the nineteenth century until the baluster has shrunk and moved all the way to the top of the instrument, allowing more room for key mechanisms and tone holes.

Middle joints

The middle joints of the French instruments studied can be divided into three groups based on the physical properties of their exteriors. These three groups reflect a clear chronological pattern. Figure 5 illustrates the three types of middle joints.



Figure 5 Middle joints of three early oboes

The first group, represented here by the Naust instrument, has a round baluster, whose curve continues most of the way to the center column beads, or nips in slightly to form a slight waist just above these beads. This group comprises of all of the earliest instruments and one of the Martin Lot instruments. The second group, in keeping with the simple profiles of the transitional instruments, has a gentle curve for a baluster and no center column beads. All of the other Lot family instruments, the oboe by Villars, and the oboe by Prudent fit into this group. The third group is marked by a return of the center column beads, but the balusters of this group have a much sharper, often beak-like curve, and all have a waist above the beads. All of the late period instruments fall into this category.

Bells

The number and types of decorative turnings on the bell changes markedly throughout the eighteenth century. In the earliest instruments, two elaborate rings are present, one above and one below the waist cove, that is, on either side of the tuning holes. From approximately 1750 until the beginning of the nineteenth century, the waist disappears as only the ring above the holes is present, and it tends to be simple, with few or no additional beads. This ring is

a bit below the baluster and defines the top of the flare.⁶ In the latest instruments, decorative rings on the bell disappear completely. Figure 6 illustrates the three types of eighteenth-century French oboe bells.

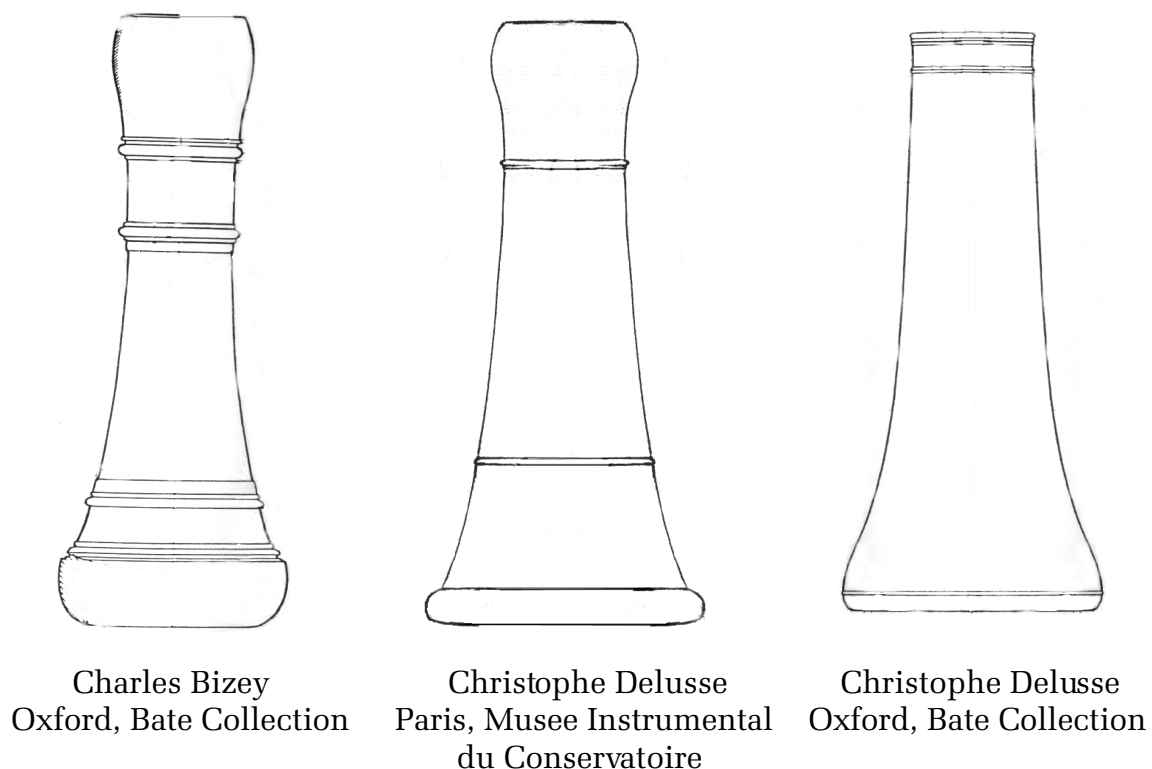


Figure 6 Bells of three early oboes

The instruments addressed in this study are aligned almost perfectly with expectation in terms of the number of rings present on the bell. With the exception of one Rouge instrument, all early instruments have two rings. That

⁶Cecil Adkins suggests that this second type, the classical bell, shows the direct influence of the oboe builders in Dresden. Cecil Adkins, *The German Oboe in the Eighteenth Century*, *Journal of the American Musical Instrument Society* XXVII (2001), in preparation.

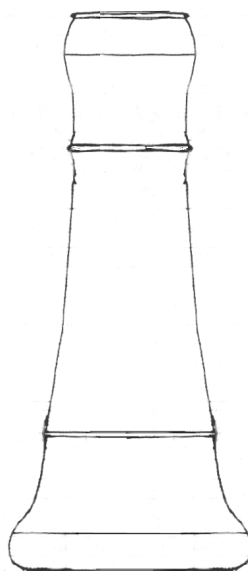
particular Rouge instrument has only one ring, as do all of the transitional instruments, and all but two of the later instruments. Of the later instruments, only one Trièbert bell and one Delusse bell have no rings at all.

Comparing the baluster ratio of bells is less informative than comparing those of the top joints, but helpful nevertheless. The instruments with the smallest ratios are indeed the latest, while the instruments with the largest baluster ratios are from the transitional period. On one extreme is an instrument by Delusse with a baluster ratio of $1/6$, while at the other extreme is an instrument by Martin Lot with a baluster ratio of $2\frac{1}{2}$. In between, however, no clear pattern exists, with most of the baluster ratios settling between $\frac{1}{2}$ and $1\frac{1}{2}$, thus demonstrating that the essential contour of the bell baluster changed very little throughout the century, with only a few notable exceptions.⁷

One final revealing element about the exterior of the bell is the rim at its base. With the exception of the Rouge oboe, the earlier instruments have a rim that is thick, curved, and slightly smaller at the bottom than at the top, as can be seen on the Bizey instrument above. This gentle curve is apparent on all of the early and transitional period instruments. Three oboes from the late period have a narrower rim with a diameter that is distinctly larger than the flare above it. The Delusse instrument in Figure 6 has this type of rim, as do the Camus instrument and one of the Trièbert instruments. The bell rims of most

⁷The Delusse and Trièbert instruments with no baluster at all are clear exceptions, as is the Delusse instruments with the baluster ratio of $1/6$.

of the late period oboes have a contour similar to the earlier instruments, but the rim is less distinctly defined and is not set off by a group of flare beads, as can be seen on the bell of the Triébert instrument in figure 7.



Triébert
Ecochard Collection

Figure 7 Late period oboe bell

Tone Holes

Until numerous keys were added, doubling the third and fourth holes enabled the player to produce a g-sharp and an f-sharp without having to cover a single, larger hole half way. This practice seems to have been in effect from early in the oboe's history, and while the doubling of the fourth hole began to drop out of practice at the beginning of the nineteenth century due to changes in fingering practices, the doubling of the third hole seems to have continued

even after keys made it unnecessary.⁸ All but four of the instruments studied have a double hole in both places. The four exceptions – the Porthaux, the Villars, one of the instruments by Panormo, and one by Trièbert, – still have a doubled third hole, but not a doubled fourth hole.

Keys

The number of keys on an instrument can be helpful in determining its age. Three-keyed oboes are generally from the first half of the eighteenth century. These three keys would include a swallow-tail c key and two e-flat keys, one on either side of the c key. This configuration would allow the player to play with either hand on top and still be able to reach the e-flat key. Such flexibility seems helpful, and indeed is also seen in woodwind instruments from earlier periods, yet it has been suggested that the duplication of the e-flat key on the left side of the instrument was likely for reasons of symmetry rather than practicality, mainly because tutors between 1695 and 1775 instruct the player to put the right hand on the bottom.⁹ Furthermore, evidence suggests that some instruments had a *key* for the left-hand e-flat, but no *hole* drilled to enable the production of that note in that manner.¹⁰

⁸Bate, *The Oboe*, 56.

⁹Eric Halfpenny, 'The French Hautboy: A Technical Survey, Part I,' *Galpin Society Journal* VI (July 1953): 31.

¹⁰The Dupuis oboe is such an instrument.

Towards the middle of the century, the left-hand e-flat key disappears, although the shape of the swallow-tail key still persists, presumably for aesthetic reasons. While many sources allude to the addition of G sharp and A sharp keys by Gerhard Hoffmann in 1727, this assertion seems to be based on a mistranslation, and it is unlikely that additional keys were added until much later in the century.¹¹ In general, attempts to modify the oboe with the addition of keys met with opposition. In 1800, the German woodwind instrument builder Heinrich Grenser expressed the prevalent attitude of disdain and reluctance towards the addition of keys, specifically addressing the addition of keys on flutes:

To improve this or any note by adding a key is neither difficult nor clever. The keys are after all nothing new . . . The real art . . . consists in making flutes on which everything can be achieved without keys.¹²

This attitude was even stronger in regard to the oboe; as late as 1823, the virtuoso oboist Wilhelm Theodor Johann Braun expressed his objections to additional keys on the instrument:

Too many keys would seem to impair the tone; and they have the added disadvantage that if they are imperfectly made one soon

¹¹Adam Carse, *Musical Wind Instruments*, (New York: Da Capo Press, 1965), 133-134.

¹²Heinrich Grenser, [Remarks on the Writings of J. G. Tromlitz}, *Intelligenzblatt zur Allgemeine musikalische Zeitung* XI (15 March 1800): 44. Quoted in Bruce Haynes, 'The Addition of Keys to the Oboe, 1790-1830,' *Journal of the International Double Reed Society* 22 (1994): 34..

finds that the one or the other does not cover the holes properly. The advantages do not outweigh the attendant disadvantages.¹³

In addition to the objections expressed by Braun, many also felt that the shadings of tone color created by the forked fingerings on instruments without keys lent a certain charm to the sound of the instrument, and that the keys that sought to eliminate these fingerings actually detracted from the personality of the instrument's sound.¹⁴ While experiments with multiple keys did finally begin to succeed by the turn of the nineteenth century in Germany, evidence of successful, or at least popular, additions of keys in France is not apparent until sometime between 1816 and 1825 when August-Gustave Vogt's *Méthode pour hautbois* includes illustrations of multi-key instruments.¹⁵ Once general acceptance for keys was achieved, elaborate experiments with key systems ensued.

After the initial three, then two keys on the eighteenth-century oboe, the order of additions is not clear. A key for g-sharp, eliminating the need for the awkward double holes for the third finger of the left hand, was one of the earliest. A key for the right hand little finger to improve the pitch of f-sharp

¹³*Allgemeine musikalische Zeitung*, Leipzig. Quoted in Gunther Joppig, *The Oboe and the Bassoon*, trans., Alfred Clayton (Portland, Oregon: Amadeus Press, 1988), 67.

¹⁴Bruce Haynes, 'The Addition of Keys to the Oboe, 1790-1830,' *Journal of the International Double Reed Society* 22 (1994): 34.

¹⁵Bruce Haynes, 'The Addition of Keys to the Oboe, 1790-1830,' 33-34, 40.

was another early addition. Following this development was the addition of a low c-sharp key, a note previously unavailable to the oboist for all practical purposes,¹⁶ and an octave key for the thumb, or occasionally the left-hand first finger.¹⁷ Next came a cross-key for f-natural, a b-flat key, and a closed key for the upper c-natural.¹⁸ With these various additions, the oboe of the beginning of the nineteenth century had anywhere between two and thirteen keys.

Of the French instruments used in this study, only six fall into the three-key category. Four of these instruments are from the early part of the century (Dupuis, Rouge, Debey, and Desjardins), while two are from the transitional period (Gilles Lot and Prudent). One might surmise from this that the three-key instrument was less popular in France than in other European countries where three-key instruments are more common.

Two-key instruments are quite plentiful among the extant French examples. Twenty-two of the instruments used for this study have only two keys. Figure 8 shows the chronological distribution of the individual two-key instruments.

Only five of the instruments studied had more than three keys. Two of these were made by Cuviller, while three are by Triébert. One of the Cuviller

¹⁶Bate indicates that early tutors suggested that the player close the c key halfway to produce a low c sharp – a difficult task at best. Bate, *The Oboe*, 55.

¹⁷Carse, *Musical Wind Instruments*, 134, note 1.

¹⁸Carse, *Musical Wind Instruments*, 134-135.

instruments, one has eight keys, while the other has thirteen. Of the Triébert instruments, one has nine keys, and the other two each have ten.

Early to 1749	Transitional 1740-1779	Late From 1780
Naust (two instruments)	Thomas Lot	Deschamps
Hotteterre	Villars	Delusse (five instruments)
Rippert	Martin Lot (three	Amlingue
Rouge	instruments)	Noblet
Bizey (two instruments)		Porthaux
		Camus

Figure 8 Chronological distribution of two-key oboes

Bores

Throughout the eighteenth century, bore diameters generally decreased in size. Not only do the minimum and maximum bore measurements tend to become smaller in the later instruments, but the conicity of the bore (the difference between the minimum and maximum ranges of the measurements on a given joint, divided by the length) changes as well.

For top joints, the minimum measurements range from 4.2 millimeters for a Delusse instrument to 7.2 millimeters for the Dupuis instrument. Middle joints fall between 9.4 millimeters for a Noblet Brothers instrument to 13.1 for the Dupuis. The bells follow the same pattern, with a range between 14.8 for the Noblet to 21.9 for one of the Rouge instruments.

As would be expected, maximum bore measurements also decrease in the later instruments. In the top joints, the maximum bore measurements fall between 9.4 for a Delusse instrument and 13.4 for the Dupuis. The middle joints range between 14.36 for the Porthaux instrument and 20.2 for the Dupuis. Maximum bell bore measurements are between 37.9 for a Triébert instrument and 64 for the Dupuis.¹⁹

While the instruments that fall between the extremes of all of these measurements do not align themselves purely chronologically, the pattern is obvious, with a strong trend towards a decreasing bore as the eighteenth century wore on. The decreasing bore size parallels the rising pitch levels throughout the century. Furthermore, such internal changes gave the player greater facility with intonation and overblowing the octave.

A look at the conicity of the bores of each joint does not yield uniform results, but again, the pattern is clear. With some exceptions, the bores of the early instruments are more conical. While still maintaining a similar contour, the bores of the later instruments tend to be less conical. The transitional

¹⁹With the exception of the minimum measurement of the bell, the Dupuis instrument has the largest bore at both the top and bottom ends of each joint. This fact lends support to Paul Carroll's assertion that, along with a number of instruments by the Dutch maker Richard Haka (c. 1646-1705), the Dupuis instrument is probably one of the oldest extant oboes. Furthermore, this instrument retains a fontanelle over the keys, revealing close ties to the shawm. Paul Carroll, *Baroque Woodwind Instruments*, (Brookfield: Ashgate, 1999), 93.

instruments are spread between the two extremes, but show a stronger tendency towards conicity than do the late instruments.

The bores of early oboes rarely have a contiguous profile from the top of the instrument to the bottom. Steps between the joints are created by the difference between the maximum bore at the end of one joint and the minimum bore at the beginning of the next. Between the top two joints, the earliest instruments generally display either a negative difference, indicating that the middle joint is actually smaller at the top than the top joint is at the bottom, or only a slight difference, usually half a centimeter or less. Most transitional and later instruments on the other hand have a larger step between these two joints, some as large as a centimeter and a half. The glaring exception to this trend is an instrument by Rouge that has a bore step of almost two centimeters between the top and middle joints. A look at the steps between the bores of the middle and bottom joints reveals no obvious trend. Instruments from all stages of the century have both small and large differences. No instruments display a negative difference between these two joints, but all fall between zero and six centimeters, with a median difference of 3.65.

CHAPTER 4

CONCLUSION

The eighteenth century was a time of development and establishment for the oboe. The degree to which the instrument does not change during this period indicates an acceptance of the oboe and its attributes, while the subtle changes wrought upon it give evidence to the changing tastes and aesthetics of the time. The exteriors of these instruments help to give a visual overview of the instrument in its various stages throughout the century and provide a superficial indication of the influence of cultural tastes upon the oboe. Conversely, investigation of the interior reveals a more gradual evolution throughout this time period, indicative of the changing technical requirements and pitch levels.

While in many ways, the oboe of 1700 is very similar to that of 1830, the delicate refinements applied to this instrument in that time pave the way for the modern oboe. Variations in the practices applied to oboe building, both in terms of the exterior and the interior, led to the genesis of the nineteenth-century oboe, the instrument that would become the basis for the modern oboe. Thus the eighteenth-century oboe connects the experimental seventeenth-century oboe to the widely-used modern oboe.

The developments to the French oboe did not occur in a vacuum.

Although the early stages are clearly French, it is impossible to discount the international appeal and use of the instrument. While an examination of the French instruments alone helps to establish the patterns evident in those oboes, the results could serve as the basis for a comparative study between these instruments and those of other countries of the same period. This in turn would shed greater light on the history of the oboe in general.

APPENDIX A

ALPHABETICAL LISTING OF INSTRUMENTS AND THEIR LOCATIONS

APPENDIX A

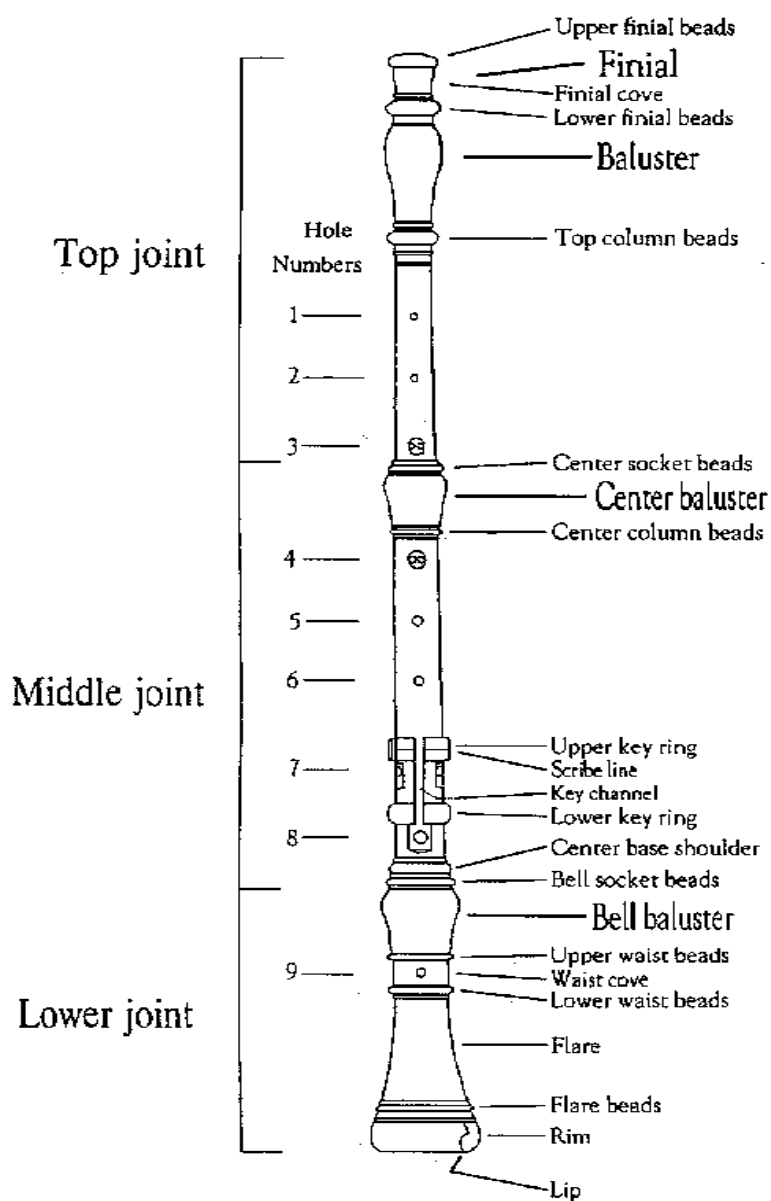
ALPHABETICAL LISTING OF INSTRUMENTS AND THEIR LOCATIONS

Maker	Location, number
Amlingue	Angoulême, Marc Ecochard Collection
Charles Bizey	Basel, Collection of Michel Piguet
Charles Bizey	Oxford, Bate Collection, 201
Charles Bizey (tenor oboe)	Paris, Musée Instrumental du Conservatoire, 2351
Hypolyte Camus	New York, Metropolitan Museum of Art, 89.4.894
Cuvillier	Bingham Inventory 1 June 1993
Cuvillier	Bingham Inventory 25 June 1992
Debey	Oxford, Bate Collection, 2
Christophe Delusse	Collection of Alfred Hertel
Christophe Delusse	Collection of Han de Vries, 27
Christophe Delusse	Leningrad, Permanent Exhibition of Musical Instruments, 505
Christophe Delusse (bell by Thomas Lot)	London, Horniman Museum, 14-5-47/202
Christophe Delusse	Oxford, Bate Collection, 20
Christophe Delusse	Oxford, Bate Collection, 202
Christophe Delusse	Paris, Musée Instrumental du Conservatoire, C481
Deschamps	Bingham Inventory 1993
Baptiste Desjardins	Winston-Salem, NC, Wachovia Museum, O-113
Dupuis	Berlin, Musikinstrumenten-Museum, 2933
Hotteterre	Sold at Sotheby s, 11 May 1981, present location unknown

Nicolas Hotteterre (bell marked Debey)	Brussels, Musée Instrumental du Conservatoire, 2320
Gilles Lot	Angoulême, Marc Ecochard Collection
Gilles Lot	Collection of Han de Vries, 18
Martin Lot	Angoulême, Marc Ecochard Collection
Martin Lot	Brussels, Musée Instrumental du Conservatoire
Martin Lot	Vermillion, S.D., Shrine to Music Museum, 4546
Thomas Lot	Oxford, Bate Collection, 24
Naust	Montréal, Collection of Bruce Haynes
Noblet Frères	Sold at Sotheby's 6 March 1979, present location unknown
Panormo	Bingham Inventory June 1 1993
Vincent Panormo	Basel, Collection of Michel Piguet
Vincent Panormo	Sold at Sotheby's 21 June 1984, present location unknown
Porthaux	Bingham Inventory 1993
Prudent	Versailles, Olivia Cottet Collection
Jean-Jacques Rippert	Geneva, Musée Instrumental
Jean-Jacques Rippert	Leipzig, Musikinstrumentenmuseum der Karl Marx, 1312d
Rouge	Paris, Musée Instrumental du Conservatoire, E.979.2.12
Rouge	Washington, DC, Library of Congress, 423
Guillaume Triébert	Angoulême, Marc Ecochard Collection
Guillaume Triébert	London, Paul Goodwin Collection
Guillaume Triébert	Peter Hedrick Collection
Paul Villars	New Haven, CT, Yale University Collection, 3418.86

APPENDIX B
NOMENCLATURE OF THE OBOE

APPENDIX B

NOMENCLATURE OF THE OBOE¹

¹Cecil Adkins, Proportions and Architectural Motives in the design of the Eighteenth-Century Oboe, *Journal of the American Musical Instrument Society* XXV (1999): 128.

WORKS CITED

- Adkins, Cecil. The German Oboe in the Eighteenth Century. *Journal of the American Musical Instrument Society* XXVII (2001), in preparation.
- Adkins, Cecil. Proportions and Architectural Motives in the Design of the Eighteenth-Century Oboe. *Journal of the American Musical Instrument Society* XXV (1999): 95-132.
- Adkins, Cecil. William Milhouse and the English Classical Oboe. *Journal of the American Musical Instrument Society* 22 (1996): 42-88.
- Bate, Philip. *The Oboe*. 3rd ed. New York: W. W. Norton & Company Inc., 1975.
- Bessaraboff, Nicholas. *Ancient European Musical Instruments*. Boston: Harvard University Press, 1941.
- Bowers, Jane M. The Hotteterre family of woodwind instrument makers. In *Concerning the Flute*. ed. Rien de Reede, 33-54. Amsterdam: Broekmans & Van Poppel B.V., 1984.
- Carroll, Paul. *Baroque Woodwind Instruments*. Brookfield, Vermont: Ashgate Press, 1999.
- Carse, Adam. *Musical Wind Instruments*. New York: Da Capo Press, 1965.
- Du Pradel, Abraham. *Livre commode contenant les adresses de la ville de Paris, et le trésor des almanache pour l'année bissexile*. Paris: 1692. Cited in William Waterhouse, *The New Langwill Index*, 98. London: Tony Bingham, 1993.
- Garnier, Joseph François. *Méthode raisonnée pour le hautbois*. Paris, c. 1800. Cited in: William Waterhouse, *The New Langwill Index*, 85. London: Tony Bingham, 1993.
- Giannini, Tula. *Great Flute Makers of France*. London: Tony Bingham, 1993.

- Grenser, Heinrich. [Remarks on the Writings of J. G. Tromlitz]. *Intelligenzblatt zur Allgemeine musikalische Zeitung* XI (15 March 1800): 44. Quoted in Bruce Haynes, *The Addition of Keys to the Oboe, 1790-1830*, 34. *Journal of the International Double Reed Society* 22 (1994): 31-46.
- Haynes, Bruce. *The Addition of Keys to the Oboe, 1790-1830*. *Journal of the International Double Reed Society* 22 (1994): 31-46.
- Haynes, Bruce. *Sweeter than Hautbois : Towards a Conception of the Baroque Period*. *Journal of the American Musicological Society* XXVI (2000): 57-82.
- Jansen, Will. *The Bassoon*. Buren, The Netherlands: Frits Knuf, 1978.
- Joppig, Gunther. *The Oboe and the Bassoon*. Translated by Alfred Clayton. Portland, Oregon: Amadeus Press, 1988.
- Mauger, Nicolas. *The Hotteterres, Famous Players and Makers of Flutes, Oboes, Bassoons, and Musettes of the Seventeenth and Eighteenth Centuries Recent Research*. Translated by Carol Padgham Albrecht. *Les Hotteterre et les Chédeville: Three Biographical Sketches in Translation*. Master's thesis, University of North Texas, 1980.
- Marx, Josef. *The Tone of the Baroque Oboe*. *Galpin Society Journal* IV (1951): 3-19.
- Mersenne, Marin. *Harmonie universelle*. Translated by Roger E. Chapman. The Hague: Martinus Nijhoff, 1975.
- Nickel, Ekkehart. *Der Holzblasinstrumentenbau in der Freien Reichstadt Nürnberg*. Munich: Emil Katzwichler, 1971.
- Sadie, Stanley, ed. *New Grove Dictionary of Musical Instruments*. London: MacMillan, 1984. S.v. Triébert, by Phillip Bate.
- Sadie, Stanley, ed. *New Grove Dictionary of Musical Instruments*. London: MacMillan, 1984. S.v. Noblet, by Niall O Laughlin.
- Sauveur, Joseph. *Principe d acoustique et de musique*. Paris, 1700/01. Cited in: William Waterhouse, *The New Langwill Index*, 329. London: Tony Bingham, 1993.

Selhof, Nicolas. Sale catalogue (The Hague, 1759). Cited in William Waterhouse, *The New Langwill Index*, 82-83. London: Tony Bingham, 1993.

Solum, John. *The Early Flute*. Oxford: Clarendon Press, 1992.

Thoinin, Ernest. *The Hotteterres and the Chédevilles*. Translated by Carol Padgham Albrecht. *Les Hotteterre et les Chédeville: Three Biographical Sketches in Translation*. Master's thesis, University of North Texas, 1980.

Waterhouse, William. *The New Langwill Index*. London: Tony Bingham, 1993.

Young, Phillip T. *4900 Historical Woodwind Instruments*. London: Tony Bingham, 1993.

Young, Phillip T. *Twenty-Five Hundred Historical Woodwind Instruments*. New York: Pendragon Press, 1982.