

WOODWIND TREATMENT IN THE EARLY BALLETS

OF JEAN-BAPTISTE LULLY

by

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ABSTRACT

The seventeenth century represents a crucial stage in the development and evolution of woodwind instruments. Older instruments, such as the crumhorn, rauschpfeif and, in France, the hautbois de Poitou and the musette became more or less obsolete in that century. On the other hand, such woodwinds as the bassoon, oboe, flute and the recorder underwent significant remodellings -- both structural and tonal -- from c.1640 to c.1660. It is generally agreed that the changes were effected in France, where, under the auspices of the Grande Ecurie du Roi, woodwind instruments traditionally had enjoyed a great popularity.

Theoretical sources describing woodwinds are completely lacking during the critical period of transition from the older instruments, such as those discussed in Marin Mersenne's Harmonie Universelle (1636), to their more modern counterparts, such as the oboes and recorders of Freillon-Poncein's La Véritable Manière d'apprendre à jouer en perpection du Hautbois, de la Flute et du Flageolet (1700). As a result, the nature of the remodelled instruments, when they first appeared in Paris, has remained difficult to ascertain.

This thesis attempts to come to terms with four of the remodelled woodwinds -- the bassoon, the oboe, the flute and the recorder -- by observing the treatment they received in the early ballets (that is, those of 1657-1670) of Jean-Baptiste Lully. The four chapters, each of which is devoted to a single instrument, divide themselves into two sections. The first part of each chapter puts the instrument under con-

sideration into historical perspective, and describes the nature of its remodelling. In the second section the musical sources are analyzed, and conclusions concerning the use of the woodwind are made.

In the absence of encyclopedic descriptions of woodwinds at the time of their remodelling, the early ballets of Lully assume especial importance. Through this medium it is possible to observe how the instruments were first used. Knowing how they were employed provides information which would be otherwise lacking.

Thesis Supervisor

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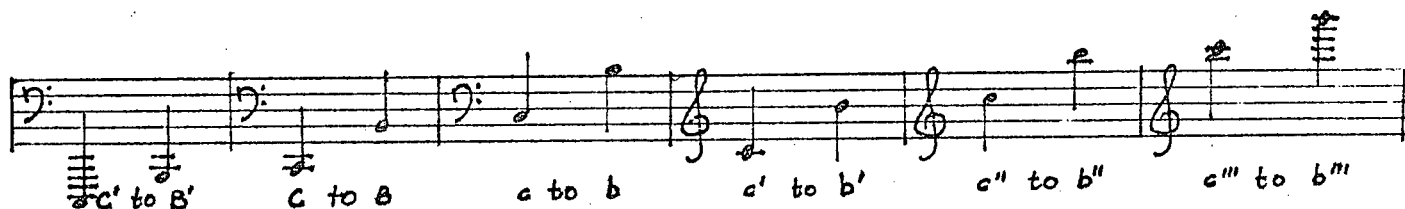
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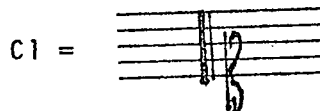
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ABBREVIATIONS AND SYMBOLS USED IN THIS STUDY

- I To avoid innumerable musical examples, the following method of octave identification has been adopted:



- II The various clefs to be encountered in the musical sources will be identified by the following patterns:



- III The periodicals listed below have been abbreviated as follows:

J.A.M.S. - Journal of American Musicological Society

Galp. Soc. J. - Galpin Society Journal

Mus. Q. - Musical Quarterly

R.M.A. Proc. - Proceedings of the Royal Musicological Association

S.I.M.G. - Sammelbände der Internationaler Musik-Gesellschaft

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INTRODUCTION

"C'est donc dans les ballets que gît le secret de son style instrumental et vocal. C'est en étudiant ses premières oeuvres qu'on peut le mieux se rendre compte des conditions dans lesquelles il s'est formé et des influences qui s'exercèrent d'abord sur lui."¹

Jean-Baptiste Lully (1632-1687) entered the services of Anne Marie Louise d'Orléans, 'La Grande Mademoiselle', upon his arrival in Paris in 1646. Beginning with this position, and culminating in his ultimate appointment as Surintendant de Musique in 1661, Lully was to become increasingly involved in the divertissements at court, especially the ballets de cour. By the mid-fifties Lully was contributing his own compositions to the court ballets, as well as dancing in them along side the nobility.²

In January, 1653, the court was preoccupied with the forthcoming production of Le Ballet de la Nuit. Lully was invited to attend one of the rehearsals at the Louvre. There the Comte de St Aignan introduced him to Louis XIV. Lully was subsequently asked to perform

¹ Henry Prunières: "Les premiers ballets de Lully", La Revue Musicale, June, 1931, No. 116, p. 1; also quoted in Henry Prunières, (edit.): Oeuvres Completes de Jean-Baptiste Lully, Tome 1, Paris Editions de la Revue Musicale, 1931, p. XIII.

² The ballets involved the co-operation of a great number of artists, writers, composers and musicians. Under Lully the genre was to gain unity through the inclusion of only one librettist and a single composer.

in a number of entrées. The young musician immediately took control of the situation and rehearsed both dancers and orchestra (Les vingt-quatre violons du Roi) with uncanny zeal. He even tactfully coached Louis XIV in some of his entrées. The ballet, the King and Lully were an impressive success at the court première, 23 February, 1653. R.H.F. Scott effectively summarizes the resultant situation:

"The King, grateful for Baptiste's assistance, thenceforward held him in high esteem and even affection...Louis consulted him on anything to do with the theatre, whether it was dancing, music or scenery, knowing that he would always receive an intelligent answer, even though it might be delivered brusquely."³

The fruit of this new-found esteem first appeared shortly after the success of Le Ballet de la Nuit; Lazarin, a violinist in the vingt-quatre and admired court composer, died. Lully asked for his post, and on 16 March, 1653 was made compositeur de la Musique instrumentale.⁴ In this position Lully composed his first dances for the Royal Ballet, collaborating with two colleagues, Mazuel and Verpré.

By November, 1654 Lully completed and produced his Ballet du Temps, the first work in which the music was entirely his. As compositeur de musique instrumentale he was charged with conducting the Grande Bande (Les Vingt-quatre), but Lully found this famous group beyond his control, for they were prone to over-embellishing his compositions. In

³R.H.F. Scott: Jean-Baptiste Lully, London, Peter Owen, 1973, p. 35.

⁴Henry Prunières: La vie illustre et libertine de Jean-Baptiste Lully, Paris, 1925, p. 63.

reaction, he obtained permission to band together a group of twenty young musicians and to form what was later dubbed les Petits Violons. Within a few months of his ardent tuition they had acquired a greater reputation than the Grande Bande. During the last years of the fifties, Lully solidified his position and status with Louis XIV, while his reputation as dancer, violinist and composer continued to increase, much to the disdain of his French contemporaries.

On 3 May, 1661, Cambefort, Surintendant de la Musique de Chapelle, died, leaving open his much-coveted position. Scott describes the ensuing events:

"As soon as the opportunist Baptiste heard of this, he hastened to Colbert who spoke to the King, and Lully was granted Letters Patent appointing him superintendent of Music and composer for the Musique de la Chambre."⁵

Lully's compositions were, in other words, quickly becoming the only ones to which the King was exposed. Moreover, in his capacity as Superintendent he had access to all the instrumental forces affiliated with the court divertissements -- the Musique de Chapelle, the Musique de Chambre and the Musique de l'Ecurie. The availability of the strings and various wind instruments permitted Lully to experiment with them, and to employ them consistently in his ballets of 1654-1670.

Le Ballet de Cour

This study will attempt to clarify Lully's use of woodwinds in

⁵R.H.F. Scott: Op.Cit., p. 42.

his early ballets, from c.1653 when he was first introduced to Louis XIV, until 1670, after which time, tragédies lyriques became the dominant court entertainment in France.⁶ Not only were these years of paramount importance in Lully's own career but, as will be seen, they were also of crucial significance in the evolution of the so-called modern woodwind.

Although it may be asserted that Lully both consolidated and created aspects of the French operatic tradition, the same is not true of his ballet compositions. The history, function and form of the ballets de cour (though freely evolving) was well-established by the time of Lully's arrival in Paris. It is therefore necessary to trace briefly the history of the genre, in order to understand better the forces and resources with which Lully first composed at the French court. This short survey attempts only to indicate major developmental currents and directions taken by the genre until Lully's arrival on the scene.

The history of courtly entertainments involving dance is a very long one; the ballet de cour, in its final development, however, was less than one hundred years old by the middle of the seventeenth century. Marcel Paquot gives a very succinct description of the genre:

"The ballet de cour was born during the reign of Henri III from a fusion of elements borrowed on the one hand from the momeries, entremets and joutes of medieval times, and on the other hand from the masquerade and intermedii of the Italian Renaissance."⁷

⁶ Indeed, Louis XV was not at all enamoured with ballet, and greatly preferred opera. See M. Paquot: Les Etrangers dans les Divertissements de la cour, Bruxelles, 1933.

⁷ Ibid. p. 10.

The most comprehensive researching of the ballet de cour is to be found in Prunières' Le Ballet de cour en France avant Benserade et Lully, a work which studies in depth the evolution of this divertissement. Such ancient pastimes as les momeries which were merely a series of entrées much like a pageant, involved costumes and some dances; and les moresques were, according to Prunières, expanded throughout the fifteenth century.⁸ He continues:

"What is still lacking in these divertissements is coherence, dramatic unity... It will be, as we shall see, the task of the humanists to give a relative unity to these spectacles, and to form, with these sparse elements, a dramatic genre."⁹

It was, in fact, through the work of the Académie de Poésie et de Musique, founded under Henri III in 1570 by Jean-Antoine de Baïf (1532-1589), that the first unified ballets de cour appeared.¹⁰ Members of this academy included such well-known writers as Jodelle and Ronsard, and composers such as Jacques Mauduit and Claude LeJeune.

In 1581, the Queen's half-sister, Mademoiselle de Voudemont, married the Duc de Joyeuse. To celebrate the occasion, Henri III and the entire Valois household presented a great series of splendid fêtes.

⁸ Henry Prunières: Le ballet de cour avant Benserade et Lully, Paris, H. Laurens, 1913, p. 8.

⁹ Ibid. p. 17.

¹⁰ Full details of the patent for the Académie's foundation are found in Frances Yates: French Academies of the 16th Century, London, Warburg Institute, App. 1, pp. 319-322.

Frances Yates¹¹ suggests that the Valois hoped to appease both internal strife and external aggression by showing the world the magnificence of which France was capable.¹² One of the entertainments was a ballet, Circé, which was called by the impresario responsible for its creation, Le Ballet Comique de la Royne. The idea for the production was by Baltasar de Beaujoyeulx, an Italian who had come to France as a member of the Marcheal de Brissac's band of violins.¹³ As was the custom of the time, his conception was translated into a ballet through the collaboration of poets, writers, painters, composers and musicians. The result in this case marked a considerable change from the norm; as Carol MacClintock says, "it is the first known work to intentionally combine dance, poetry and music in a coherent dramatic whole".¹⁴ The story permitted the inclusion of a great variety of entrées, special stage effects, dancing and much music, but these otherwise disparate elements of the ballet all related to the story.

The new found dramatic unity of Le Ballet Comique de la Royne was subsequently lost during the last decade of the sixteenth century.¹⁵

¹¹ ibid., p. 258.

¹² Robert Isherwood, in his Music in the Service of the King (Ithica, N.Y., 1973), maintains that the entire phenomenon of lavish court entertainments under Louis XIV was largely owing to a similar political function.

¹³ His Italian name was Baldassare de Belgioso.

¹⁴ C. and L. MacClintock: Le Ballet Comique de la Royne (1581), American Institute of Musicology, 1971, p. 9.

¹⁵ Henry Prunières: Op.Cit.: p. 110.

According to Prunières,¹⁶ there were during that period two contrasting varieties of ballet: the first, les mascarades, was dominant until the end of the century, involving entrées and dances in costume, but with no sung dialogue; the second, les intermedes, used sung récits and choruses. The ultimate direction, first hinted at in Circé, was an amalgamation of these two approaches. Prunières suggests:

"Around 1620, however, the ballet de cour constituted a well-defined dramatic genre. Intermediary between opera and ballet-mas-carade, it catered to the love which the French had for expressive dance and theatre."¹⁷

During the Regency and the reign of Louis XIII there was a strong tendency toward a uniform and unified genre. There remained, nonetheless, two basic categories into which the ballets fell: sérieuse and comique.¹⁸ The codification of the ballet involved a standardization of customs, and especially content: nearly always a mythological allegory complimenting the royal family, or revealing topical activities and political intrigue. To accommodate a need for variety in an increasingly sterile medium, diverting entrées were often introduced, providing comic relief from a complex plot or theme. As this tendency progressed, thematic unity and theatrical considerations once more became somewhat obscured.¹⁹

The instruments in common use by the time of Lully's first experiences with ballet de cour included, of course, the instruments from

¹⁶ Ibid., p. 34.

¹⁷ Ibid., p. 121.

¹⁸ Ibid., p. 123. The ballet comique employed spoken dialogue, while the ballet-sérieuse used sung recits.

¹⁹ Ibid., p. 128.

the three branches of the King's music.²⁰ Also included, if the dramatic situation so warranted, were such popular instruments as the musette or flageolet. It was in this state that ballet was first introduced to the young Lully.

As has been suggested, the young monarch of France was very much interested in Ballet de cour. In his memoirs, for example, Louis frequently wrote at great length about his participation in specific productions, and of the great joy which they afforded him.²¹ His pro-ballet (or pro-divertissement in general) policy dictated to Lully the path to pursue. Baptiste's shrewd selection of collaborators put his name beside the most famous writers of his day -- Benserade, Corneille, Molière and eventually Quinault. With such distinguished writers as partners, it is easy to see why the 'Lully version' of ballets attained a thematic unity and dramatic purpose hitherto unapproached.²² The heavy emphasis on music in Lully's ballets, and the importance of dance and ballet-entrées in his later operas, made the transition from ballet de cour to tragédie-lyrique a very smooth one, indeed.

The major aesthetic and evolutionary aspects of the genre now established, we may turn to the basic make-up of the ballets, their construction and the personnel required. Three elements constitute the ballet de cour: dance; music -- both vocal and instrumental -- and

²⁰See Infra.: p. 10.

²¹J. Lognon (edit.): Memoires de Louis XIV, Paris, Tallandier, 1927; especially as quoted by M. Paquot: Op.Cit.

²²See Henry Prunières: Op.Cit., p. 129.

costumes. Since costumes have no direct bearing on the question at hand, they will not be discussed.²³ The dances, however, have a profound influence on many aspects of the music to be discussed: tempo, of course, was dictated by the dance steps; also, since entrées were often of an extended length, the music was repeated many times, resulting in the need for both written and improvised ornamentation, and requiring texture changes to vary the musical material.²⁴

The dance, with reference to the ballets de cour, was neither exclusively folk-like (that is based entirely on socially current dances, such as bourées, allemandes, etc.), nor choreographed in the nineteenth-century sense of the term (that is mimed story-telling). Rather the many entrées involved a few basic steps through the use of which figures both geometric and allegoric, were designed on the floor. The basic steps, of course, had countless variations. As Prunières notes:

"The dance peculiar to ballet had nothing in common with the dance of the ball; the steps were not all subjugated to the traditional rules; they were infinitely varied."²⁵

²³Prunières, in the introduction to his Oeuvres Complètes de Jean-Baptiste Lully, Tome 1, gives an adequate description of the use and design of costumes in Lully's ballets. For further information, see Isherwood: Op.Cit.

²⁴See H.M. Ellis: The dances of Jean-Baptiste Lully, Doc. Dissert., Stanford U., 1967, for a somewhat cursory discussion of the relationship of dance to music.

²⁵Henry Prunières: Op.Cit., p. 172.

Popular dances and even choreographed 'choruses' were frequent additions to the format, for they could be included in the action if a story required the representation of a fête or a ball. Originally the dancing of the ballets was an exclusively aristocratic prerogative; the King and 'high' nobles were habitual participants, and, indeed, the young Louis XIV was greatly admired for his dancing abilities.²⁶ Prunières notices that the only non-aristocratic personnel, as late as Circé (1581), were the court musicians. By the turn of the century, though, professionals -- baladins, instrumentalists and vocalists -- took their positions along side the nobility.²⁷

Dating from the earlier precursors of the ballets de cour is the inclusion of significant numbers of instrumentalists, who played fanfares, entr'actes and also accompanied dances, entrées and vocal numbers. By Lully's time the instrumental forces were often considerable. After 1661, as the new Maître de Musique, Lully, by virtue of his position, was able to draw on instrumentalists from the three main departments of the King's music: Musique de Chapelle; Musique de Chambre and Musique de l'Ecurie. The Ecurie was the most important of the departments for wind players; it included (1) the trumpets, (2) the fifes and drums, (3) the violins, shawms and sackbuts, (4) the krumhorns and trumpets marine and (5) the oboes and Musettes de Poitou. Prunières states:

²⁶ Henry Prunières: Op.Cit., p. 173; see also Robert Isherwood: Op.Cit.

²⁷ Ibid., pp. 173-174.

"It was not at all rare that a royal ballet required the united intervention of musical forces from the Chamber, Chapel and Stable. All these artists, in taking part in the execution of a ballet, separated themselves into several groups, each one having its particular attributes and function."²⁸

The exact number of participating musicians in a given performance, of course, cannot always be precisely ascertained; the resources, however, were substantial, for as Demuth notes:

"Lully had a hundred and fifty musicians to draw upon... He could transport them to Saint-Germain, Versailles, Paris or any of the royal chateaux at a moment's notice, and he could use them as the orchestra in the Salle du Palais Royal whenever necessary."²⁹

Besides greatly contributing to the overall opulence of the spectacles, the large forces also catered to various musical ends and higher artistic goals. Demuth continues:

"Lully treated the instruments of the orchestra expressively, but only in a general sense; there are no subtleties of orchestration."³⁰

Demuth gives, further, an effective summary of some of the roles played by certain instruments.

²⁸ Henry Prunières: Op.Cit., p. 182. It will be one of the goals of this study to define these functions.

²⁹ Norman Demuth: French Opera: its development to the Revolution, Sussex, Artemis Press, 1963, p. 96.

³⁰ Ibid., p. 165. It is difficult to know what Demuth means by 'subtlety'; certainly there are no orchestrational subtleties in the Mozartian sense. Lully's innovations in his use of woodwinds, however, have few, if any, precedents, as will become clear later on.

"Flutes sounded the amorous moments of the gods and goddesses, and they created the atmosphere for the scènes de sommeil and nocturnes, during which magic rites took place. Oboes were used for the peasant dances, trumpets supplied the warlike and martial music, while violins underlined the slumbers of the heroes and added excitement (tremolando) to the battles, 'furies' and storms."³¹

There was a great variety of instruments in use by Lully's time, then, and they played an important role in the divertissements de cour.

Developments in Seventeenth-Century Woodwind Instruments

The great influence that seventeenth-century French ballets had on the development of modern orchestral practice cannot be too strongly emphasized. French theatre in general, especially under the leadership of Jean-Baptiste Lully, was the birthplace of modern woodwinds, and it established a model for their use. Charles Cudworth continues:

"In France particularly the early development of a regular orchestra of the modern kind, with many players to each individual part, was closely linked with the court and its cult of ballet."³²

Lully's use of four woodwinds will be discussed in this study: the bassoon, the oboe, the flute and the recorder. The great period of innovation for all these woodwinds as they quite quickly evolved in Paris

³¹ Ibid., p. 165.

³² Charles Cudworth: "Baptiste's Vein -- French Orchestral Music and its influence from 1650-1750", R.M.A. Proc., 83: 1956-1957, p. 29.

coincides with their inclusion in the early ballets of Jean-Baptiste Lully.

The first appearance of the newer woodwinds by the middle of the seventeenth century was an almost exclusively French phenomenon. Anthony Baines³³ maintains that Italy, specifically the Bologna school, gave an over-riding importance to the recently-perfected violin, admitting at times the trumpet to add brilliance to its string ensembles. He continues:

"... the boy Lully, who was to become the first composer for the woodwind, no doubt set out for Paris with no better opinion than other Italians³⁴ as to the possibilities of wooden wind instruments."

In France, however, the recorder, musette and hautbois de Poitou were enjoying a great currency not only in aristocratic circles, but also as solo and ensemble instruments, for which an ever-increasing repertoire was being made available to professional players. Included in the ranks of these virtuosi was a group of Parisian woodturners and instrument-makers, centering around Jean Hotteterre (?-c.1678) and Michel Philidor (?-1659).

The Hotteterre family, who were to play a major role as court instrumentalists for over a hundred years, came from the Normandy village of La Couture-Boussey. The first member to appear in Paris was Jean, the earliest record of his residence being his inclusion as an instrumentalist

³³Anthony Baines: Woodwind Instruments and their history, London, Faber and Faber, 3rd edit., 1967, p. 275.

³⁴Ibid.

In the 1657 production of l'Amour Malade.³⁵ The Philidors already established as instrumentalists in Paris, had as a real surname, Danican.

George Allen describes the circumstances leading to the change of names:

"In the early part of the seventeenth century, an Italian haut-boy player, from Sienna, by the name of Filidori, visited France, and produced a strong impression on the mind of Louis III by his brilliant performance."³⁶

Michel Danican entered the services of the King shortly afterward, and the young French virtuoso so impressed the King that he was called a Filidori, or, in its French form, Philidor.³⁷

Hotteterre was a fine woodturner and had earned his fame as an instrument maker through his widely-admired musettes; while Philidor was an expert reed-maker, being capable of refinements in the thickness of these to a degree previously unknown.³⁸ Their imminent collaboration in the development of modern double reeds was not, however, the first major remodelling. Hotteterre, at first, worked with his sons in a shop where he manufactured and repaired instruments. Anthony Baines notes:

"His recorder design -- probably the earliest of the important woodwind remodellings, and the design we follow today -- seems to show the hand of a bagpipe-maker, especially with its cylindrical head joint, which, whatever its acoustical effect

³⁵A.E. Roquet: Les Hotteterre et les Chèdeville, Paris, 1894, p. 15. Also appearing on the program were his two sons, Jean II and Nicolas Ier.

³⁶George Allen: The Life of Philidor, Da Capo Press reprint of 1863, Philadelphia edit., N.Y., 1971, p. 1.

³⁷Ibid., p. 2.

³⁸See Joseph Marx: "The tone of the Baroque oboe", Galpin Soc. Journal, IV, June, 1951, p. 13

might be, takes after the chanter stock of a musette as if meant to match it."³⁹

Shortly afterward, during the early 'fifties', experimental instruments in a transition phase started to appear in the Hotteterre workshop. Many of these attempts, especially recorders and oboes, may be observed in the museum collections of the Bibliothèque Nationale and the Bibliothèque de Conservatoire.

The instruments with which Hotteterre and Philidor worked⁴⁰ were of an older variety -- instruments which had remained ostensibly unchanged since their perfection for consort use, early in the sixteenth century. They fell into one of two categories: the haut, or loud consort, including the shawms, crumhorns and pommers (or later, curtals); and the bas, or soft consort, admitting such instruments as recorders, flutes and occasionally a curtal.⁴¹ The instruments were simple in their outward appearance, frequently revealing key mechanisms on the larger instruments. Each instrument belonged to a family of four basic sizes -- the soprano (dessus), the alto (hautecontre), the tenor (taille) and the bass.⁴² The tenor, which in every family but the shawms⁴³ represented

³⁹Anthony Baines: Op.Cit., p. 274.

⁴⁰It was Michel de la Barre, a noted eighteenth-century flutist, who cited Hotteterre and Philidor as coinventors of the oboe in a letter dated 1740. See Joseph Marx: Op.Cit., p. 12.

⁴¹By the later sixteenth century, of course, the two groups were freely mixed with appropriate doublings to balance the texture.

⁴²Virdung (1511) mentions these four. In Praetorius (1616-1618), however, such families as recorders were illustrated as having at least ten members.

⁴³The shawm band aligned itself in a way that saw the alto as a primary member of the family, playing the soprano line.

the 'standard' for the group, usually produced in its natural fingering a diatonic d-major scale. There were no transposing woodwinds.⁴⁴

Characteristic of the woodwinds was a wide cylindrical bore and large finger holes. The resulting sonority resisted most overtones and the sound was loud and pure in the lower register.⁴⁵ For the most part, the sixteenth- and early seventeenth-century woodwind had a limited range which rarely exceeded a twelfth.⁴⁶ With the exception of the bassoon, or curtal, the early seventeenth century saw no 'Free' double reeds; they were either contained within a reed capsule, as with the crumhorn and rauschpfeif, or partially covered and protected by a pirouette, as was the case with the shawm. The pirouette is a mouthpiece-like cup against which the players lips are pressed. Although it provides embouchure support and facilitates playing with very little wind pressure, the lips have little control over the reed, and consequently can exercise only minimal intonation alterations. Moreover, a uniform wind pressure is required, allowing practically no dynamic inflections. The ultimate removal of the pirouette in the transition from shawm to oboe required the adoption of increased embouchure subtlety, but, of course, greatly enhanced the tonal and expressive range of the instrument.

⁴⁴Because of a faulty f' on the shawm, the bands as a rule transposed their music up a whole tone, to avoid a series of bad fingerings and intonation problems.

⁴⁵See Adam Carse: Musical Wind Instruments, London, MacMillan and Co., 1939.

⁴⁶The crumhorn had a uniform range of only a ninth. The shawms, on the other hand, had a two-octave compass.

The specific alterations in the woodwinds undertaken by Hotteterre and Philidor will be dealt with in detail with reference to each instrument individually later in this study. Certain generalizations concerning these processes, however, may be briefly summarized at this point. The goal of the many innovations was to produce instruments which would be well-suited to solo and concerted usage; hence, increased range, dynamic flexibility and improved intonation were major aims in these developments. Anthony Baines states:

"The first thing we notice about the new designs is that in every case the instrument is constructed in several short joints, instead of as far as possible all in one piece as formerly."⁴⁷

This particular innovation is of great significance. In using the older methods, the bores were drilled in one piece with one long drill bit. Understandably, with the larger sizes, the ends of the bores, when the drill bit was fully extended, were subject to considerable amounts of wobbling, thus producing inaccuracies, faulty sonorities and bad intonation.⁴⁸ The new approach, though, employed short, accurate bore drillings in all sizes of instruments. This method resulted in what Baines calls a "... curious internal feature"⁴⁹ the instruments, drilled in several sections, showed bores with broken profiles. Baines continues:

"It [the bore] may change from joint to joint -- e.g. cone and cylinder may meet end to end, or

⁴⁷Anthony Baines: Op.Cit., p. 276.

⁴⁸This method resulted, further, in chipping inside the bore.

⁴⁹Ibid.

the bores of two joints may make an abrupt step where they meet. Such bore construction naturally has some acoustic effect, but this is not a vital one."⁵⁰

Another technique in boring played an important role in the extension of the range of late seventeenth-century woodwinds: the bores were made inversely conical -- that is tapering toward the bell -- as opposed to cylindrically. This feature tended to excite the upper partials of each tone, thus enhancing a larger range in the second octave.⁵¹ The range was further extended by slightly narrowing the bore and making the finger holes somewhat smaller.⁵²

In outward appearance, too, the woodwinds underwent some remodellings. Baines suggests:

"We notice the characteristically ornamental appearance of the instruments, largely due to fashionable Renaissance turnery applied to the thickenings left in the wood or ivory to give strength to the sockets where the various joints met."⁵³

To facilitate fingering, two items were introduced: first, on the larger instruments especially, the finger holes were moved closer together by drilling them on a diagonal, while maintaining the correct spacing on the inner bore; secondly, keys were added to (a) extend the range downward

⁵⁰ Ibid.

⁵¹ For an interesting and well-presented discussion of this and related acoustical phenomena, see: Lyndesay G. Langwill: The bassoon and contrabassoon, London, E. Benn 1965, Chapter '9', "Acoustics".

⁵² Ibid.

⁵³ Ibid.

one tone⁵⁴, or (b) provide chromatic notes with otherwise difficult or impossible cross-fingerings. The extra note-hole was drilled on the foot-joint; in the case of the tenor recorder, for example, the lowest note became c'. Two keys were added to the oboe: the c-extension; and an E-flat key. Until the early eighteenth century, keys were usually duplicated on both sides of the instrument to cater to both left- and right-handed players, the stop or hole not in use being plugged with wax.⁵⁵

It can be seen even in this brief summary, that renovations on the woodwinds under consideration were carried out extensively and with great care and attention. Hotteterre and his circle, therefore, were to have a profound influence on the development of the modern woodwind. As Baines concludes:

"... it is impossible for us to say definitely which individual maker or player was responsible for each of the vital woodwind inventions that originated during that time, all of them apparently in France and probably within that circle of Paris makers among whom we can dimly discern Hotteterre as the leader. The new products included: the recorder as we know it today; the conical flute; the oboe; and the true bassoon (as opposed to the old curtal). In other words, practically the entire woodwind of the eighteenth-century orchestra -- an astonishing out-

⁵⁴The flute's lowest note remained d' until well into the eighteenth century.

⁵⁵See Adam Carse: Op.Cit.; Jacques Hotteterre: Principes de la flûte traversière, ou flûte d'Allemagne; de la flûte à bec, ou flûte douce et du hautbois, is one of the first sources to state without hesitation that the left hand should be above the right.

put for one small group of men."⁵⁶

Since such virtuoso players as Hotteterre, Philidor, Destouches and Descoteaux appear regularly in the programs of the divertissements from the mid 'fifties', there can be little doubt that Lully would avail himself of the potentials provided by their remodelled instruments. This study will observe the writing for these woodwinds in an attempt to trace developments in range, function, etc., through the medium of Lully's early ballet scores.

The Sources

The sources required for a study such as this are absolutely essential as final proofs or disproofs of a theory. They are, in this instance, dangerously small in number. The primary literary sources are almost non-existent with regard to encyclopedic discussions of the various instruments at the time of their remodelling. Sources for descriptions and technical discussions of sixteenth-century instruments are amply provided in Sebastian Virdung's Musica Getutsch..., (1511) and Martin Agricola's Musica Instrumentalis Deusch..., (1528 and 1545). Those of the early seventeenth century are thoroughly presented in Michael Praetorius' Syntagma Musicum (1616-1619), and later in Marin Mersenne's Traité de l'Harmonie Universelle (1636). Unfortunately, similar exhaustive studies do not appear in the crucial period of 1650 to 1680. Moreover, French publications such as tutors, manuals and the

⁵⁶Anthony Baines: Op.Cit., p. 276.

like do not appear until the turn of the century, and when they do -- e.g. Freillon-Poncein's La véritable manière d'apprendre... du hautbois, de la flûtes et du flageolet (1700), or Jacques Hotteterre's Principes... (1707) -- they describe instruments which have changed considerably from the time of Mersenne. As Eppelsheim points out,⁵⁷ Mersenne neglected to provide such basic information as the fundamental tones of flutes and recorders, while providing only cursory details for the oboe. Mersenne does promise a discussion of the hautbois de Poitou, but this subsequent chapter of Book V is devoted exclusively to bassoons. John Banister, the supposed author of the first oboe tutor, The Sprightly Companion of 1695, must have had access to the new French instrument which had appeared almost forty years earlier. Freillon-Poncein's work, the first French tutor for the oboe, does not appear until five years after Banister's. Likewise with the recorder, there are no treatises or manuals contemporaneous with the arrival of the new model. Eppelsheim⁵⁸ again turns to English sources, for Humphrey Salter's The Genteel Companion (London, 1683), and John Carr's The Delightful Companion (London, 1684), are the first manuals to describe the Hotteterre version of the alto recorder.⁵⁹ The annoying

⁵⁷ Jurgen Eppelsheim: Das Orchester in den Werken Jean-Baptiste Lullys, Tutzing, Hans Schneider, 1961, p. 70.

⁵⁸ Ibid., p. 71.

⁵⁹ The alto before this time is a fourth above the d'-tenor, i.e., in g'. Praetorius gives this as the alto's fundamental. Mersenne neglects to give ranges. With extension down one tone, then, the Hotteterre recorder becomes one in f', the one mentioned by Carr and Salter.

hiatus in literary sources of French origin necessitates either the forward extension of Mersenne's discussions, or the backward extrapolation of the writings of Hotteterre, Freillon-Poncein and Brossard.⁶⁰ It is hoped, therefore, that the analyses of the musical sources will provide the missing documentation of the woodwind's evolution.

The musical sources are as problematic as theoretical ones. In the introduction to Lully's Oeuvres Complètes, Prunières informs us:

"Lully himself only published eleven scores of operas and six grand motets."⁶¹

In the light of the great volume of music Lully composed, this is hardly an impressive corpus of his work. Unfortunately, as Eppelsheim continues:

"Autograph sources by Lully, except for a few isolated pages, are not preserved."⁶²

In fact, Ellis asserts, "...all works before 1672, except La Grotte de Versailles and Monsieur de Pourceaugnac, are available only in manuscript form."⁶³ Moreover, they are hand copies, not by Lully, of the full scores, either authorized or unauthorized by the composer. By far the

⁶⁰ That 1650-1680 was a period of woodwind transition may account for the dearth of French literary sources.

⁶¹ Henry Prunières: Op.Cit., p. VIII.

⁶² Jürgen Eppelsheim: Op.Cit., p. 15.

⁶³ H. M. Ellis: "The Sources of Jean-Baptiste Lully's secular music", Récherches sur la Musique française Classique, VIII, 1968, p. 107.

largest and most reliable source of these scores is the Collection Philidor, found, in part, in the Bibliothèque de Conservatoire at Paris.

As to the quality of the Collection Philidor, Ellis assures us:

"These manuscripts are a good source of the musical text, and in some cases are the only sources available in P.G. [i.e., Partition Générale, or Full Score]." ⁶⁴

The collection, initiated by a request by Louis XIV for a compendium of the divertissements which had entertained the French court, was begun in 1683 by the King's music librarian, André Philidor l'aîné, ⁶⁵ and his colleague, François Fossard. The large undertaking was completed, for the most part, by 1697, but as Tessier notes ⁶⁶, the vast majority of the scores were copied between 1689 and 1690. The project divided itself into three categories:

"(1) Les pièces de toutes sortes -- ballets et autres - datant du XVII^e siècle et des règnes de Henri IV et Louis XIII..."

(2) Les ballets de la jeunesse de Louis XIV...

(3) Les ballets et comédies-ballets de Lully...." ⁶⁷

Of the third section Philidor says in the dedication:

"After having presented to Your Majesty the musical collection that I made of the oldest ballets..."

⁶⁴ Meredith Ellis: Op.Cit., p. 107.

⁶⁵ André Philidor was the nephew of Michel, 'co-inventor' of the oboe, and father of Anne Philidor, who initiated the Concerts Spirituels in 1725.

⁶⁶ André Tessier: "Un fonds musical de la Bibliothèque de Louis XIV: La Collection Philidor", La Revue Musicale, XII, avril, 1931, p. 300.

⁶⁷ Ibid., pp. 301-302.

I believed it necessary to neglect nothing in organizing all that Mr. de Lully created for your divertissements before the Operas. It is only Fossard and myself who could have undertaken such a project, because of the great care we took in collecting, with much effort, all that this incomparable genius produced."⁶⁸

One can only hope that Philidor was as careful as he claims, for there are no other sources against which to compare these examples of the early Lully ballet. Since Tessier⁶⁹ informs us that most of the work of copying was done between 1689 and 1690, further doubt as to the authenticity is cast on the entire collection, because many of Lully's compositions were copied, no doubt, after the composer's death. Until, if ever, actual autographs are discovered, however, the Collection Philidor must remain our primary source for Lully's early ballets.⁷⁰ Tessier does offer us some reassurance when he writes:

"They [Philidor and Fossard] were able to say in their dedication of the ballets de cour to the King, that in collecting the texts, they had taken great care; but it's a good thing that it was indicated to us once again, through their temporary editor, that they had in their possession the autographs by Lully."⁷¹

⁶⁸Quoted in André Tessier: Op.Cit., p. 301-302.

⁶⁹See note 66 above.

⁷⁰Airs, dances, choruses, etc. from many of these works are found in various arrangements and anthologies of the time. There are at present, though, few other sources for the complete ballet scores.

⁷¹André Tessier: Op.Cit., pp. 298-299. In 1694 Philidor decided to publish his Lully copies with Pierre Ballard (the 'temporary editor' mentioned by Tessier). In a preface Ballard states that he had the Lully Autographs. The proposed edition was discontinued because the Philidor Collection belonged to the King's library, and was, therefore unavailable for publication. The preface has been preserved.

A large portion⁷² of the Collection Philidor made its way to the library of St. Michael's College, Tenbury, through the auction of the estate of the Comte de Toulouse.⁷³ Among the manuscripts are several complete and separate orchestral parts of these same Lully scores. A careful correlation of the manuscripts deriving from Paris with those of Tenbury is both beyond the scope of this study and impossible at the present time. Nonetheless, Fellowes notes that most of the Tenbury manuscripts are in Andre Philidor's hand: the present writer has no reason to believe that they should deviate substantially from the scores in the Paris collection.⁷⁴ It is likely, further, that the Tenbury manuscripts were copies made from the 'originals' (i.e., the Collection Philidor) in the King's Library.⁷⁵

Nineteen scores from the Collection Philidor in the Bibliothèque de Conservatoire will be studied in this thesis. They are: La Nuit (1653); L'Amour Malade (1657); Les Plaisirs Troublés (1657);

Tessier concludes that we at least have the consolation of two assurances that Philidor's copies were made from Lully's autographs: first in Philidor's own dedication; and second in the preface of Ballard's proposed series.

⁷²Ninety-five volumes of manuscript.

⁷³For a history and careful inventory of this spurious collection see, Fellowes: "The Philidor Manuscripts", Music and Letters, 1931.

⁷⁴There can be no doubt that a correlation of the two sources in the future would be invaluable and illuminating.

⁷⁵For a discussion of this theory, see Fellowes: Op.Cit.

Alcidiane (1658); La Raillerie (1659); l'Impatience (1661); Les Saisons (1661); Les Noces de Village (1663); Le Mariage Forcé (1664); La Princesse d'Elide (1664); Les Amours Déguisez (1664); La Naissance de Venus (1665); L'Amour Médecin (1665); Les Muses (1661); La Grotte de Versailles (1668); Flore (1669); Monsieur de Pourceaugnac (1669); Le Bourgeois Gentilhomme (1670); Les Jeux Pithiens (1670).

CHAPTER I

THE BASSOON

The early bassoon -- dulzian, Chorist Fagott, curtal or basson -- was only one of a number of instruments that could perform the bass part in a woodwind consort at the beginning of the seventeenth century.¹ All the bass woodwinds, of course, were perfectly suited to the music they were required to perform. The bass crumhorn, for example, most commonly was employed in conjunction with other crumhorns. The bass pommer was a member of the shawm band and was therefore a member of the loud consort. It was the bassoon, however, which attracted the greatest attention as evidenced in the ever-growing repertoire the instrument received in the early seventeenth century.²

Two characteristic features of the early bassoon greatly contributed to the instrument's popularity. First of all, the conical bore of the instrument was doubled back on itself in a U-tube. This construction made the bassoon much more manageable than the contemporary bass pommer, in which the bore was of one length. Secondly, the bassoon was capable of dynamic inflection owing to the nature of its reed apparatus. The bassoon possessed a free double reed; that is, it was neither protected by a pirouette, nor enclosed in a reed capsule. These two features

¹Other bass woodwinds included the bass crumhorn, the bass pommer, the courtaut and the cervelat. See Lyndesay Langwill: "The curtal (1550-1750)", Musical Times, 1937, p. 306.

²See Joseph Marx: "The tone of the Baroque oboe", Galpin Society Journal, IV, June, 1951, pp. 8-9.

made very soft playing possible on the instrument.

The early bassoons may have inherited their free reeds from the contemporary pommers.³ Pirouettes are not apparent in any of the diagrams of the sixteenth-century pommer. Joseph Marx hypothesizes that if the bass pommer did have a pirouette, it seems to have lost it in the sixteenth century. He explains:

"Such a development is very plausible if we consider that the reed of a bass instrument is cut from a stalk of cane of much greater diameter than that of a treble instrument. Such a reed does not exert a great outward pressure at the tip of the reed (which is the effort of the natural material to revert to its original shape) and players must have discovered that they could easily control such bass reeds directly with their lips and thus improve the quality of the tone while gaining control of pitch and volume."⁴

It is likely, therefore, that the early bassoon's reed evolved for similar reasons.

The bassoon was a relatively new instrument at the turn of the seventeenth century. The instrument has origins which, as Langwill puts it,⁵ are shrouded in mystery. It is conspicuously lacking in theoretical sources of the sixteenth century -- notably Virdung, Agricola and Luscinius. Anthony Baines believes the bassoon first appears in written records around 1540.⁶ Its first inclusion in a theoretical source, however, does not occur until 1596, when Zacconi describes an

³Ibid., p. 8.

⁴Ibid.

⁵Lyndesay Langwill: The Bassoon and Contrabassoon, London, 1965, p. 7.

⁶Woodwind Instruments and their History, London, 3rd edit. 1967, p. 263.

instrument which he calls Fagotto Chorista in his Prattica di Musica (Venice, 1596, Bk. IV, p. 218). Adam Carse believes the bassoon originated, therefore, in either Italy or Germany.⁷ Between Zacconi and Mersenne, the bassoon is fairly well-documented in European sources.

In his De Organographia of 1619, Praetorius describes the Fagotten-Dolcians. He writes:

"...the dolcians, like the fagotten also, are quieter and softer in tone than the pommers. Hence it is perhaps because of their sweetness that they are named dolcians, or dolcisonantes... C is the lowest note of the chorist fagott...."⁸

From Zacconi we learned that the bassoon has a range of two octaves less a tone. Praetorius' bassoons have two keys -- for E and F -- and are in three sizes: one in C; a Quart bass in G'; and a Quint bass in F'. These then will represent the standards for the early seventeenth century.

The first major French description of the bassoon is by Mersenne. Proposition XXXIII in Book V of Harmonie Universelle is entitled "To explain the shape, size range and use of the Basson, Fagot, Courtaux, and Cervelats de Musique". He begins by stating:

"I treat these species of basses because they can be joined in the concert of oboes, and are different from the preceding bass [that is, the pommer] only in that they break into two parts to be able to be managed and carried more easily; that is why they

⁷Adam Carse: Musical wind instruments, London, 1939, p. 183.

⁸Michael Praetorius: De Organographia, Wolfenbüttel, 1619, Ch. XI, trans. by Langwill: Op. Cit., p. 20.

are called Fagots, because they resemble two pieces of wood which are bound and fagotted together."⁹

Mersenne continues:

"This Fagot has three keys, of which the first which closes the seventh hole is uncovered, and the second and third are covered with their pockets."¹⁰

These two statements -- the first hinting that the bassoon was in at least two pieces, and the second describing three keys -- show that Mersenne's bassoons have deviated from the standard established by Zacconi and Praetorius. Indeed, Mersenne's fagot seems to be an instrument in transition from the older dulzian to the remodelled bassoon.¹¹

In addition to the hint of sectionalization and the appearance of three keys, Mersenne's fagot exhibits still other abnormalities. First of all, there are twelve holes, as opposed to the standard ten on the early seventeenth-century dulzian. The twelfth hole, according to Mersenne, is "... not stopped at all".¹² The tenth hole on the bassoon described by Praetorius was an open one which produced C. On Mersenne's fagot, however, the tenth hole is operated by a third key, the eleventh

⁹ Marin Mersenne: Harmonie Universelle, trans. by Roger E. Chapman, The Hague, 1957, p. 372. This is a most interesting statement in that it shows that a tradition of using the bassoon in conjunction with oboes was established very early.

¹⁰ Ibid., p. 373.

¹¹ See the present writer's unpublished paper "Mersenne's Fagots and Bassons: instruments in transition", University of B. C. January, 1975.

¹² Op.Cit., p. 373. It is, in other words, a sounding vent.

being open. Mersenne also states that the range of the bassoon is only a tenth or an eleventh.¹³ This range, of course, is significantly smaller than the two octaves less a tone given by Zacconi.

If one considers Mersenne's bassoons as being in a state of transition, the deviations described above are not so problematic. By the mid-seventeenth century the remodelled bassoon had a range of two and a half octaves, descending to B'-flat.¹⁴ It is possible, therefore, that Mersenne, too, is making an early reference to a bassoon with a fundamental of B'-flat. Indeed, the first nine holes, including two keyed ones, on Mersenne's fagot are identical in format to those on Praetorius' bassoon. The tenth hole consequently is likely to produce C, and the eleventh, B'-flat.¹⁵ An additional note hole, of course, necessitated an extra key, and this was made to operate the tenth hole.

The limited range of Mersenne's fagot is easily explained. An instrument with eleven note-holes possesses a natural range of an eleventh. In the case of the bassoon, which has both a free double reed and a conical bore, over-blowing produces the octave partial. Increasing the wind pressure in conjunction with more pressure exerted by the player's lips on the reed tip, could therefore extend the range of Mersenne's bassoons by as much as an octave.

There are hints that Mersenne's fagot is already undergoing

¹³Ibid.

¹⁴See Langwill: Op.Cit.

¹⁵Jürgen Eppelsheim in his Das Orchester in den Werken Jean-Baptiste Lullys, Tutzing, 1961, p. 108, arrives at the same conclusion.

the process of sectionalization, a process which initiated the era of the modern woodwind. Mersenne says of the bassoons:

"... they break into two parts to be able to be managed and carried more easily; that is why they are called Fagots..."¹⁶

Included in Mersenne's discussion is a larger instrument called a basson. This instrument is analogous to Praetorius' Quart-bass, for it is lower by a fourth than the fagot.¹⁷ If we compare the description of the fagot to that of the basson, which Mersenne specifically notes "is all of one piece of wood",¹⁸ it seems likely that he was impressed with the fagot's 'two pieces'. More telling, perhaps, is the distinct bell-'joint' which appears on the diagram of the fagot. The inaccurate illustration makes the bell look deceptively small; but Mersenne informs us: "this end is almost nine inches from I to H".¹⁹ Describing the distance between the last two holes of the instrument, he writes:

"And from the eleventh to the twelfth seven and a half inches, and from there to the end of the Fagot, which is hidden under the end H, is five and a half inches."²⁰

How could the end of the instrument be "hidden" under the bell of the bassoon, unless the bell were a separate joint that was mounted onto it? It seems quite probable that Mersenne's fagot represents the first, tentative experiment in sectionalization.

¹⁶Op.Cit., p. 372.

¹⁷Ibid., p. 374.

¹⁸Ibid.

¹⁹Ibid., p. 373, see Figure 1.

²⁰Ibid.

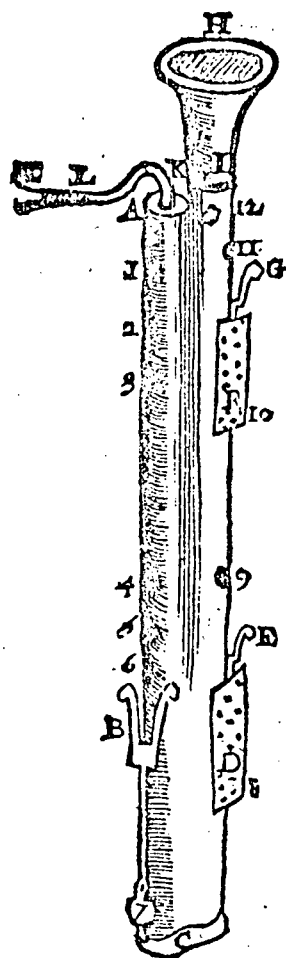


Figure 1. Fagot from Mersenne's Harmonie Universelle, Bk. V, Proposition XXXII.

We may summarize the innovative features of Mersenne's fagot as follows: it descends to B'-flat; it has three keys, adopting the important principle of putting the player's two thumbs in control of four note holes on the back of the instrument; and it seems to represent an early attempt at sectionalization. With these in mind, then, we may consider Mersenne's bassoons as instruments in transition.

The ultimate arrival of the remodelled bassoon must have occurred shortly after the 1636 publication of Harmonie Universelle.²¹

There are, of course, no subsequent theoretical sources dealing with the instrument until the turn of the eighteenth century. In 1713 Mattheson writes:

"The stately Bassoon, Basse de Chromorne [sic!], lt. Fagotto, vulgo Dulcian, is the usual bass, the foundation or accompaniment of the Hautbois...He who would distinguish himself on the bassoon will find that elegance and speed especially in the high register tax his powers to the full... The compass of the bassoon extends over three and a half [sic] octaves from C to f' or g'. Occasionally it produces contra B-flat and A in addition."²²

Mattheson shows that he was familiar with the older two-keyed dulcian which descended only to C, as well as the newer bassoon with a key extending its compass to B'-flat. Mattheson's reference to the possibility of further extending the range downward to A' was very current in the eighteenth century. Diderot and D'Alembert's Encyclopédie gives a full three octave range to the bassoon, from A' to a'. while stating:

"Everyone who plays the basson is not able to play this range, either being unable to control properly their breath or the instrument not being in good order. Thus they content themselves in descending to B-flat and B-natural, notes which are produced without opening a single hole, by the sole method of blowing the air through the instrument."²³

²¹ See Adam Carse: Op.Cit., p. 186.

²² Johann Mattheson: Das neu-eröffnete Orchestre, Hamburg, 1712, Pt. III, paragraph 9; trans. by Langwill: Op.Cit., pp. 34-35. C to f' or g', of course is only two and a half octaves.

²³ Diderot and D'Alembert: Encyclopédie Raisonnée..., Paris, 1767, Vol. 2, p. 127.

Breath regulation alone, therefore, permitted the bassoon player to 'lip' changes in pitch. It is, no doubt, through this method that eighteenth-century writers believed the tone A' to be possible on the bassoon.

The changes which occurred in the bassoon's construction to produce the instrument described by Mattheson probably were effected in France.²⁴ They included full-fledged sectionalization: separate long and tenor joints were connected through a U-shaped butt-joint; and a bell-joint prolonged the bore to enable the production of B'-flat.²⁵ An overlapping wing section on the tenor joint covered part of the long joint and contained the top three note holes of the instrument. More accurate drilling of the bore owing to sectionalization, and modified finger-hole sizes enhanced the upper register of the bassoon.

Technique was facilitated on the remodelled instrument through both additions to and rearrangements in the existing key mechanism. We recall that on the older dulzian keys were provided for both E and F. The F-key on the remodelled bassoon remained on the front of the instrument. The E-key, however, was moved up to control D on the back of the instrument, leaving E as an open hole. The third key was made to control B'-flat. On the back of the bassoon, therefore, the player's lower thumb, which had formerly governed the E-key and the open D-hole, was now only in control of an open E-hole. The player's upper thumb, beforehand only working the open C-hole, was now controlling the new D-key

²⁴Anthony Baines: Op.Cit., p. 274.

²⁵Lyndesay Langwill: Op.Cit., p. 28.

the open C-hole and the new B'-flat key.²⁶

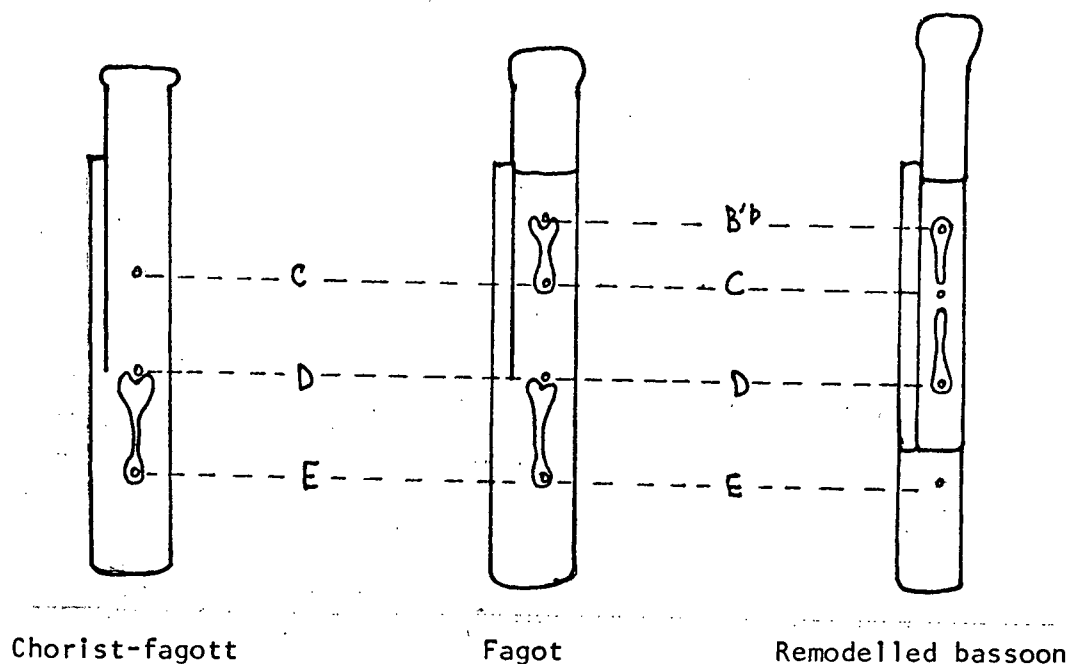


Figure 2. Back view of Chorist-fagott, Fagot, and remodelled baroque bassoon.

The present writer believes that sectionalization necessitated this change in key mechanism. The newer bassoon had four distinct sections: a tenor-joint; a butt-joint (the U-tube); a long-joint and a bell-joint. On a bassoon of this design the E hole is situated on the butt-joint, while the D hole is now on the long joint. If the key mechanism of the fagot had been retained, the key which formerly operated the E-hole would have had to cross over the joint between the butt and long sections of the bassoon, in order to be in close proximity of the

²⁶This arrangement is exactly the opposite to that on Mersenne's 3-keyed fagot; on that instrument E was keyed, D was open, C was keyed, and B'-flat was open.

D-hole. Such an arrangement, of course, would be both impractical and susceptible to damage. With the new system, the two keys on the back of the bassoon were both contained on the long-joint.

When the fully-remodelled bassoon first appeared is a matter for some conjecture. We have seen that the process was already underway by 1636. There is fairly good proof that the instrument was standardized in its new form well before 1670. Langwill²⁷ singles out a Dutch painting attributed to Harman Hals which depicts a bassoon with such features as a bell joint, a crook, a reed and the upper parts of a long and tenor joint.²⁸ The painting provides good proof that the newer instrument was well-developed before 1670, for Harman Hals lived from 1611 to 1669.

There have been numerous estimates, of course, as to the first appearance of the new bassoon, and as to the first composer to employ it consistently. Some of the estimates are less accurate than others.

Karl Geiringer, for example, suggests:

"Together with the oboe, in 1659 the bassoon found its way into the operatic orchestra in the production of Cambert's Pomone."²⁹

Besides the fact that Pomone was not produced until 1671, modern scholarship³⁰ has found earlier references to the use of the oboe, and presumably, the bassoon. As to Cambert's use of the bassoon, Langwill

²⁷Op.Cit., p. 28.

²⁸The painting is 'Der Faggotspieler' from the series 'The senses'. It is housed at the Art Museum at Aachen.

²⁹K. Geiringer: Musical Instruments, London, 2nd, edit., 1945, p. 172.

³⁰Notably Joseph Marx: Op.Cit.

informs us:

"It has been frequently asserted that the bassoon first appeared in the French opera orchestra in Cambert's Pomone (1671)... the fragmentary Ms. (from the Paris Conservatoire) music of Pomone mentions 'hautbois' but not 'bassons'."³¹

It will be recalled, however, that as early as 1636 the bassoon was expected to play bass to the oboes.³² Langwill further concludes that although the bassoon was certainly used by Lully, it was given little prominence.³³ Anthony Baines' assessment of the situation is, perhaps, closest to the mark. He states:

"It [the bassoon] is first named in a Lully score in 1674 [Psyché], but it may well have been in use ten or more years earlier..."³⁴

The validity of this statement will be examined presently.

The Bassoon in Lully's Early Ballets:

Of all the instruments with which this study is concerned, the bassoon is, perhaps, most problematic. The various difficulties encountered in attempting to discover the nature of the instrument's employment derive, for the most part, from the bassoon's great versatility. We have seen that the bassoon possessed an extensive range -- over two and a half octaves. It has been shown further that, owing to its free

³¹Op.Cit., p. 75.

³²See note 9.

³³Ibid., p. 75.

³⁴Op.Cit., p. 286.

double reed, the instrument was capable of great variations in dynamics. The bassoon, therefore, had the potential to perform in a variety of situations.

The bassoon had as a complementary instrument the violoncello. Distinguishing between the two instruments solely on musical grounds in Lully scores is not only dangerous, but very difficult. The present writer believes, however, that the range of a given bass part, in conjunction with other evidence, can often aid in distinguishing between the two: excessively high bass parts seem to be intended for the bassoon.³⁵ In the scores observed by the present writer, only rarely does the bass part ascend beyond d' to e'-flat. On only three occasions did it ascend to e'.³⁶ In these three situations (two of them in Trio settings), it is possible that Lully had bassoons in mind. Only in conjunction with stronger evidence, however, may the range of a bass part be considered as an indication of the bassoon's use.

Another problem faced in determining the employment bassoons received is in the nature of the sources consulted. The scores of the Collection Philidor are not performing editions. As a result, many

³⁵The note d', in both three- and five-part settings, appears to be the normal upward limit of Lully's bass parts.

³⁶In Ballet de l'Impatience (1661), 1er Entrée of Part III; Les Jeux Pithiens (1670) 'Ritournelle' on p. 116V of Tome VI in Philidor's Recueil de Ballets; and Alcidiane (1658) 2nd number of Part III.

indications of desired instrumentation that may have been written in the autographs are possibly omitted. Moreover, the individual copies in the collection do not display a consistent thoroughness: many scores are carefully copied; but others are very 'sketchy' in appearance.³⁷ They do, fortunately, provide enough information to make certain tentative conclusions.

The most perplexing difficulty encountered with respect to the bassoon in Lully's early ballets is that it is never specified in the scores.³⁸ We are consequently forced to establish a set of criteria by which we may determine the implied use of the instrument. The musical and/or dramatic context of an entrée can be most enlightening. Of especial importance is the dramatic context within which a given selection or entrée occurs. Woodwinds are traditionally reserved for idyllic scenes -- scènes de champêtres and scènes de bergers.³⁹ The bassoon in such cases performs the bass line either with or without other bass instruments, such as the cello. As early as 1636 the bassoon was considered the bass part to higher oboes. In general, wherever the use of woodwinds can be determined for dessus parts, it is probable that bas-

³⁷One copy of Les Plaisirs Troublés (1657), for example, excludes the 2nd and 4th parts in the 5-part settings throughout.

³⁸It is not until 1674, in the opera Psyché, that Lully specifically writes 'bassons'.

³⁹See Prunières: "Lully et l'Opéra Français", La Revue Musicale, 1925, p. 41.

soons were employed as bass instruments in those situations.⁴⁰

Finally, the use of bassoons may be suggested by the performers who took part in a given ballet. The basic string orchestra of the vingt-quatre violons was frequently augmented in these productions by wind players drawn from the large reservoir of talent in the Grande Ecurie. Two divisions of Ecurie catered especially to the new woodwinds of the period: the Joueurs de violons, haut-bois, sacqueboutes et cornets and the Hautbois et Muzettes de Poitou.⁴¹ Included in the ranks of these two departments are the names of the most famous early masters and manufacturers of the remodelled woodwinds. In the Joueurs de violons, hautbois... Michel Rousselet is listed as basse de hautbois; while in the Hautbois de Poitou, one of the three Hotteterres -- Nicolas -- and Jean Brunet are described as bassecontre players.⁴² With extant livrets to the ballets which often list the performers involved, it is possible to infer the use of the bassoon in the event that any of the three names mentioned above appear. The present writer was able to deduce such information from two sources only: Henry Prunières' edition of Lully's Oeuvres Complètes gives facsimilies of two livrets -- one for L'Amour Malade (1657) and Alcidiane (1658); and Charles Silin in his Benserade

⁴⁰ See Adam Carse: History of Orchestration, London, 1925, p. 80.

⁴¹ Of the two, the Hautbois et Muzettes de Poitou seems to have been more extensively employed in ballet productions.

⁴² Marcel Benoît: Musiques de Cour, Paris, 1971, p. 4. These three musicians were active in the Ecurie throughout the period of Lully's early ballets. Jean and Martin Hotteterre were primarily performers on dessus instruments.

and His Ballets de Cour (Maryland, 1940) draws heavily on the livrets, often naming the instrumentalists involved in a particular work.⁴³

With these criteria as guides, we may now approach the ballet scores.

Nine ballets have been selected because they clearly show evidence of the bassoon's use, and demonstrate a number of ways in which it was employed. They are: Amour Malade (1657); Alcidiane (1658); La Raillerie (1659); Impatience (1661); Amours Déguisez (1664); La Princesse d'Elide (1664); La Grotte de Versailles (1668); Le Bourgeois Gentilhomme (1670) and Les Jeux Pithiens (1670).

The ballet Amour Malade was produced in 1657 resulting from a collaboration between Benserade and Lully. In many respects it is a most significant work in Lully's output. It is one of the first ballets in which the music is exclusively by Lully. Moreover, it is cited by Joseph Marx,⁴⁴ Henry Prunieres,⁴⁵ and others as the first instance of the remodelled oboe's employment. In the Dernière Entrée of the work, a Concert Champestre de L'Espoux is cited as being played by the oboes of the Ecurie.

It is in this twenty-four bar work that we will find the earliest use of the bassoon in this study. The music fulfils a number of the criteria which we have established as evidence of the bassoon's

⁴³A large corpus of livrets from the ballets by Lully and Benserade is housed in the Library of Congress. It was unfortunately unavailable to the present writer for consultation.

⁴⁴Op.Cit., p. 14.

⁴⁵Op.Cit., p. 99.

use: It is a concert champêtre: the bass line is to an ensemble of oboes; and its performers include two bassoon players from the Ecurie.

The livret says of the last entrée:

"Concert champestre de l'Espoux:
Les Sieurs Obterre le père, Obterre fils aîné,
Obterre le cadet, Piechet, Brunet, Descouteaux,
Destouches Pelerin, Nicolas, et Alais..."⁴⁶

Obterre, of course, is one of a number of spellings of the name Hotteterre.

The bassoon line offers little real interest. It performs the bass of Lully's normal five-part texture, and has a range of D - a. The piece is in G-major and probably requires orchestral doublings by strings.⁴⁷ The concert champêtre will be discussed again with reference to the oboe.

In Alcidiane (1658) the use of the bassoon is slightly more prominent. There are at least two occasions where its employment seems implied by the musical content; both these occur in the third part of the ballet. After the overture to this section, a Récit de la Fortune introduces highlights of the drama to follow. The ritournelle of this récit is set for three instruments. The range of the bass line is extensive -- from E to e' in the key of a-minor. Since three Hotteterres and Brunet appear in the livret, and are specified as performers in the ensuing entrée, it would seem likely that a bassoon was used in this

⁴⁶Cited in Prunières: Op.Cit., facing p. 43.

⁴⁷Ibid., Prunières scores the bass line for both bassoon and cello.

Ritournelle.

The second entrée of Part III is titled in Philidor's score, "Six Bergers et Six Bergeres". The Air pour Polexandre is in g-minor and is set in a normal five-part structure. The livret of this ballet states of this entrée:

"Trois Bergers... trois Bergeres... font avec plusieurs autres un Concert Rustique, auquel un chœur de Flutes et de plusieurs autres instrumens repondent."⁴⁸

The bassoon, no doubt, is one of the 'other instruments', performing its task as bass to woodwind parts. The range of the bass line is B'-flat - d'.

In La Raillerie (1659) the bassoon once again appears in Lully's five-part orchestral idiom; again it performs with specified woodwinds -- in this case, recorders -- in the upper parts. The eighth entrée is devoted to Les contrefaisseurs. From pp. 39-41 of Philidor's copy, recorders are scored in g-minor; the bass part of this section is not very extensive -- D - b-flat. From page 42 to 45 of the same Entrée a Sarabande in g-minor is provided. In both these instances, specified recorders divide the dessus line in two, resulting in six real parts. The bassoon which presumably plays the bass in this section is given a range of D - c'.

The Ballet de l'Impatience of 1661 provides us with an example where specified bassoons may be inferred from directions in the score. The third entrée of the third part of the ballet (p. 57 in Philidor's

⁴⁸ Ibid.

score) is subtitled: "8 Chevaliers dansant sans violllons". One can only conclude that Lully was gaining enough confidence in both the ability of the wind instruments, and his ability to provide appropriate music for them.⁴⁹ Although the title of this number does not refer to woodwinds alone, it is probable that the realization of the bass part involved the use of bassoons. The work is in g-minor, set for five parts, the bass line extending from D to b-flat.

A Symphonie in the Prologue to the 1664 comédie-ballet, Amours Déguisez,⁵⁰ foreshadows an orchestral technique which was to achieve fruition in the opera orchestra of Rameau in the eighteenth century. Instruments are consciously selected to portray a dramatic exchange in purely musical terms. In the case of Amours Déguisez, Lully's exploitation of the technique is experimental: the drama is presented beforehand in Molière's spoken dialogue; then Lully's music depicts the conflict in somewhat simplistic terms.

The allegorical confrontation centres around Les Arts on the one hand, and Les Graces et Les Plaisirs on the other. Employing concertato principles, Lully gives Les Arts one group of instruments, and Les Graces a varied arrangement of the first ensemble. For Les Arts

⁴⁹'Sans violllons' excludes the entire string section. The term 'violllons' in Lully's scores is generic, referring to the whole family. The dramatic action requires the entrée to commence before the violllns have finished tuning. At bar 14, a marking in all the parts of the score suggests that perhaps violllns are to enter the texture at that point. Winds, nonetheless, are definitely required to perform the music at the beginning of the entrée.

⁵⁰Although the comédie-ballet is distinct as a genre from the ballet, it has been included in this study since it employs similar writing styles and techniques. The libretto is by Molière.

Lully indicates: "Tous le monde joue"; For Les Graces he specifies: "a Partis simple meslé de flustes".⁵¹ Les Graces is scored for three parts -- two dessus and a bass; only one instrument plus a fluste⁵² are to play the dessus parts of this section.

Again we may infer employment of the bassoon as bass to the woodwinds. In the tous section -- a seven-part set up -- the bass has a range of D - c'. In the doux section the bassoon is given a compass of D to b-flat. It seems likely that since bassoons are required in this section, they would perform in the tous as well as doux portions of the entrée.

The ballet, La Princesse d'Elide also of 1664, was only one of a number of great divertissements given to honour both the Queen and the Queen Mother. It formed the ballet portion of the larger comédie-ballet, Les Plaisirs de l'île Enchantée by Molière and Lully. This ballet, like Amour Malade, represents a landmark in use of double-reed instruments; it is the first work to actually specify oboes in the score.⁵³ The third number of the ballet is entitled "Marche de hautbois pour le Dieu Pan, et sa suite".

The Philidor copy of this ballet which presents this specification is housed in the Bibliothèque Nationale, CP. Rés. F 531. Unfortunately, the only copy available to the present writer is CP Rés. F 655. The title of the work in this score is simply 'Marche du dieu

⁵¹On Page 2 - 5 of Philidor's copy.

⁵²Probably a recorder.

⁵³See Eppelsheim: Op.Cit., pp. 104-105.

Pan'. Nonetheless, we may still observe how the oboes were employed. The bassoon must have been used as bass to the five-part structure in which the oboes took part. In G-major, the bassoon is given a range of D - c'.

The subsequent number of the same ballet is a 'Rondeau Pour les Flutes et Violons, allant à la table du Roy'. In this selection the bassoon, with the cellos, is likely to have performed the bass part; it is given a range of C to c' in the key of G-major. This is one of the few indications we have that the bassoon was included as a bass instrument within the context of a specified string orchestra.

Of all the scores consulted, the Princesse d'Elide and the Grotte de Versailles (1668) represent some of the most extensive use of woodwinds. Twelve pages of the latter work (pp. 19-31 of CP Rés. F532) present quite clearly a number of ways in which the bassoon was expected to perform. This 'woodwind section' of the ballet is initiated on page 19 with a Ritournelle pour les flutes.⁵⁴ The Ritournelle, in three parts, is in g-minor. The bass part again suggests performance on the bassoon, which is given a rather extensive range of D to d'.

The Ritournelle introduces a récit -- a vocal duo for Arice et Caliste. Of paramount significance is the musical setting of the récit: it borrows its musical content exactly from the preceding

⁵⁴There is good evidence to show that the flutes involved here are of the transverse type. This will be discussed in chapter three.

ritournelle. The implications are, of course, that the instruments continue to play, doubling the vocal parts. The bassoon, perhaps with added cellos, is therefore required to play the continuo bass of a vocal setting, the first such instance we have observed.

The Ritournelle of page 19 returns subsequently, and leads to a second recit de Ménalque et Coridon. New music is provided for this text, but the pattern established previously would also seem to be in effect here; the instruments of the Ritournelle are likely to have doubled the vocal parts once more.

A new Ritournelle follows this recit; again the next vocal duo, 'Voyons tous deux en aimant', uses the music of its Ritournelle. Although 'flutes' are not specified, this section of the ballet appears to act as a unit -- various scènes de bergers. It seems likely that the instrumentation of the section would therefore remain consistent.

The entrée is concluded with a large selection for orchestra and chorus, and a Menuet. The chorus -- 'La même chœur de Bergers' -- is in ten parts: four vocal and 6 orchestral. Interestingly, there are two bass lines, although the two parts are almost identical.⁵⁵ Both bass lines show a range of D - b-natural (the chorus is in G-major), and the bassoon must have been intended to perform in one of the bass parts. Here then, we have evidence of the bassoon's use in orchestral and vocal tous sections. The concluding Menuet, still in G-major, no doubt, is for a tous orchestra. In light of the prominent treatment the woodwinds

⁵⁵On two occasions the first bass is given two repeated eighth notes to the second bass' single quarter note.

received throughout the entrée, it is not unreasonable to assume that flutes and bassoons also took part. The bass line here is not extensive in its range; from only D to g.

Finally, two ballets from 1670 will serve to conclude our study of the bassoon. In Les Jeux Pithiens Lully provides another example of the various relationships between his orchestra and chorus. On pages 118V to 119V in Tome VI of Philidor's Recueil de Ballets, a three-part vocal setting with the incipit 'Jouissons de Plaisirs', is presented. The work, in g-minor, is headed by the following instructions: "Les flutes les hautbois et les violons Jouent l'air qui suit avant qu'il se chante".⁵⁶ The appearance of woodwinds, and specifically oboes, in the dessus parts leads us to infer the use of bassoons with cellos on the untexted bass line. The bass part exhibits a considerable range, from D to d'. It is not improbable that these instruments are to double the vocal parts when the latter enter the structure.

The comédie-ballet, Le Bourgeois Gentilhomme, of 1670 is, perhaps, the most famous product of the Molière-Lully collaboration. Such a spectacle at this point in Lully's career represents an art form very close in nature to the composer's tragédies lyriques, the first of which was to appear in three years.⁵⁷ Many techniques of Lully's mature style, then, appear in the ballets of the late sixties and early seventies. This is certainly true of his use of woodwinds.

⁵⁶ Located at the bottom of page 118R.

⁵⁷ The tragédies-lyriques, of course, did not contain spoken dialogue as did the comédies-ballets.

The fifth Entrée of the Ballet de Nations (the ballet portion of the production) contains two Menuets, the second of which is in a trio format. Jürgen Eppelsheim cites this as the first appearance of an oboe trio by Lully.⁵⁸ In Philidor's copy (CP Rés. F578, p. 175; not available to the present writer) the trio is called "Menuet pour les hautbois en poitevin".⁵⁹ In the livret of 1670, however, the trio is described as: "accompagnez de huit Fluste et Haut-bois".⁶⁰ In any event, the situation requires bassoons for the bass part, according to our established criteria. The second menuet gives a range of E to c' to the bass line. It is likely that the trio requires that the strings of the five-part menuet drop out. Conversely, the use of oboes and bassoons in the five-part menuet is not probable.

Through this limited sampling of early Lully ballets, we may make a number of conclusions concerning the bassoon. First and foremost, the bassoon has been shown to receive regular employment in Lully's ballet orchestra from as early as 1657. Since the bassoon was one of the earliest, if not the first woodwind⁶¹ to undergo remodelling, this premise becomes especially tenable. Although musical evidence is lack-

⁵⁸Op.Cit., p. 105.

⁵⁹Ibid.

⁶⁰The problem, of course, concerns (1) the use of flutes in conjunction with oboes; and (2) whether oboes or hautbois de Poitou are required. Eppelsheim shows that oboes are probably intended.

⁶¹See the present writer's unpublished paper cited in footnote 11.

ing, the present writer believes that the remodelled bassoon gained entrance to the French ballet orchestra in the late forties or early fifties.

The bassoon seems to have been employed by Lully irrespective of key and mode contexts. It will be shown in subsequent chapters that the recorders and flutes especially performed best in certain keys; the recorder as a result of its fundamental of f' was well-suited to flat keys; the transverse flute in d', on the other hand, was often reserved for sharp keys. In the eighteen examples of the bassoon's employment observed in this sampling, ten were in a flat key (g-minor), two were in natural keys (C major and a minor) and six selections were in a sharp key (G major).⁶² With respect to key, then, the bassoon once again asserts its versatility.

The most important conclusions we may draw from this study concern the use to which the bassoon was put within the orchestra and various ensembles. In every case but one, the bassoon played or doubled the bass part. In the 'Marche de hautbois pour le Dieu Pan' of *La Princesse d'Elide*, however, a case for the bassoon's use on the taille part becomes evident. The fourth line of the five-part structure has a range of d - e'. This, of course, is too low for the tenor oboe which descends only to f. Since the part ascends only as high as e' the line could be performed with little difficulty on the bassoon. This 'Marche' will

⁶²These statistics are somewhat misleading since g-minor appears to be Lully's favourite key in the early ballets.

be discussed again in the next chapter with reference to the oboe.

The bassoon, we have seen, performed in a number of ensemble situations. It was used in Lully's normal five-part orchestral structure in conjunction with strings in Amour Malade (1657), Alcidiane (1658), Amour Déguisez (1664) and especially in La Princesse d'Elide (1664). In this ballet, we recall, a Rondeau is designated for both woodwinds (flutes) and strings (viollons). The ballet, l'Impatience (1661), provides an example of the bassoon's employment in a five-part structure without strings: i.e. "Les 8 chevaliers sans viollons". The bassoon also saw extensive treatment in trio textures. In Les Jeux Pithiens a trio is specified with strings and woodwinds: "Les flutes les hautbois et les violons jouënt". A trio involving the bassoon without strings is in evidence in La Grotte de Versailles (1668) -- the Ritournelle pour les flutes.

It is in La Grotte de Versailles that we find evidence of the bassoon's use in conjunction with voices. In three cases -- 'Arice et Calistre', 'Menalque et Coridon', and 'Voyons tous deux en aimant' -- the bassoon has been considered as the probable continuo bass in vocal duos. It has been shown, further, that the bassoon doubles the bass line in the chorus designated, 'La même Choeur des Bergers'.

It can be seen that the bassoon was considered appropriate in a great many situations. Indeed, its apparent versatility might suggest that the instrument was a permanent fixture, performing both orchestral and continuo roles. It is doubtful, however, that this is the case. The normal continuo group in Lully's orchestra seems to have been the property of the Petit Choeur, a select ensemble to which the bassoon did

not belong in the eighteenth century.⁶³ The Petit Choeur, according to a document of 1719, consisted of the following instruments: 1 clavecin, 2 basses de viole, 2 basses de violons, 2 theorbes, 2 dessus de violons, 2 flûtes.⁶⁴ There is no evidence to state categorically that the principles and components of the Petit Choeur were intact during the seventeenth century. It is possible, however, that during the period of Lully's early ballets similar procedures were in force. The exclusion of bassoons from the standard Petit Choeur, and the flute's inclusion in it, does not imply that the two instruments were never employed together; nor does it imply that the use of flutes was restricted to that group alone. It may be concluded that the bassoon was not a normal member of Lully's orchestra, and was probably not a standard continuo instrument. It may have fulfilled both these functions, however, when special effects or sonorities were required.

The bassoon, we may conclude, was treated as a special instrument, as were all the woodwinds of Lully's orchestra. The very nature of the ballet subjects, of course, admitted such effects with great regularity; evidence of the bassoon's employment, therefore, is quite frequent. Although the instrument's potential was not approached in Lully's scores, a model for its future use can easily be seen.

⁶³ See Eppelsheim: Op.Cit., p. 150.

⁶⁴ Ibid.

CHAPTER II

THE OBOE

By way of contrast to the early bassoon, the early oboe and its precursors did not demonstrate a high degree of versatility; they were consistently assigned rather set functions, being employed in only a limited number of situations. It is for this reason, perhaps, that the documentation of the oboe's evolution is more contradiction-free than that of the bassoon. Unfortunately, the period of transition from the older shawm to the more modern oboe is no less problematic, theoretical sources, as with other woodwinds of that time, being completely lacking.

The treble shawm is the direct predecessor of the oboe as we know it. The history of shawm-like, double-reed instruments is a very long one, and need not occupy our time here.¹ The earliest written theoretical account of the shawm is given by Tinctoris in 1486. As Phillip Bate says,

"Thereafter more particular information is furnished by successive specialist writers up to Praetorius, by whose time a complete family of different sizes... had developed".²

The ultimate arrival of the authentic oboe, sometime around the middle of the seventeenth century in France, is complicated by two problems.

¹For information on this history, see Adam Carse: Musical Wind Instruments, London, Macmillan and Co., 1939; and Phillip Bate: The Oboe, London, E. Benn, 1956.

²Op.Cit., p. 28.

First of all, the French name of the oboe -- hautbois -- is the same as that for the older shawm. This ambiguity, of course, leads to much confusion in the interpretation of seventeenth-century French sources. The second problem is the nature of the structural changes which occurred in the instrument; they are not nearly so straight-forward as were those of the bassoon.

The sixteenth and early seventeenth-century shawm had a number of quite unique features. It could be made of any of a number of hardwoods, and was usually constructed in one piece. It had a conical bore, expanding from the reed-end to a trumpet-like bell. Like the bassoon, the larger shawms admitted key-mechanisms very early in their evolution. One of the more unusual features of the the shawm which was also retained by the early oboe was the appearance of two to six tuning holes on the instrument. These were located below the note-holes, well beyond the reach of the fingers, and had no keys to control them.³ The instrument was apparently much too long for the actual pitch of its fundamental; up to almost half the length of the bore on some of the larger shawms seems to be redundant. The extra length of bore, however, was far from superfluous; its contribution to the tone of the instrument as a resonating chamber was probably most important.⁴ Of all the physical characteristics of the shawm, the one most indigenous to the instrument is without doubt its reed mechanism.

³Adam Carse: Op.Cit., p. 23.

⁴Phillip Bate: Op.Cit., p. 30.

The reed apparatus of the shawm consisted of three parts: a staple; a pirouette and a reed. The long broad reeds were inserted into a metal staple, which was situated on the 'top' of the instrument. The pirouette, as previously mentioned, was a cup-like disk against which the player's lips were pressed; it covered and/or protected the greater part of the reed's length. This arrangement was exclusive to the shawm family.⁵ The advantage of such a reed mechanism evidently was the support it offered the player in loud and sustained playing.⁶ In comparison to the control made possible through the eventual removal of the pirouette, the shawm's mouthpiece arrangement was somewhat restrictive. Phillip Bate cautions, nonetheless:

"From the mere presence of the pirouette it has been argued that the shawm-player had no control over the reed. It is here, however, that the subtlety of the apparatus appears. The hollowed face [of the pirouette] permitted the base of the reed to be set in quite deeply so that in use the blades lay between the player's lips. Thus, while still supported, the lips could to some extent exercise control. It was on account of this facility that the compass of the shawms could be carried upwards beyond the first octave and was not limited, in Praetorius' own words, 'to as many tones as there were holes'."

In essence, the pirouette mechanism is nothing more than an extension of the reed-capsule system of the crumhorns and hautbois de Poitou; in the

⁵We have already seen that the bass pommer lost its pirouette sometime in the sixteenth century.

⁶Phillip Bate: Op.Cit., p. 32.

⁷Ibid.

case of the shawm, however, the player's mouth in conjunction with the pirouette forms a wind chamber within which the reed is contained.⁸ In both the crumhorn's and shawm's system, a consistent wind pressure is required to ensure that the reed will speak, and even Bate admits that the shawm's tone is necessarily 'loud' and 'sustained'.

In his Syntagma Musicum, Praetorius, in describing the shawm family, states:

"Only the highest discant of these instruments is called shawm (Italian, piffaro; Latin, gingrina, because it sounds like the cackling of a goose -- from gingier, to cackle). The [descant] shawm has no keys."⁹

Praetorius is not at all specific with respect to the fundamental tones of these instruments, mentioning simply that the shawm's align themselves a tone higher than the cornets and sackbuts. From this we may conclude that the treble shawm, the standard size of the family, had a lowest tone of d'. Mersenne also omits mentioning fundamental tones, but does concur with Praetorius on the shawm's range. Mersenne writes:

"As to the range of the hautbois, each part for example, the treble, produces the fifteenth. For after as many natural tones are made as there are holes, still others are begun which are more forced and shrill, by increasing the wind...."¹⁰

⁸ Bate disagrees with this, stating that the control (albeit minimal) that the lips exercise is foreign to the reed-capsule principle: Op.Cit., p. 32.

⁹ Michael Praetorius: Syntagma Musicum, II, trans. by Harold Blumenfeld, N.Y., Bärenreiter, 1962, p. 37.

¹⁰ Marin Mersenne: Harmonie Universelle, trans. by R.E. Chapman, The Hague, 1957, pp. 371-372.

Mersenne's evaluation of the tone of the shawm is, perhaps, more lenient than Praetorius' verdict. Mersenne admires these instruments for

"... the great noise that they make and the great harmony that they render, for they have the strongest and most violent tone of all the instruments, except for the trumpet."¹¹

As a result of the instruments' physical structure and tone, the shawms were not treated as other wind instruments were in the consorts of the sixteenth and early seventeenth centuries. In a number of ways the shawms received special consideration: the family aligned itself in a way that gave the treble member discant pitch; diapason keys were added liberally to increase the downward range of the instruments (e.g. the four-keyed tenor); and the shawm band, owing to the unavailability of a satisfactory f', transposed their music up one tone.¹² The unusual nature of the shawm's employment provides a point of contention between Anthony Baines and Phillip Bate. Baines states emphatically that the instrument was "not admitted to the art of consorts", and that the "sixteenth century shawm was exclusively a band instrument".¹³ Bate, on the other hand, writes:

"From the first, shawms belonged to the category of the 'loud music', whether employed indoors

¹¹ ibid., p. 378.

¹² See Anthony Baines: Woodwind Instruments and their History, London, Faber and Faber, 3rd edit., 1967, pp. 269-70.

¹³ ibid., p. 268. Baines appears to contradict himself, for he later cites shawms, cornets and sackbuts as a typical ensemble (p. 271). He apparently distinguishes between 'band' and 'consort' in a way other modern scholars have not done.

or in the open air, and although capable of forming an harmonic group or 'whole consort' by themselves, they were early combined with winds of other sorts."¹⁴

It would seem that Bate's interpretation of the shawm's use is more tenable, for Mersenne informs us:

"As to their music, it is suitable for the large ensemble, such as the Ballets (although the violins are now used in their place)...."¹⁵

Baines is nonetheless correct in his interpretation, insofar as the shawm did not possess a complete chromatic range, rendering its usefulness in conjunction with other instruments somewhat restrictive.

After Mersenne, the hautbois disappears in French theoretical sources for more than sixty years. The shawm by c.1640 had acquired specific functions, especially in the ballets, for which it was admirably suited. The appearance of The Sprightly Companion, presumably by John Banister, in 1695, followed in 1700 by Freillan-Poncein's La Véritable Manière... indicates that a new hautbois, with greatly modified features, had superseded the older shawm in the intervening years.

The reasons for the development of a newer oboe, in light of the great popularity of its ancestors, are at first baffling. Joseph Marx, however, has arrived at some interesting and most plausible suggestions. In his article "The tone of the baroque oboe", Marx proposes that the great popularity of the Chorist-Fagott accounts for the desire on

¹⁴Op.Cit., p. 28.

¹⁵Mersenne: Op.Cit., p. 378.

the part of French players and makers "to make so useful and grateful a medium as the [free] double reed available on a treble instrument".¹⁶

We recall that as a result of the free reed, the fagot was afforded great flexibility.¹⁷ Applying these features to the shawm meant that the former pirouette mechanism had to be removed. Marx concludes that the initial stages of the oboe's remodelling were directed toward the advancement of reed-making techniques, and that only after the perfection of this reed was work begun to improve the shawm itself.¹⁸

It was probably Michel Philidor who was responsible for the development of the new oboe's reed.¹⁹ The authority for this statement is a letter written in about 1735²⁰ by Michel de la Barre. De la Barre claims that the information contained in this correspondence, concerning a history of the musette, was found in the archives of the Chambre de Comptes. He writes:

"But his [Lully's] rise brought about the final downfall of all these older instruments with the exception of the oboe, thanks to Filidor [sic] and Hauteterre [sic]; these men spoiled great quantities of wood and played great quantities of music until they

¹⁶ Joseph Marx: "The tone of the baroque oboe", Galpin Society Journal, IV, June, 1951, pp. 9-10.

¹⁷ Infra. Chapter one, footnotes 5 and 6.

¹⁸ Ibid., p. 10.

¹⁹ Ibid., p. 13.

²⁰ The estimates for the date of this letter go as late as 1740. Marcel Benoit's Musiques de Cour, shows convincingly that 1735 is a more likely date.

finally succeeded in rendering it suitable for concerts. Since that time, the musettes were left to the shepherds, violins, recorders, the oboes and viols taking their place for the transverse flute did not come until later."²¹

Since both the Hotteterre's and Philidor's were members of French musical dynasties which lasted almost a hundred years, de la Barre's statement is of little help in pinpointing the time of this important undertaking. An earlier document, the 'James Talbot Manuscript', is most helpful in specifying such details. In and around 1690, Talbot was compiling data on a great number of instruments, apparently with the idea of publishing a book or treatise in mind. In his notes for the French hautbois he writes:

"The present Hautbois [is] not 40 years old and [is] an improvement of the Great French hautbois which is like our Weights [i.e. shawms]."²²

According to Talbot, therefore, the oboe did not appear until after 1650. With this information Marx convincingly argues that the two men mentioned by de la Barre were Jean Hotteterre (d.1678) and Michel Philidor (d.1659). Of these two, Hotteterre is known to have been a famous instrument-maker.²³ Marx further concludes:

²¹Cited in Benoit: Op.Cit., p. 455.

²²Quoted by A. Baines: "James Talbot's Manuscript", Galpin Society Journal, 1, March, 1948, p. 14.

²³In his Traité de la Musette (1672), Charles Borjon cites Jean Hotteterre as being "... a man of unique talent for making all kinds of instruments of wood, ivory and ebony... bagpipes, recorders, flageolets, oboes...", (p. 38).

"... Michel Philidor did the actual work on the refinement of the reed and then sought the help of [Jean] Hotteterre, the best woodturner in the King's service, to construct an instrument to match it."²⁴

It was in the early fifties, therefore, that the new oboe probably was given its first tentative trials under the direction of Michel Philidor and Jean Hotteterre.

The idea behind remodelling the shawm cannot have been to increase its range substantially. As early as 1619, Praetorius had noted the shawm's ability to play more notes than there were holes; a range of two octaves is given by Mersenne. The early tutors of the new oboe do not indicate a significant increment over this range: the James Talbot manuscript lists a range of c' to c''';²⁵ Freillon-Poncein gives a complete chromatic range of c' - d''';²⁶ and Hotteterre²⁷ refers his readers to the discussion of the flute to learn the range of the oboe. Hotteterre's flute is given a range of d' to g'', but the author includes c' as an additional lower tone for the oboe. He further limits the oboe's upper range:

"Note that tones above high D [i.e. d'''] are almost never used."²⁸

²⁴Op.Cit., p. 14.

²⁵Baines: Op.Cit., p. 14

²⁶La Véritable Manière d'apprendre à jouer en perfection du haut-bois, Paris, 1700, p. 11.

²⁷Principes de la flute traversière... et du hautbois, Paris, 1707.

²⁸Ibid. p. 72.

The older shawm did not possess a uniformly serviceable range. We have already seen that a good f' was not available to the treble shawm player. At best the shawm was useful in a limited number of tonalities. Indeed, in the case of treble shawms, Praetorius suggests that music in the customary keys of C and F should be transposed to G, the best scale on the instrument.²⁹ We know, further, that the upper range of the shawm was, according to Mersenne, "more forced and shrill".³⁰

The new oboe's important characteristics would therefore be in the realm of dynamics, tone and intonation; it would have a more flexible dynamic range, and a much more serviceable upper register.³¹ The changes required in both oboe and reed construction, therefore, were geared to these ideals. In the construction of the oboe itself, the bore was made a little narrower than as formerly with the treble shawm. The new oboe was constructed in three sections, having characteristic bulges at the two joints. The finger holes were made smaller to enliven the upper register. Another important change was the lowering of the overall pitch of the instrument to c', making the keys of C and F practicable. The new oboe had a c'-key at the bell-end of the bore. Since on the shawm, whose fundamental tone was d', the note f' was not useable, it follows

²⁹Cited by Bate: Op.Cit., p. 29. It is curious that the musical example for explaining the proper use of shawm provided by Mersenne is in F. (see p. 378).

³⁰See footnote 12.

³¹Baines: Op.Cit., pp. 277-278.

that on the oboe in c', the tone e'-flat would not be available. To alleviate the problem an e'-flat key was added, duplicated on both sides of the bore to accommodate both right- and left-handed players.³² The oboe, then, was given a fully chromatic range, although c'-sharp was problematic. Freillon-Poncein and other early writers state without hesitation that this note is possible, through the rather tricky procedure of half-closing the c'-key. In this way the 3-keyed oboe of the early eighteenth century was born.

The reed, as explained earlier, necessarily underwent some modification in the transition from shawm to oboe. Although few specimens of shawm and early oboe reeds have survived, there is sufficient evidence to make certain general conclusions about the changes which occurred. The reeds of the earlier instrument were somewhat wider at the tip. Anthony Baines suggests that the newer instrument had a reed which was a good half-centimeter narrower than the reed of the shawm. The first recorded measurement of the width of the new oboe's reed is provided by James Talbot who cites this as being (in its modern equivalent) 9.5 millimeters.³³ Phillip Bate appears to disagree with Baines' proposal that the shawm's reed was 5 millimeters wider, for he writes:

"... the measurements noted by Dr. Talbot (c.1700) show that in their dimensions they differed little from

³²The later 18th century discontinued the practice of duplicating the e'-flat key, since 'left hand above right' became standardized. Thus the three-keyed oboe predates the two-keyed one.

³³Cited by Baines: Op.Cit., p. 278.

those used with the contemporary shawms."³⁴

The operative word in Bate's statement is 'contemporary'. The change from shawm to oboe was not at all sudden, and indeed, the oboe, from its debut in the 1650's, underwent continual refinement. Shawm and oboe, therefore, existed side by side for a period. The present writer believes it would be neutral for the remaining shawm players to eagerly accept the improvements made in the oboe's reed.

In general the reeds were more V-shaped, not unlike the bassoon reed of today. The width of the reed in relationship to the narrower bore would produce a broader, less incisive tone.³⁵ Another refinement in the new reed was its positioning on the instrument. Whereas the shawm reed was placed onto a staple at the top of the instrument, the reed of the new oboe was assembled with a staple which, as a unit, was inserted directly into the instrument itself.³⁶ With these alterations to both instrument and reed, the new oboe made its debut in the ballet orchestra of Jean-Baptiste Lully. Both Henry Prunières³⁷ and Joseph Marx³⁸ believe that it was probably in the 1657 production of L'Amour Malade that the new oboe had its first public performance.³⁹

³⁴Op.Cit., p. 11.

³⁵Ibid., p. 15.

³⁶As evidenced in diagrams in Diderot's Encyclopédie, the staple in the later eighteenth century was sometimes removed altogether.

³⁷Oeuvres Complètes de Jean-Baptiste Lully, I, Introduction.

³⁸Op.Cit.

³⁹Jean Hotteterre and two of his sons, Nicolas and Martin, are listed as instrumentalists in the livret of this ballet.

From this initial, tentative experiment the oboe knew immediate popularity. By the end of the seventeenth century it was one of the premiere wind instrument with an ever-growing repertoire. French virtuosos, such as Loeillet and La Riche (the expert player with whom James Talbot collaborated) took the new French invention abroad. Thus, in the preface to The Sprightly Companion (1695) J[ohn] B[anister] states:

"One would wonder the French Hautboy should obtain so great an Esteem in all the Courts of Christendome, as to have the Preference to any other single Instrument. Indeed it looks strange at first sight: But on the other hand, if a Man considers the Excellency and Use of it, this Wonder will soon vanish...."⁴⁰

No doubt, the great admiration which the oboe received was primarily owing to its great expressive range. Banister continues:

"For besides its Inimitable charming Sweetness of Sound (when play's [sic] upon) it is also Majestical and Stately, and not much Inferior to the Trumpet...."⁴¹

The new oboe was also capable of quiet playing:

"... all that play upon this Instrument, to a reasonable perfection, know, That with a good Reed it goes as easie and soft as the Flute [i.e. recorder]."⁴²

We may conclude that the oboe had become a very versatile instrument by c.1670, for after this time, like the violin, it was used unsparingly to depict almost any mood or effect. Before this date,

⁴⁰ Quoted by K. G. Evans: Instructional Materials for the Oboe, 1695-1800, Unpub. Doc. Dissert., State U. of Iowa, 1963, pp. 120-121.

⁴¹ Ibid., p. 121.

⁴² Ibid.

however, it is likely that the oboe retained its ancestor's tasks; along with the musettes and shawms, the early oboe was assigned symphonies de champêtres and scènes de bergers. It is in these situations that we will observe the instrument's initial treatment in the orchestra of Lully's ballets.

The Oboe in Lully's Early Ballets

The oboe was only one of three remodelled woodwinds which were regularly exploited in the dessus parts of Lully's early ballet music. It is not unlikely, therefore, that, along with oboes, recorders and flutes should appear in the same productions at various points.⁴³ Moreover, all three instruments were most often associated with similar idyllic and rustic dramatic action. Distinguishing between the three instruments is consequently quite difficult in the event that no instrumentation is specified. The range of the dessus part, however, is often of help in these situations.

The recorders most often employed, as we shall see in Chapter 4, had f' as a fundamental tone. Any part descending below this note in a work requiring woodwinds for the dessus line is intended, no doubt, for either oboe (fundamental tone of c') or flute (fundamental tone of d'). If this ballet were produced before c.1665 (before which the remodelled flute was unavailable),⁴⁴ it is most likely the dessus instru-

⁴³The transverse flute, however, does not figure in the ballets of the late fifties and early sixties; see Chapter 3.

⁴⁴See Chapter 3.

ment required was the oboe.

A further manifestation of the confusion surrounding the three primary dessus woodwinds of Lully's orchestra is the names of the players who performed on these instruments. The first virtuosos of the remodelled oboe were also, almost without exception, celebrated masters of the recorder.⁴⁵ The Hautbois et Musettes de Poitou of the Grande Ecurie supplied the early ballets with most of these performers.⁴⁶ Included in this group were: François Pignon dit Descouteaux, dessus de hautbois de Poitou; Jean Destouches, taille de hautbois de Poitou; Pierre Plesche, taille de hautbois; and Jean Hotteterre (co-inventor of the remodelled oboe), dessus de hautbois de Poitou.⁴⁷

These men appear in at least nine ballets of the period 1657-1670. Unfortunately, they do not appear in these productions solely in their capacities as oboe players. Indeed, Pierre Plesche is listed in 1664 as a "joueur de fluste ordinaire de la Chambre", while Descouteaux is listed as a player of the "hautbois et fluste ordinaire".⁴⁸ In the ballets of the late fifties and early sixties the two most prominent

⁴⁵ Indeed François Descouteaux was famous for his ability on the transverse flute, as well as the oboe and recorder. See M. Benoît: Op.Cit.

⁴⁶ It is odd that the Joueurs de violons, hautbois, sacqueboutes et cornets, the group that became the Douze Grands Hautbois du Roi under Louis XIII, do not figure as instrumentalists in the court ballets. They were no doubt reserved for their military and ceremonial functions.

⁴⁷ Ibid., p. 4.

⁴⁸ Ibid., p. 11.

dessus oboe players appear to be Jean Hotteterre -- along with his sons -- and Descouteaux.⁴⁹ When these names appear in the livrets of the ballets, then, we might expect oboes to appear in the orchestra.

A final problem concerning Lully's use of oboes involves the instruments themselves. Arriving at the same time as the standard oboe was a tenor instrument, called in most French sources the taille de hautbois, or simply taille. This instrument was pitched a fifth lower than the normal oboe, having f as its lowest note.⁵⁰ Baines suggests that the taille was most commonly used in a military capacity;⁵¹ nonetheless, it does not appear to have been excluded entirely from orchestral usage. Jürgen Eppelsheim, for example, has discovered evidence for the taille's use in Atys (1676).⁵² In this opera, two parts designated for oboes descend to g and a, both tones being too low for performance on the standard instrument in c'.

In the early ballets, too, there is evidence that the taille instrument was in use. In at least three productions⁵³ oboes are specified within a five-part orchestral set-up. In these circumstances, two

⁴⁹After the mid-sixties, Descouteaux seems to have devoted most of his time to the transverse flute; see Chapter 3.

⁵⁰See Anthony Baines: Op.Cit., p. 283.

⁵¹Ibid. It was used in the Douze Grands Hautbois du Roi.

⁵²In his Das Orchester in den Werken Jean-Baptiste Lullys, Tutzing, 1961, p. 105.

⁵³L'Impatience (1661), third entrée; Les Noces de Village (1663), first entrée; La Princesse d'Elide (1664), 3rd number.

possible solutions present themselves: oboes are intended only for the dessus part, the other lines being performed by other instruments; or, oboes are responsible for three or more parts in the texture, doubled by violins throughout. The latter solution is suggested by the fact that in many cases both the dessus and hautecontre parts are within the compass of the oboe in c', while the taille part lies comfortably on the tenor oboe in f. In addition, the oboe and recorder players of the Ecurie are used in large numbers (usually five or six names). Since it is unlikely that the orchestration would require six oboes on one part, it is probable that they arranged themselves in approximately even numbers throughout the orchestra. Two sizes of remodelled oboe, therefore, appear to have been exploited by Lully in his ballet orchestra.

Unlike the bassoon, the oboe is occasionally specified in the productions. These specifications appear in two ways: they are either indicated in the score itself; or the livret alludes to the instrument in its presentation of the drama.⁵⁴ For the purposes of this study, situations where oboes are specified by either of these methods have been almost exclusively used. In four ballets, however, musical evidence strongly suggests the use of oboes. These have been included to provide a broader basis for conclusions concerning the oboe's use.

The following scores have been consulted for this chapter:

Amour Malade (1657); Alcidiane (1658); Impatience (1661); Les Noces de Village (1663); Amours Déguisez (1664); La Princesse d'Elide (1664)

⁵⁴As mentioned in the previous chapter, it has been necessary to rely heavily on secondary literature for references to the livrets.

Les Jeux Pithiens (1670) and Le Bourgeois Gentilhomme (1670).

The first orchestral performance on the remodelled oboe occurred in 1657 in the ballet, L'Amour Malade.⁵⁵ Characteristically, this occurs near the end of the production, at the start of the final entrée.⁵⁶ Although no indications of oboes is supplied in the score, the livret informs us that in the entrée entitled 'Concert champêtre de l'Espoux', three Hotteterres, Piesche, Descouteaux and Destouches took part. Jean Hotteterre and Descouteaux, no doubt, performed the dessus part of the five-part orchestra. In G-major, this line is given a range of g' to b''. The hautecontre part, with a range of f'-sharp to d'' is likely to have been played on either oboes in c' or tenors in f. The third part, however, with a range of only c' - a' would lie very low on the oboe in c'. Since both Piesche and Destouches appear in the livret, both being listed as taille players in the accounts of the Grande Ecurie,⁵⁷ it is not unreasonable to suppose tenor oboes performed this line.

In Prunières' edition of the ballet,⁵⁸ the first four parts are scored for 'flûtes' and oboes. It will be shown in the next chapter that it is unlikely that transverse flutes were available at this early date.

⁵⁵See Joseph Marx: Op.Cit., p. 14; Henry Prunières: Op.Cit., p. 99.

⁵⁶Adam Carse: History of Orchestration, London, 1925, pp. 70-71. Carse maintains that woodwinds were habitually employed in the full-enssembled finales of each Act or production.

⁵⁷See note 47.

⁵⁸Oeuvres Complètes de Lully, Tome 1, p. 98.

Moreover the fourth part descends to d (below middle c'). Since this part only goes as high as d' it is probable that it is intended for either bassoons or continuo instruments. No violinists are mentioned as performers in this number. It is not impossible that recorders were expected to double the first three lines with the oboes. However, the fourth part, contrary to Prunières' suggestion, is not suitable for either recorders or oboes.⁵⁹

The ballet, Alcidiane of 1658, provides us with no specific references to oboes in either score or livret. In the second entrée of Part III, however, the livret, does indicate:

"Trois bergers, et autant de bergeres... font
avec plusieurs autres un Concert Rustique,
auquel un chœur de Flustes et de plusieurs
autres instrumens respondent...."⁶⁰

Included as instrumentalists at this point are three Hotteterres, Descouteaux, two Destouches and Piesche. It is quite obvious that recorders are required here; but the range of the five parts suggests the possible inclusion of oboes.

In g-minor, the first line is given a range of g' to b''-flat, a compass suitable to both recorders in f' and oboes in c'. The second line exhibits a range of e' to d''; this would require performance on a tenor recorder in c' or an oboe in c'. The tenor line however descends

⁵⁹ It is unlikely that a contrabass recorder in C is expected to perform here. The part is too low for the standard bass recorder in f.

⁶⁰ Henry Prunières: Op.Cit., Tome III, p. 28 in the facsimile of the livret of Alcidiane.

to g, too low for any recorder other than the bass in f. This line, though, lies nicely on the taille de hautbois. It is the range of this third line which suggests the inclusion of oboes, since performing music for a bass recorder on the part marked taille is unlikely.

This entrée includes two more pieces marked "pour les memes": an Air, and a Gavotte. Both selections maintain the tonality of g-minor and both reproduce the same problems of range in the third part of the five-part orchestra. It would seem likely that the orchestration, and hence the use of oboes is implied by musical evidence throughout this section of the ballet.

Alcidiane is concluded by two chaconnes. The first, which also serves as a ritournelle for the final recit, is a three-part 'Petite Chaconne'. The second is a large five-part 'Chaconne des Maures'. Inasmuch as both numbers are of substantial length, it is reasonable to expect that some variety in instrumental colour is required. It is possible, therefore, that the three-part chaconne is intended for woodwinds.⁶¹

Both dessus parts in the 'Petite Chaconne' are given extensive ranges: the first, a compass of e' to c'''; and the second, one of g'-sharp to c'''. Since the first dessus line over-steps the range of the normal dessus recorder in f', the woodwinds required must be oboes. It is not impossible, of course, that strings, rather than woodwinds, are

⁶¹Henry Prunières (Op.Cit., Tome II) provides orchestration for neither of these chaconnes.

desired in the 'Petite Chaconne'. Since oboes have been shown to take part elsewhere in the ballet, however, the exploitation of the instrument's sonority at the end of the work, where large instrumental forces are traditionally employed, would not be surprising.

The Ballet de l'Impatience was produced in 1661 to replace the planned premiere of Cavalli's opera Ercole Amante which was not yet ready for staging. The third entrée, on page 57 in Philidor's score is subtitled '8 chevaliers dansant sans violons'. The exclusion of strings, of course, requires a performance on wind instruments -- either recorders, oboes or both. The top four lines of the five-part setting align themselves in the following way:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - b''-flat
hautecontre	c1	e' - d''
taille	c2	b-flat - a'
quinte	c3	c - e'-flat

As was the case in the examples observed in Alcidiane, the tenor recorder in c' is not capable of playing the taille part. Again assigning the top three lines to two oboes in c' and in f solves the problem. It is likely that the Quinte line was played by a bassoon.

The ballet, Les Noces de Village of 1663, provides our first encounter with 'oboes' being specified in the livret, but not the score. In the very first entrée of the work (that is, after the ouverture and introductory récit), the bride and groom, around whose marriage the action is based, make their entrance. Charles Silin, apparently consulting the livret relates:

"The Bride and Groom, conducted by violins and oboes,

are the first to arrive at the place of assembly."⁶²

Indeed, included as instrumentalists for this entree are: four Hotterres [!], Descouteaux, Destouches and Piesche.⁶³

The distribution and ranges of this five-part work presents us with alignments which are somewhat different from those thus far observed:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	d' - b''
hautecontre	c1	b - e''
taille	c2	g - b'
quinte	c3	d - e'

Of especial interest here is the hautecontre line which descends below middle c' to b-natural. Hitherto, it has been possible to ascribe the hautecontre part to either the oboe in c' or the taille in f. This example makes it clear, however, that in most cases the second line in a five-part setting for oboes is intended for the taille de hautbois. A large number -- 70% -- of the five-part settings using oboes exploited a range of d' to e'' on the hautecontre part. The extensive range in this example is somewhat unusual. The use of the same size of instrument on both taille and hautecontre parts, however, is a tradition which goes back at least as far as Mersenne. Tenor oboes and flutes, for example, were used on hautecontre and taille parts in their respective whole consorts (see Chapters 3 and 4). The tenor oboe would also per-

⁶²Charles Silin: Benserade and his Ballets de Cour, Johns Hopkins Press, Maryland, 1940, p. 324.

⁶³Ibid.

form the part marked taille which, in this instance, is given a range of g - b'. The large number of woodwind instrumentalists in this entrée, of course, makes it very unlikely that oboes would be used on only the dessus line.

Just before this entrée in Les Noces de Village, an introductory recit is accompanied by a three-part ritournelle scored for two dessus and one bass instrument. This ritournelle is described as a "rustic harmony" and involves the wind players of the first entrée described above.⁶⁴ The first dessus is given a rather extensive range of g' to c''', while the second is given one of f'-sharp to a''. This short number, like the entrée which follows it, is in the key of G-major.

In the sixth entrée of Amours Déguisez (1664), a situation where the range of the parts in conjunction with the performers involved once more suggests the use of oboes. The first four parts of the five-part Concert de Bergers (p. 36 in Philidor's score) presents the following arrangement:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - g''
hautecontre	c1	d' - d''
taille	c2	a - a'
quinte	c3	d - d'

A large number of performers took part in this entrée, including: Plesche; Descouteaux; three Hotteterres; Destouches; Besson; Le Peintre; Le Roux aîné; Charlot; Hengé; La Rivière; Roulé; Huguenet;

⁶⁴Ibid.

Le Graïs; Marchand; Laquaisse and La Fontain.⁶⁵ The specification of six woodwind players suggests they were used on more than one part. Owing to the ranges of the middle parts, therefore, oboes appear to be likely participants in this entrée.

According to Jürgen Eppelsheim⁶⁶, the 'Marche du Dieu Pan' from La Princesse d'Elide of 1664 represents the first time oboes are actually specified in a work by Lully. We have already seen, however, that in 1663 Les Nopces de Village specified the instrument in the livret. As noted in the last chapter, the title of this entrée in Philidor's score -- CP Rés. F531 -- is 'March de Hautbois pour le Dieu Pan'. The five-part orchestra aligns itself as follows:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - b''
hautecontre	c1	d' - e''
taille	c2	g - a'
quinte	c3	d - e'
basse	f1	D - c'

By following the established pattern, we may ascribe oboes in c' to the dessus part, tenor oboes in f to the hautecontre and taille parts, and bassoons with continuo parts to the quinte and basse.⁶⁷ The present writer was unable to find reference to the instrumentalists listed in the livret of this ballet. Since oboes are specified in the score, however, we may assume that Hotteterre, Descouteaux et al participated.

⁶⁵Of these Besson, Le Peintre, Le Roux, La Rivière, Roulé, Huguenet, Le Graïs, Marchand, Laquaisse and La Fontaine were violinists.

⁶⁶Op.Cit., pp. 104-105.

⁶⁷See Chapter 1 for a discussion of the bassoon's use in this ballet.

Oboes are once more specified in Les Jeux Pithiens of 1670.

A vocal number from this ballet 'Jouissons des Plaisirs', is to be found on pages 118V-119V of Philidor's score -- CF Rés. F657. On the preceding page the following directions are written:

"Les flutes les hautbois et les violons Jouënt
l'air qui suit avant qu'il se chante."

The air is in three parts, in the key of g-minor. It is quite clear that it is intended for two dessus parts and a bass, but the arrangement of the three parts does not follow the normal trio pattern: the second part is given a c-clef on the first line. This, of course, is the normal clef for a hautecontre part. The ranges of the two upper parts -- g' to f'' and d - d'' respectively -- coupled with the three-part setting, strongly suggests that two groups of dessus instruments are necessary.⁶⁸ The abnormality of the c-clef can be explained by the fact that the two upper parts are texted. It is likely, moreover, that the instruments would double the voices when the latter entered the texture.

Immediately following 'Jouissons des Plaisirs' is a six-part Prélude in g-minor. The 'extra' voice in this instrumental work is an additional dessus part. Since oboes were specified in the preceding number, it is most probable that they should be included in the Prélude. This number provides an interesting example of Lully's use of concertato technique; the music alternates between six- and three-part textures, the trio sections being set for two dessus instruments and a bass. In

⁶⁸ Since the second part descends to d', the flutes required here are probably of the transverse type. This will be discussed in the next chapter.

the last nine bars of the work -- a tutti section -- the two dessus voices merge into one.

The range of the first dessus is g' to b''-flat; that of the second is g' to a''. The first part is given much more prominence than the second, although both lines are featured in the trio sections -- bars 3-6, 10, 13, 17-19, 26-28 and 34. Since the orchestration of trios is probably the same as that of the preceding number, we may assume that violins and transverse flutes performed the dessus line along with oboes.

The final score to be consulted in this chapter is that for Le Bourgeois Gentilhomme of 1670. A five-part menuet is followed by a menuet in trio on pages 92r-93r of Philidor's score (CP Rés. F657). The latter has been cited as Lully's first use of the oboe trio.⁶⁹ It is in this format -- a contrasting trio section within a tutti orchestral context -- that the oboe was to receive its most characteristic use at the hands of such composers as Purcell, Scarlatti and Handel.⁷⁰

The first menuet proper of this number most likely did not include the solo oboes of the trio. The two dessus voices of the second menuet align themselves as follows:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus I	g1	a' - b''-flat
dessus II	g1	g' - g''

Another part of Bourgeois Gentilhomme, before the menuet, presents an interesting approach to alternation of instrumental sonorities.

⁶⁹See Jürgen Eppelsheim: Op.Cit. p. 105.

⁷⁰See Carse: Op.Cit. p. 76.

A series of récits is interrupted by ritournelles from pages 68v through 71r. The three-part ritournelles, however, appear to alternate between strings and winds. The first of four ritournelles has no specified instrumentation; the second is carefully marked viollons; the third again has no indication, while the fourth is once more intended for viollons. We may infer from this set-up that wind players are required for the first and third repetitions. Oboes, since they are known to have been used in the ballet, are likely to have participated.

The first dessus part of the initial ritournelle has a range of b' to a''; the second dessus, one of a' to a''. The third ritournelle presents the same ranges. It is obvious that by 1670 Lully was well-aware of the colouristic potential of the remodelled oboe.

It has been shown that, although it was used quite regularly, the oboe was reserved for a rather small number of situations: as a colour instrument in some trios and orchestral numbers; and more usually within the context of its traditional association with bergers and scènes de champêtre. Its potential does not seem to be explored to the same degree as was that of the bassoon's. Within the limits of its stereotyped tasks, however, the oboe was given parts of considerable variety to perform.

The instrument was expected to play within the normal five-part string orchestra, doubling the three upper parts. The clearest example of this practice observed in the scores occurred in Les Noces de Village (1663): the first entrée, we recall, was specified for both violins and oboes. The oboe's use within a five-part setting was not restricted to doubling strings: in L'Impatience (1661) the third entrée

was entitled '8 Chevaliers dansant sans violons'.

The oboes most characteristic use, however, seems to be within the framework of the trio. The instrument in this arrangement performed in ritournelles to récits, as in both Les Noces du Village (after the Ouverture) and Le Bourgeois Gentilhomme (1670 - pp. 68v and 70v); it played trio sections in purely instrumental numbers such as the menuet with trio in Le Bourgeois Gentilhomme. In Les Jeux Pithiens it was observed that the oboe doubled the vocal lines of a sung récit.

The oboe, for the most part, was used by Lully in conjunction with the string orchestra. In addition it was consistently associated with other woodwinds, especially the recorders. We have observed a number of occasions, notably the second entrée of Part III in Alcidiane, where oboes and recorders were probably used together. This practice stems, of course, from the fact that the performers on the early oboes were initially recorder players. In Les Jeux Pithiens, we also observed oboes and transverse flutes used in the same number ('Jouissons des Plaisirs').

The range of the oboe was extensively exploited by Lully -- from d' to c''' (e.g. Les Noces de Village); we recall that, as late as 1700, Freillon-Poncein gave the usual range of the oboe as c' to d'''. Of the fifteen instances of oboe treatment observed, seven were in flat keys, six were in sharp keys (including two selections from Le Bourgeois Gentilhomme in D-major), and two were in natural keys. From these statistics we may conclude that the intonation and tuning problems of the earlier shawm had been alleviated in the remodelled oboe.

It must finally be reiterated that both the dessus oboe in c' and the taille in f were employed by Lully. The tenor has been shown to have performed both the hautecontre and taille parts of Lully's five-part orchestra. In three-part settings, on the other hand, only the oboe in c' was required.

Lully's use of the oboe was rather methodical; its performance in stereotyped situations no doubt determined this fate. Nonetheless, Lully was the first to explore the possibility of its use in the orchestral idiom, and his development of the oboe trio after its first use in Le Bourgeois Gentilhomme of 1670 established a pattern which was to be exploited extensively throughout the next century.

CHAPTER III

THE FLUTE

As was the case with the oboe, by the early seventeenth century the flute was a well-established instrument with a very long tradition. Of all European woodwinds, the flute has, perhaps, the longest history. That the flute was one of the last woodwinds to receive remodelling at the hands of the French instrument-makers¹ may be attributed to the fact that, beforehand, this instrument's structure and functions were well-standardized. Another reason for the later date of the flute's reconstruction is the difficulty which Hotteterre and his circle apparently encountered in this undertaking. Baines notes that the new flute was the least successful of all the woodwind remodellings because it "... was the hardest to play really well, and in tune".²

The problems we have already observed surrounding the use of the term, hautbois, are severely magnified in the case of the name, flûte. Not only does flûte serve to indicate both the older and newer forms of the instrument in French sources, but it is also the name of an instrument of an entirely different species -- the recorder. Knowing what instrument is referred to by "flûte", especially in seventeenth-century sources, is frequently very difficult. The difficulty is com-

¹We have seen in the previous chapter that a letter by LaBarre referring to various woodwinds, states: "La flûte traversière n'est venue qu'après..." This will be treated in more detail below.

²Anthony Baines: Woodwind Instruments and their History. London, Faber and Faber, 3rd edit., 1967, p. 291.

pounded by virtue of the fact that the twentieth-century musician recognizes "flute" as the transverse type in common practice; the seventeenth-century musicians, on the other hand, most often interpreted "flute" as the instrument of the recorder variety. Before attempting to decipher the complexities of the term flûte, we will trace the development of the instrument of the transverse type.

The transverse flute entered the early seventeenth century in a family of three basic sizes: a discant, an alto or tenor³, and a bass. These instruments had uniformly cylindrical bores, six finger holes, and a mouth hole across which the player's breath was directed to initiate sound vibrations along the length of the bore. With the exception of the bass⁴, the flutes were made in one section, usually of boxwood. Their sound was apparently loud and clear, of extensive range, and, according to Baines⁵, suitable for outdoors use. The instrument was, therefore, exceedingly simplistic in its structure, a fact which, no doubt, accounts for the consistency of the data on flutes provided by writers of the sixteenth and early seventeenth centuries.

Praetorius' discussion of the flute in his De Organographia of 1619 is so short that it may be quoted in its entirety here:

"The Cross Flute (Italian, traversa or fiffaro) has

³The middle size of the flute family played both alto and tenor parts in a four-part consort.

⁴The bass flute was often made in two sections. See Anthony Baines: Op.Cit., p. 250.

⁵Ibid. Baines mentions, in addition, that the sound in the upper register was quite "harsh".

six holes in front and none in back. It produces fifteen natural tones and four falsetto tones besides, thus nineteen in all, just as the cornet."⁶

Mersenne provides a much more substantial discussion of the flute in Proposition IX of the Fifth Book of his Harmonie Universelle. He makes special note of the flute's cylindrical bore:

"It is drilled with equal thickness all the way, which does not happen in all sorts of Chalumeaus, as I shall say elsewhere, and this thickness is of eight lines."⁷

Mersenne describes and diagrams one flute in some detail; from the dimensions he supplies -- a length of 23½ inches -- it may be deduced that he is referring to a tenor flute. Of this instrument he writes: "this flute serves as treble in the parts..."⁸ Mersenne, after stating that the range of the flute is two and a half octaves, shows a rather confusing tablature which gives the flute's lowest note as g (below middle c'). The ordinary number of the family -- the tenor flute -- has d', and not g, as a fundamental. Curiously, it is the bass flute which has g for a lowest note; it is difficult to explain why Mersenne should show the range of a bass flute when his discussion concerns the tenor. A second tablature and fingering chart, however, does show the tenor

⁶Michael Praetorius: Syntagma Musicum, II: De Organographia, trans. by Harold Blumenfeld, N.Y., Bärenreiter, 1962, p. 35. There is a subsequent paragraph describing the Swiss fife.

⁷Marin Mersenne: Harmonie Universelle, trans. by Roger E. Chapman, The Hague, 1957, Book 5, Prop. IX, p. 310. The modern equivalent of the bore's diameter is approximately 18mm.

⁸Ibid.

flute's range as d' - g''', one tone less than the 'nineteenth' Mer-senne suggests in his text.⁹

Although mention is made of the transverse flute in subsequent years of the seventeenth century, no additional technical data is made available until close to 1700. Most modern scholars concur that, as was the case with the oboe, a group of Parisian wood-turners and instrument-makers effected extensive remodellings of the tenor flute sometime before the end of the seventeenth century.¹⁰ It is an Englishman -- James Talbot -- however, who gives us our first look at the remodelled flute.¹¹ Sometime around 1690,¹² Talbot describes an instrument in three sections, with six finger holes, and one keyed hole for the note, d'-sharp. In 1707 the first published tutor to discuss the remodelled flute appears: Jacques-Martin Hotteterre's Principes de la Flute Traversiere, ou Flute D'Allemagne, de la Flute a bec, ou flute douce, et du haut-bois. The illustrations of the flute in this treatise show an instrument with a tapering bore, and much more elaborate turnery in its outward appearance.

We may conclude from sources of the late seventeenth and early eighteenth centuries, together with extant instruments from that period,

⁹Ibid., p. 311.

¹⁰See, for example Baines: Op.Cit.; Phillip Bate: The Flute, London, Benn; 1969.

¹¹See Baines: "James Talbot's Manuscript", Galpin Soc. J. 1, March, 1948.

¹²According to Bate: Op.Cit. p. 84.

that the following features appeared on the flute between 1636 and c.1690: an inversely conical bore replaced the older cylindrical one; a closed d'-sharp key appeared; the instrument was constructed in three or four sections instead of in one piece as formerly; and the natural scale of the instrument was D, showing that the older alto/tenor flute was considered most appropriate for remodelling.¹³ It should be pointed out that not the entire length of the new flute's bore was conical. The head joint, probably in imitation of the contemporary recorders, remained cylindrical.¹⁴ The conical shape of the rest of the bore had a flattening effect on the instrument's pitch; as a result, the finger-holes could be drilled slightly closer together, reducing the stretch for the hands. The tonal effects of the remodelling are well summarized by Baines, who writes: "With this bore the tone becomes purer, free from fife-like shrillness...."¹⁵

The 'sweeter' sonority¹⁶ of the new flute was, no doubt, most pronounced to the generation first encountering it. The flute received stereotyped treatment -- usually in the scènes de sommeil of dramatic productions.¹⁷ Besides assuming this stereotyped usage, the employment of flutes was further restricted by certain deficiencies in that instru-

¹³See Bate: Op.Cit., p. 77; and Adam Carse: Musical Wind Instruments, London, MacMillan and Co., 1939, pp. 84-85.

¹⁴See Bate: Op.Cit., p. 77.

¹⁵Op.Cit., p. 290.

¹⁶Bate: Op.Cit., p. 80.

¹⁷See Henry Prunières: "Lully et l'Opéra Français" La Revue Musicale, Numéro Spécial, 1925, p. 40.

ment. The conical bore of the newer design -- the feature which resulted in the flute's characteristic sonority -- also resulted in quite serious intonation difficulties. The following tones on the early remodelled flute were often so bad as to be unusable: b'-flat -- too sharp; g'-sharp and g''-sharp -- both sharp, especially the lower; f'-sharp and f''-sharp -- just slightly flat; and f' and f'' -- quite sharp.¹⁸ Indeed, the new flute seems to have had not a single good f-natural throughout its range; Hotteterre, in the fingering-chart of his Principes..., omits high f''', although f'''-sharp and g''' are given fingerings. In short, the best keys for the new flute were G and D major.

Carse maintains:

"Provided they were not called upon to play in keys very remote from the foundation key of D, they evidently satisfied the players and composers of several generations...."¹⁹

Despite the limitations imposed by this faulty intonation, the flutes increased their popularity with astonishing rapidity after their introduction to the French instrumental ensembles.

An accurate dating of the remodelled flute's first appearance in France is a matter of considerable controversy. Theoretical sources lacking, we are forced to rely, for the most part, on letters and 'second-hand' information. We have already made reference to a letter of Michel de la Barre in the previous chapter. We recall that de la Barre, writing in about 1730, was referring to the decline of the musette during the

¹⁸See Baines: Op.Cit., pp. 291-292.

¹⁹Carse: Op.Cit. p. 87.

time of Lully. He states in part:

"Since that time the musettes were left to the shepherds; violins, recorders, theorboes and viols taking their place, for the transverse flute didn't come till later."²⁰

Modern scholars²¹ have drawn heavily on this statement to date the flute's appearance at c.1670. Phillip Bate, adds that even Quantz, in his Versuch einer Anweisung die Flute Traversiere zu spielen of 1752, was uncertain as to the time and place of the remodelled flute's appearance. Quantz writes:

"The exact time when this improvement was made, and who its originator was, cannot be fixed with certainty, although I have spared no pains to discover reliable answers. In all probability the improvement was made less than a century ago; it was no doubt, undertaken in France at the same time that the shawm was developed into the oboe, and the bombard into the bassoon."²²

Quantz' statement certainly does not contradict Bate's estimate of c.1670. Bate, however, seems to ignore important information in La Barre's letter, information which when analyzed, suggests his date of 1670 should be advanced. If, indeed, the flute was remodelled at the same time as the oboe, then Bate's date may be pushed back by as much as ten to fifteen years, and still fall within the hundred year limit suggested by Quantz. Let us return to La Barre's letter.

²⁰Cited in Ecorcheville: "Quelques documents sur la musique de La Grande Ecurie du Roi", S.I.M.G., Vol. II, 1900-1901, p. 633.

²¹Notably Adam Carse: Op.Cit. and Phillip Bate: Op.Cit.

²²J. J. Quantz: On Playing the Flute, trans. by E. R. Reilly, London, Faber and Faber, 1966, p. 30, paragraph 5.

In reference to the older musette's disappearance from the normal ensemble, La Barre relates:

"... the violins, recorders, theorboes and viols took their place, for the transverse flute did not come till later. It was Philbert [sic] who first played it [the flute] in France and then almost at that same time Descoteaux [sic]; the king for whom, along with his entire court, this instrument was infinitely pleasing, added two more positions to the 4 existing musettes de Poitou, and presented them to Philbert and Descoteaux; these two have told me many times that the king, in giving them the positions, informed them that he strongly wished that all the six musettes should be changed over to transverse flutes, for they [the flutes] would at least be useful, in that the musettes were only suited to having peasant-ladies dance."²³

La Barre's understanding of the situation is quite tenable when one considers that he studied under both Descoteaux and Philibert Rebillé (i.e. Philbert).²⁴ Moreover, this information is substantiated, in part by Quantz, who also cites Philibert as the first master of the new flute.²⁵

²³This letter is cited fully in M. Benoit: Musiques de Cour, Paris, J. Picard, 1971, p. 455; "... les violons, les flutes douces, les theorbes et les violes prirent leur place, car la flute traverssière n'est venue qu'après. C'est Philibert qui en a jouer le premier en France, et puis presque dans le meme temps, Descoteaux; le roy ausi bien que toute sa cour, a qui cet istrument [sic] plut infiniment, adiouta deus charges aux quatres musettes de Poitou, et les donna a Philbert et Descoteaux, et ils m'ont dit plusieurs fois que le roy leurs avoit dit en les leur donnant qu'il souhaitoit fort que les six musettes fussent metamorphoses en flutes traversieres, qu'amoins elles seroient utiles, au lieu que les musettes n'estoient propre qu'a faire dansser les paisanes".

²⁴See M. Benoit: Versailles et les musiciens du Roi, Paris, A. et J. Picard, 1971, p. 224.

²⁵Op.Cit., paragraph 6, p. 30.

In essence, La Barre tells us that as a result of the brilliant flute playing of both Descouteaux and Philibert, two positions in the Hautbois et Musettes de Poitou were created, so that the two instrumentalists could quickly enter the court's service.

The Hautbois et Musettes de Poitou, along with the other four departments of La Grande Ecurie du Roi,²⁶ was, more than anything else, a finely structured institution. It was created in the sixteenth century to accommodate four players of the instruments called, de Poitou:²⁷ there was a taille de hautbois et bass-contre de musette; a taille de hautbois et joueur de cornemuses; a dessus de hautbois and a basse-contre et dessus de musette.²⁸ The positions were granted for life, and usually were controlled by a few families, generation after generation. By the mid-seventeenth century, of course, the de Poitou instruments were ostensibly obsolete. By the seventies, the players of this institution were most frequently playing recorders, flutes or oboes, and usually all three.²⁹ The traditional nomenclature of both the department and the positions within it, nonetheless was maintained until the revolution. It was within this group that two positions were created

²⁶ Les Trompettes; Les Tambours et Fifres; Les Violons, hautbois, sacqueboutes et cornets; and Les cromornes et trompettes marines.

²⁷ These instruments, like crumhorns, had their double reeds enclosed in capsules.

²⁸ Ecorcheville: Op.Cit., p. 633.

²⁹ A larger reservoir for court oboists, of course, was the Douze Grands Hautbois du Roi.

for the two virtuosos, Philibert and Descouteaux, quite a testimonial to their flute-playing capabilities.

This interpretation of La Barre's letter established, it is only necessary to attempt to determine the date of the creation of the two new positions. La Barre's letter is misleading in two respects: first of all, one infers that Philibert mastered the flute at approximately the same time Descouteaux did; secondly, it is implied that Philibert gained entrance to the hautbois et musettes de Poitou before Descouteaux.

Ecorcheville surmizes that a fifth position in the hautbois de Poitou was created between 1647 and 1662;³⁰ we may be more precise. In the Etat des officiers de la maison du Roi of 1661, six names appear under Hautbois et Muzettes de Poitou: "François Pignon dit Descouteaux, dessus de haulbois de Poictou; Jean Brunet et Jean Louis son fils, basseconte et dessus de muzette de Poictou; Jean Destouches, taille de haulbois et basseconte de muzette de Poictou; Pierre Puche [i.e. Piesche], taille de haulbois et joueur de cornemuze; Jean Hauteterre, dessus de haubois [sic] de Poictou".³¹ We notice that, although six names appear, only five positions are listed. The extra name is obviously Jean Brunet's son, Jean Louis, for only one position follows their names: dessus et basseconte de muzette de Poictou. This position was one of the four original ones. The additional position, supposedly

³⁰ Op.Cit., p. 634.

³¹ Benoit: Op.Cit., p. 4.

created by the king, is a new dessus de hautbois de Poitou, and it is held by François Pignon Descouteaux. In similar documents of 1664, the number listed beside positions in the Hautbois de Poitou is five;³² the names listed are the same as those of 1661, except that Jean Louis Brunet has been removed. We may conclude, then, that François Descouteaux was granted a newly-created position in the hautbois de Poitou sometime before 1661.

The present writer has found that the earliest Court reference to Descouteaux is 1657, in the production of L'Amour Malade. Taking part with Descouteaux in this spectacle were Jean Hotteterre with his two sons, and Destouches, among other woodwind players. We recall that this ballet was the first to include the remodelled oboes. It seems possible, therefore, that Descouteaux was granted a new position for his oboe-playing, and not, as La Barre relates, for his flute-playing ability. It is likely that only after Philibert's mastering of the new flute did Descouteaux devote his skills to it, becoming a great master and teacher himself. This would confirm La Barre's implication that Philibert was first to play the new flute, and that Descouteaux followed his lead shortly thereafter. The fifth position in the Hautbois et Musettes de Poitou, therefore, was probably created in 1657.

The situation is not nearly so straight forward in the case of Philibert Rebillé. In 1666, the Etat des Officiers de la Maison du Roi again lists the six names of the hautbois et muzettes de Poitou that

³² Ibid., p. 9.

appeared in 1661; again the superfluous member is Jean Louis Brunet.³³

In 1667 seven names appear: Jean Brunet; Anthoine Piesche, replacing his father, Pierre; Michel Destouches; Martin Hotteterre, replacing his father, Jean; François Pignon Descouteaux; and Jean Louis Brunet with Philebert [sic] Rebillé. The last two named receive special mention: "(led.[it] Jean Louis est filz de Jean Brunet, et il n'a point de certificat) [Philebert Rebillé est reçu a sa place. Nota: point d'employ]".³⁴ This information indicates that Philibert Rebillé gained entrance to the group of hautbois de Poitou in 1667 by replacing a very young Jean Louis Brunet. Philibert appears to have been given a newly-created sixth position in the group; indeed, additional expenses for that year show that there were now six positions in the group: "Pour un habillement complet de six joueurs de hautbois, cornemuses et musettes de Poitou--Néant".³⁵ It is not until 1670 that an official document concerning the creation of the sixth position in favour of Philibert appears.

The document, however, is most illuminating. It states:

"Retenue de Hautbois, musette et flûte de Poitou ordinaire de la Grande Ecurie, en faveur de Phillipes Rebellé [sic], successeur de Jean

³³ Jean Louis appears in these listings, no doubt, as an eventual successor to his father's position. In 1666 Jean Louis must have been much too young to take an active role in this group, for as late as 1677 he is referred to as being not yet eighteen years of age. (See Benoit: Op.Cit., p. 54.) Although no definite biographical information is available to the present writer, documents from the Ecurie of 1678 suggest that Jean-Louis turned eighteen that year. In 1666, therefore, he was likely only six years of age.

³⁴ Ibid., p. 18. Editorial brackets are in the original.

³⁵ Ibid., p. 18.

Louis Brunet, demissionnaire."³⁶

To the present writer's knowledge this is the first time the traditional title of a member of the Hautbois et Musettes de Poitou was adjusted to indicate the actual instrument the performer used. It is good proof, moreover, that Philibert entered the Court as a flute-player.

We may conclude that La Barre's letter incorrectly ascribes the creation of the fifth position in the Hautbois et Musettes de Poitou to Descouteaux' flute-playing ability. In the case of Philibert and the sixth position, however, this would indeed seem to be the case. It is likely that, shortly after Philibert's arrival, Descouteaux took up the transverse flute.

The flutes played by Descouteaux and Philibert in the late sixties and early seventies were most probably of the remodelled transverse type. The older transverse flute of Mersenne's time had not been a popular concert instrument in France. Moreover, there was no department of the Grande Ecurie in the earlier seventeenth century that could include such an instrument.³⁷ In addition, Charles de Saint-Evremond (in his Oeuvres, 1740, III, p. 294) suggests that flute concerts were unknown in France before 1659.³⁸ When the transverse flute did finally

³⁶ Ibid., p. 18. Yet another document is listed on p. 37.

³⁷ The fifres et tabours could include fifes, which in Mersenne's time were similar to transverse flutes, but of a smaller range. They were, however, reserved for military use.

³⁸ Cited in Albert Cohen: "A study of instrumental ensemble practice in seventeenth-century France", Galpin Society Journal, n15, 1962, p. 5.

find a place in Ecurie, then, it was most likely after the remodelling process had occurred.

There is documentation which suggests that Philibert was gaining renown as a flute-player well before 1670. Records of a trial in 1679, in which Jean Brunet's (a member of the Ecurie) wife was found guilty of poisoning her husband in 1672, give an account of the music-making activity in which Philibert participated:

"Madame Brunet was married to a fine bourgeois of Port St-Landry in the city. M and Mme Brunet used to receive many guests, for there was always good music-making at their house. The fashionable flute-player, Philbert [sic] Rebillé, called Philbert [sic], now a musician of the King, made himself heard there habitually. Brunet adored the flute player for the agreeability of his talent...."³⁹

Although this document fails to specify the type of flute upon which Philibert performed, we may assume, from other sources cited above, that it was a transverse one. It was through these concerts, no doubt, that Philibert was first introduced to Brunet, and subsequently gained sponsorship into the hautbois et musettes de Poitou.⁴⁰ Since the flute-

³⁹Cited in Ecorcheville: Op.Cit., p. 634. This trial is a most famous one. Much of Philibert's fame may be owing to his affiliation with the scandalous affair. Jean Brunet, who was so pleased with the concerts Philibert gave at his home, offered the flute-player the hand of his daughter. Mme Brunet, unfortunately, fell in love with Philibert. After she had disposed of her husband, she married Philibert. When she was discovered and later hanged, the flute-player was imprisoned for a short period, during which he disappears from activities in the Ecurie.

⁴⁰We recall that in 1667 Jean Brunet's son, Jean Louis, was removed from the group in favour of Philibert. This is probably another manifestation of Brunet's admiration for him.

player entered the Ecurie as early as 1667, some of the concerts in which he was heard at the Brunet's must have occurred sometime before that date.

We may conclude that a remodelled flute was available by at least 1667. It is unlikely, as already observed, that Descouteaux, when he entered the Ecurie in 1657, was a flute player. Nonetheless, it can be seen that the actual process of remodelling must have been initiated in the very late fifties or early sixties. This date agrees with Quantz' statement that the remodelled flute was less than a century old in 1752.

There is musical evidence which bears out our hypothesis that the flute was available for use in the early ballets of Lully, 1657-1670. As will be shown presently, however, it is only at the very end of this period that they make their initial appearance in Lully's ballet orchestras.

The Flute in Lully's Early Ballets

The sampling taken from Lully's early ballets with reference to the flute will be necessarily small; not only was the flute the last of the standard woodwinds to be remodelled, but it also had little tradition for employment within the context of the ballets de cour. When the instrument finally does appear, then, it is given very specialized treatment, being used in only a small number of situations.

Before proceeding to Lully's ballet scores, it will be necessary to briefly expose the problems surrounding the term flûte. As previously mentioned, the term by itself indicated 'recorder' to most

seventeenth-century musicians. Many modern scholars believe that to show that a transverse flute was desired, special indications in the score, such as d'Allemagne or traversière, were required.⁴¹ On the other hand, Lully occasionally used the term flûte à bec to specifically designate recorders.⁴² Clearly, the term flûte by itself offers little help in determining the instrument demanded in the score.

In the early scores, to at least 1665, of course, the problem is non-existent, for the transverse flute was not then available. In the later ones, however, the difficulty is a very real one, which requires solution.

How the flutes or recorders are used in Lully's ballets is apparently the only musical clue to determining the appropriate instrument in a given situation. To this end, the range and tonality of the music can be most enlightening. The upward range of the dessus parts are of little help in this matter, since Lully rarely scores his dessus instruments above c'''; this tone of course, is within easy reach of both the remodelled flute and the recorders in f' (treble) and c' (tenor). The downward range of this part, however, is quite significant. There are examples in Lully scores where a dessus part scored for flûtes descends below f', to e' or d'. This is obviously out of reach on the f;-recorder, and since the tenor recorder probably would not be given a

⁴¹ See for example, Jürgen Eppelsheim: Das Orchester in den Werken Jean-Baptiste Lullys, Tutzing, 1961, p. 66.

⁴² Eppelsheim (*Ibid.*) believes that flûte à bec is redundant, since by convention flûte alone meant recorder.

dessus clef,⁴³ the situation demands performance on a transverse flute. In a limited number of cases, then, the range of a part is useful in distinguishing between flutes and recorders.

The tonality of a work, along with the repeated appearance of certain tones, provides another method for determining which species of flute is required. This method, however, is not nearly as dependable as the previous one. We have seen that the new flute was best suited to sharp keys -- especially G- and D-major. Recorders, on the other hand, were most effective in flat keys. Anthony Baines suggests that these limitations may help to sort out the appropriate instrument in a score simply marked flûtes.⁴⁴ In addition, we have seen that the following notes are badly out of tune on the flute: b'-flat; g'-sharp; and f'. Music which features these tones in an exposed or consistent manner would consequently be better suited to the recorder.

Finally, the performers on the early flute, perhaps more explicitly than with any of the other woodwinds in this study, may clearly identify the desired instrument in a given score. The appearance of Philibert and Descouteaux in the livret of a ballet almost assures us that transverse flutes took part. By 1669-1670, however, other members of the Grande Ecurie's Hautbois et Musettes de Poitou had taken up the new instrument. Thus in the comédie-ballet, Monsieur de Pourceaugnac of

⁴³The use of the various recorder sizes will be discussed in the next chapter.

⁴⁴Op.Cit., p. 291.

1669, Molière's livret lists four flutists: "Les Sieurs Descotteaux [sic] Philbert [sic], Piesche fils et Fossard". Two of these players -- Descotteaux and Piesche -- could easily perform on either recorders or oboes; their appearance in conjunction with Philibert, however, makes their playing transverse flutes most probable.

Since transverse flutes are new instruments at the time of Lully's early ballets, their inclusion in the orchestra is usually indicated by either the score or accompanying livret. Only those scores in which the instrument is specifically designated have been consulted, although some entrées not specified for flutes have been included if they appear in ballets where flutes are known to have participated. In both situations, of course, the criteria established for distinguishing between flutes and recorders must be applied.

Only four of all the scores selected for this study demonstrated employment of transverse flutes. They are: Les Muses (1666); La Grotte de Versailles (1668); Monsieur de Pourceaugnac (1669) and Les Jeux Pithiens (1670). Prunières' edition of a limited number of Lully's comédie-ballets has also been consulted, because Prunières includes the original comédies with livrets in his editions. These of course, provide the names of performers as well as the type of instruments required in a given section of the drama. The editions sometimes include entrées, which the Philidor copies available to the present writer have omitted; of these, entrées which include the flute have been studied for the purposes of this chapter.

The Ballet des Muses, which premiered on 2 December 1666, is the first ballet to have contained music for the recently remodelled

transverse flute.⁴⁵ This date is apparently too early for the use of transverse flutes; we recall that Philibert is not mentioned at court until 1667. Certain peculiarities in the repetitions of this ballet, however, account for this discrepancy.

The Ballet des Muses was apparently a very popular divertissement of considerable splendour and brilliance;⁴⁶ it was, therefore, given several repetitions. Curiously, the content of the ballet was altered a number of times until its final performance, 19 February, 1667. Among the instrumentalists listed in the livret are: Descouteaux, Philibert, Jean and Nicolas Hotteterre, Piesche and Lully. Of especial interest, of course, is the inclusion of Philibert, for we may assume that transverse flutes, as a result, were employed in the production.

Philibert's exclusion from records at Court until 1667 may be explained in two ways: first of all, it is possible that Philibert's services were not required for the original December 2nd version, but that he was used in one of the subsequent alterations or additions in January of 1667; secondly, and more probably, the expenses incurred were not entered into the Court's accounts until the termination of the ballet, in 1667. The latter solution is all the more tenable when one considers

⁴⁵Adam Carse (Op.Cit., p. 178) maintains that the remodelled flute did not have its orchestral debut until 1677. Phillip Bate (Op.Cit., p. 82) does not attempt to describe the first instance of the new flute's employment. Inasmuch as Bate believes the transverse flute was not remodelled until c.1670, however, it is clear he would not agree with the present writer's premise. The information provided below will substantiate this theory.

⁴⁶See Charles Silin: Benserade and His Ballets de Cour, Maryland, 1940, p. 365.

that the dramatic situation in which the flute was first used occurs in the original version of the ballet -- in December 1666. We may, therefore, conclude that the transverse flute was first used orchestally in 1666.

The Paris Gazette describes the fifth entrée of the Ballet des Muses as follows: "Dans la cinquième, pour Clio, se voit la bataille donnée entre Alexandre et Porus...."⁴⁷ Silin, who must be referring to the livret, states that the entrée was danced to the accompaniment of flutes and drums.⁴⁸ Since Philibert is included as an instrumentalist, we may only conclude that this is a reference to transverse flutes.

Musically, the fifth entrée consists of three numbers:

(1) 'Marche des Grecs'; (2) 'Marche des Indiens' and (3) 'Le Grand Combat'. The first two contain parts for drums and are, as a result, in six parts. The upper parts of the 'Marche de Grecs' show the following arrangement:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	f' - b''-flat
hautecontre	c1	f' - d''
taille	c2	b-flat - a'

Those for the 'Marche des Indiens' are as follows:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - b''-flat
hautecontre	c1	d' - d''
taille	c2	b-flat - b'-flat

⁴⁷Cited in Silin: Op.Cit., p. 360

⁴⁸Ibid.

The upper parts in 'Le Grand Combat' (scored without drums) are:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - b''-flat
hautecontre	c1	d' - d''
taille	c2	b-flat - b'-flat

It can be seen that both the dessus and hautecontre lines are within the compass of the flute (lowest note, d'). The taille, however, is in all three examples too low for performance on transverse flutes. It is likely that it, along with the quinte and basse parts, was executed on strings. From the names listed in the livret we may establish a tentative setting as: Philibert and Descouteaux on the dessus line; Piesche and Hotteterre on the hautecontre.

Flutes are given a much more prominent position in La Grotte de Versailles (1668). The first entrée, concerned with bergers, commences with a 'Ritournelle pour les flutes'.⁴⁹ That this three-part ritournelle is intended for transverse flutes, as opposed to recorders, is indicated by the ranges of the two dessus parts; the first has a compass of g' to f''; while the second has one of d' to d''. It is the second dessus part, of course, which indicates the need for transverse flutes, since it descends below the dessus recorder's range.

The ritournelle commences a series of alternating ritournelles and récits. Of great interest is the music for the récits which, in each of the four alternations, borrows its content from the instrumental

⁴⁹ Specified on p. 18 in the score. At the beginning of the ritournelle on p. 19 the following is written in pencil, copied over with ink; "flustes et violons". From this we might conclude that violins doubled the flutes.

ritournelle preceding it. This type of set-up suggests that perhaps the instruments of the ritournelle double the voices when each récit is begun.

The second ritournelle of the series, like the first, is in g-minor. Although no instrumentation is indicated, it is likely that the entrée would use the same instruments throughout. The range of the first dessus is g' to b''-flat; that of the second is d' to d''. We may assume, then, that this too requires performance by transverse flutes. The récit which follows, 'Voyons tous deux en aimant', uses the same musical material, again suggesting the possible doubling by flutes and violins.

The third ritournelle, preceding the récit, 'Les oyseaux vivent', would, according to the established pattern, also include transverse flutes. The ranges of the two dessus parts are: first -- g' to e''; second -- e' to c''. The tonality has changed to G-major, and with references to birds in the accompanying text, flutes are, indeed, strongly suggested.

The fourth and final ritournelle of the series returns to g-minor. It differs from the preceding numbers in three respects. First, the ranges of the dessus lines -- f'-sharp to a'' and g' to a'' -- does not exclude the possibility of recorders taking part. Second, the music for the ensuing récit, 'Dans ces deserts', does not borrow exactly the music of the ritournelle. Third, this récit is for only one voice. From these points we may conclude that the ritournelle instruments probably did not double the vocal lines of the final récit. Although the ritournelle lies within the reach of recorders, it is most unlikely that they should suddenly enter the texture of an entrée highlighting the

transverse flute.

A livret for La Grotte de Versailles was not available to the present writer. It is subsequently uncertain whether or not Philibert took part in the production. Nonetheless, the ranges of the dessus parts in the first ritournelle of the entrée, marked flutes, as described above, is good proof that transverse flutes were used in this ballet.

The comédie-ballet, Monsieur de Pourceaugnac,⁵⁰ was produced in 1669. On p. 54 of the Philidor copy (Tome VI of the Recueil des Ballets) an entrée, 'Les Maîtres à danser', is commenced. The livret describes the personnel required for its execution as follows:

"Les deux maîtres à danser: MM. La Pierre et Favier.
Les deux pages: MM. Beauchamp et Chicaneau. Quatre curieux de spectacles: Les sieurs Noblet, Joubert, L'Estang et Mayeu. Les quatre flûtes: Les sieurs Descotteaux, Philibert, Piesche fils et Fossard."⁵¹

Clearly transverse flutes are required. Since only four performers are listed, and the entrée is in five parts, we may assume that other musicians also took part. The setting has the following arrangement:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - c'''
hautecontre	c1	d' - e'''-flat
taille	c2	b-flat - a'
quinte	c3	g - g'
basse	f4	D - d'

It is obvious that only the top two lines are available to transverse

⁵⁰This was only one of a number of divertissements which together formed Le Divertissement Royal de Chambort.

⁵¹Cited in Prunieres: Op.Cit., Vol. III, p. 11.

flutes. As a result, it is likely that Descouteaux and Philibert performed the dessus part while Piesche and Fossard⁵² played the hautcontre.

In the 1670 production of Les Jeux Pithiens flutes are once more included in the orchestra. On folios 118v to 119v of Tome VI in Philidor's collection is a vocal number called 'Jouissons des Plaisirs'. On folio 118R appears the instruction: 'Les flutes les hautbois et les violons jouent l'air qui suit avant qu'il se chante'.⁵³ The three-part setting in g-minor shows a somewhat unusual arrangement:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - f''
dessus	c1	d' - d''
basse	f4	D - d'

Curiously, the second dessus is given a c-clef on the first line, as if it were a hautecontre part. The unusual clef, as explained in the previous chapter, results, no doubt, from the fact that the two upper parts are texted. We may be sure that the specified flutes are of the transverse type, for the second line descends to d', beyond the range of the recorder in f'.⁵⁴

The next number in this entrée is an orchestral setting in g-minor entitled 'Prelude'. It is quite possible that flutes also parti-

⁵²This is the Fossard who assisted Philidor in copying Lully's scores.

⁵³Prunières (Ibid.) scores this for only 'Flûtes' in his edition.

⁵⁴It is possible that a treble recorder in f' and a tenor c' are intended. The unlikely situation of a trio with three different instruments, however, strongly militates against this solution.

cipated in this work, a premise which is supported by the fact that the 'Prelude' is in six parts, including two dessus lines. The first dessus is given a range of g' to b''-flat, while the second has a compass of g' to a''.

A final instance of the flute's use in Les Jeux Pithiens is not included in Philidor's copy of the ballet. In the third scene (pp. 179-181 in Prunières' edition) a 'Ritournelle pour les Flûtes' appears. The setting is for two dessus instruments plus bass. The range of the first line is d'' to b''-flat, while the second part is given one of a' to a''. Again the ranges do not exclude performance on recorders; but since flutes probably were used elsewhere in the ballet, the flutes indicated by Prunières are, no doubt, of the transverse variety.⁵⁵

The use of flutes in Lully's early ballets has been shown to be somewhat experimental. The great virtuosity through which both Philibert and Descouteaux gained renown is almost completely avoided. It would appear, nonetheless, that Lully was well aware of the great colouristic potential of the new instrument, for he employed the flute in quite a variety of ensembles.

It is most interesting that the first use of the flute, in Les Muses (1666), was in conjunction with drums, in a 'military' entrée. The traditional fifres et tambours of the Grande Ecurie, no doubt, suggested this kind of treatment to Lully. Thus, the only appreciation the French Court had for flutes of transverse type was exploited when

⁵⁵Prunières, throughout his edition makes no distinction between recorder and flute.

the new instrument was first introduced. The treatment the flute received in subsequent ballets, however, clearly demonstrates that the instrument was quickly accepted.

In Les Jeux Pithiens of 1670, flutes were observed within Lully's string orchestra. That two dessus parts appeared in this setting, is good evidence of the special considerations the instrument was afforded. Lully most frequently scored flutes, however, in three-part settings. In La Grotte de Versailles (1668), we recall that the ritournelle for 'Goutons bien des Plaisirs' required both flutes and violins on the two upper parts of the trio. In Les Jeux Pithiens, a trio for 'Jouissons des Plaisirs' placed the new flute in conjunction with oboes. In the same ballet flutes were given a trio ritournelle, without the support of other instruments. Finally, in both La Grotte de Versailles and Les Jeux Pithiens, we found strong evidence to suggest the doubling of vocal parts by flutes.

Besides being aware of the great potential of the new flute, Lully seems to have been familiar with its intonation problems. Although he wrote for the flute in a major key on only one occasion in this small sampling, Lully appears to have avoided the instrument's two worst tones -- f' and g'-sharp -- whenever possible. This is especially true for the lower flute parts, the lower octave of the instrument's range being, perhaps, most problematic. In the four ritournelles studied in La Grotte de Versailles, for example, the tone f' never appears in the second flute part. This is most conspicuous in that the f' appears quite often in the first dessus parts of the entrée. Lully, then, shows an appreciation of the instrument's capabilities very early on.

It should be mentioned that the remodelled transverse flute of Lully's early ballets was not the instrument used in the first half of the eighteenth century. Performers and makers were evidently aware of the difficulties of intonation which existed after the initial remodeling. There can be little doubt, nonetheless, that players such as Philibert and Descouteaux were able to overcome these problems in their brilliant performances. Bate⁵⁷ cites 1697 as the date when Jacques Hotteterre introduced yet another model of the flute. Its design, of course, was greatly indebted to the version first exploited by Lully in the late 1660's.

More than with any other instrument of this study, the flute demonstrates the importance of observing Lully's use of woodwinds in his early ballets. Through the medium of this genre, we have been able to study the earliest known examples of the instrument's use. The historical documents of the Grande Ecurie which suggested the use of a remodelled transverse flute as early as 1667, have been substantiated by musical evidence in Lully's ballets. We must put back the time of the flute's remodelling by almost ten years from Bate's tentative dating of 1670. Moreover, we may push Carse's date of 1677, as the first instance of the new flute's employment, back to 1666.

⁵⁷Op.Cit., p. 81.

CHAPTER IV

THE RECORDER

By the middle of the seventeenth century two varieties of flute were available to the instrumentalist -- the transverse flute and the recorder. Although, as we have seen, the transverse type was in the ascendance, eventually superseding its competitor in the eighteenth century, the recorder during the period of Lully's early ballets in France was more generally popular. Neither instrument appears to have attracted much attention in France until the mid-seventeenth century,¹ and it is owing, no doubt, to their successful remodelling in the forties and fifties that the instruments quickly gained high favour in that country. In other European centres during the sixteenth and seventeenth centuries, however, the recorders and flutes enjoyed a great currency.

A considerable rivalry between the remodelled versions of both instruments is in evidence in the late seventeenth and early eighteenth centuries;² both instruments at that time were called upon to perform similar functions. Before remodelling, however, such competition was not nearly so noticeable. The flute was a loud, versatile instrument, evidently suitable for outdoors use.³ In addition, it possessed a rather extensive range of two and a half octaves. The recorder, on the other

¹See Albert Cohen: "A study of instrumental ensemble practice in seventeenth-century France", Galpin Society J., 15, 1962, p. 5.

²See Edgar Hunt: The Recorder and its Music, London, H. Jenkins, 1962.

³See Anthony Baines: Woodwind Instruments and their History, London, Faber and Faber, 3rd edit., 1967, p. 250.

hand, was quiet, ideal for consort use with other recorders, or mixed with many instruments. Its range was rarely given as more than two octaves.⁴ Neither instrument was expected to assume the other's tasks in the various ensembles of the time.

We have considered in some detail the terminological problems of flûte in the previous chapter. Yet another dimension is added to the difficulty in the case of the recorder. Whereas with the flute only one remodelled size was normally available -- having d' as a fundamental -- at least five sizes of recorders appear to have been popular between c.1650 and c.1750. As late as 1767 Diderot and D'Alembert describe five sizes: in f (basse), c' (quinte), f' (taille), c'' (haute contre) and f'' (dessus).⁵ In addition, a treble recorder in d', the so-called voice flute, was quite current in England in the eighteenth century. These instruments were known by various names, including flûtes. Having decided a work requires the use of a recorder, then, one must further decide which recorder is most appropriate.

The recorder in f' (the modern alto and the taille in the Encyclopédie) was the overwhelming favourite throughout the Baroque period. Solo and trio sonatas, most chamber works and the majority of concerti for recorders were written with this instrument in mind.⁶ It

⁴Silvestro Ganassi, author of Fontegara..., (Venice, 1535) must have been a virtuoso recorder player: he gives the instrument a range of two octaves and a sixth. Cited in Hunt: Op.Cit., p. 37.

⁵Encyclopédie, Paris 1767, in Vol. 5 of "Planches de Lutherie".

⁶See E. Hunt: Op.Cit., Chapter 3.

was, in short, the standard instrument of the recorder family.⁷ The f'-recorder's popularity unfortunately does not rule out performance on other recorder sizes in Lully's ballets. This problem will be approached later in the chapter.

In 1619 Michael Praetorius lists eight sizes of recorder,⁸ a substantial increase over the standard family of this instrument in the sixteenth century. Sebastian Virdung's Musica Getutscht (1511), for example, listed a discant, a tenor and a bass. These three are analogous to the alto, tenor and basset instruments respectively in Praetorius' De Organographia.⁹ Praetorius' recorders are: Klein Flöttlin in g''; Discant Flöt in d''; Discant Flöt in c''; Alt Flöt in g'; Tenor Flöt in c'; Basset Flöt in f; Bas Flöt in B-flat and Grossbas Flöt in F. Praetorius mentions the difficulties in intonation encountered in working with this large ensemble. In anticipation of things to come he writes:

"But it occurred to me to 'piece' apart the flutes half way between the mouthpiece and the highest finger hole, thus lengthening the upper section of the pipe by [as much as] the breadth of two fingers. This makes the length of the tube variable and thus its pitch may be accordingly adjusted higher or lower."¹⁰

This early reference to the process of sectionalization was to be realized within thirty years.

⁷See Jürgen Eppelsheim: Das Orchester in den Werken Jean-Baptiste Lullys, Tutzing, 1967, p. 78.

⁸Syntagma Musicum, II: De Organographia, trans. by H. Blumenfeld, New York, Bärenreiter, 1962.

⁹Cited by Hunt: Op.Cit., p. 41.

¹⁰Op.Cit., p. 35.

In his Harmonie Universelle Mersenne calls recorders, 'English flutes' (Flustes d'Angleterre). He makes reference to five sizes of recorders which correspond to the following instruments listed by Praetorius: a great bass, a bass, a basset, a tenor and an alto. He provides no fundamental tones for these instruments; he does give hints, however, that allow us to determine these fundamentals. Mersenne describes a petit jeu and a grand jeu, stating that, although they may be joined together to form a large ensemble, they are normally used as separate groups. The petit jeu consisted of a dessus, a haut-contre and taille (both parts being played on the same size of recorder) and a bass. In the grand jeu the bass of the previous group became the dessus of the new one. Two larger sizes of recorder provided the other parts in the grand jeu. The fundamental tones of these five instruments have been derived by modern scholars in a number of ways, often resulting in conflicting solutions.

Mersenne writes of the petit jeu:

"But to understand the tuning of all the parts, it must be observed that their eighth hole being open, the dessus is at the ninth, and the taille with the haute-contre is at the fifth from the bass."¹¹

This problematic sentence has two interpretations: one may infer that, on the bass instrument described in this passage, the eighth hole is either open or closed. If the latter were so, then, with all eight holes closed on the other recorders, the dessus would have a fundamental

¹¹ Harmonie Universelle, Bk. V, Prop. VIII, p. 307.

which was an octave higher than the bass, while the taille would stand a fourth above the bass. If the bass recorder's eighth hole is interpreted as being open, however, then the fundamental tones of the three instruments would be: taille -- a fifth higher than the bass; and dessus -- a ninth higher than the bass.

In his Das Orchester in den Werken Jean-Baptiste Lullys, Jürgen Eppelsheim espouses the second solution, concluding that Mersenne's reforders were: a bass in f; a taille in c' and a dessus in g'.¹² Eppelsheim arrives at this conclusion through the somewhat dangerous technique of determining the sounding length of the bass provided in the diagrams and statistics of Mersenne's discussion.¹³ The present writer agrees with Eppelsheim's conclusion, but believes a less dubious approach is provided by Mersenne.

Mersenne supplies a fingering chart which is quite obviously based on a recorder in C -- i.e. it shows that with all eight finger-holes closed the tone c' is produced. Since Praetorius' Tenorflöt had c' as a fundamental, it is certain that the c'-recorder of Mersenne's tablature was the taille. Using Mersenne's formula we may conclude that the bass recorder was in f (a fifth below the tenor), and, consequently, that the dessus instrument was in g' (that is, a ninth higher than the

¹²Op.Cit., pp. 69-70. Edgar Hunt (Op.Cit. p. 45) erroneously concludes that Mersenne's recorders included a bass in f, a taille in c' and a dessus in f'.

¹³The danger of using such statistics is vividly shown in the case of the dessus recorder; this, Mersenne says, is eleven 'lines' long. In modern terms, it becomes a dessus of slightly over 7/8 of an inch in length.

the bass). This interpretation is substantiated by the subsequent material in Proposition VIII.

Mersenne's fingering chart, geared to a recorder in c', must be made to serve instruments with different fundamentals. In a rather confused fashion Mersenne offers the key to the chart's solution:



"I shall give only one or two examples to make this practice understood; the first serves for the UT, or for the RE of G re sol ut, which is made by closing the first four holes and the seventh, and opening the others. And to make the FA which is a fourth higher, one simply closes the first, the third and the seventh. To make the SOL which follows, one simply closes the third and seventh holes."¹⁴

Before interpreting this passage, three items must be noted: first of all, Mersenne's fingerings use the seventh hole as a tuning one¹⁵ in the lower octave; secondly, since the recorder in c' is given a complete fingering chart, only the instruments in f and g' need be accommodated in his directions for the chart's employment; finally the finger holes are numbered top to bottom, the first hole being the thumb-hole on the back of the instrument.

The first fingering given in the above passage, ●●●○○○●, produces g' on a recorder in c'. Mersenne says it 'serves for the UT, or the RE of G re sol ut'. We might transliterate this to: 'serves for C, or for D on an instrument in G'. Indeed, this fingering does produce

¹⁴Mersenne: Op.Cit., p. 307.

¹⁵In addition, the closed 7th hole provides support in holding the instrument in place.

the tone C on an f-recorder, and D on a g-recorder. Mersenne's subsequent examples in this passage are, curiously, geared only to the recorder in f: for example,  for FA or f, and  for sol or g. Nonetheless, a pattern for applying the fingering chart to instruments in both f and g is quite evident. This, of course, gives credibility to our premise that Mersenne's petit jeu was organized as follows: basse in f; taille and/or haute-contre in c' and dessus in g'.

The fundamental tones of the recorders in Mersenne's grand jeu are ascertained, perhaps, a little more easily. Mersenne writes of them:

"It is unnecessary to speak of their tablature, because they take their pattern from the preceding."¹⁶

The statement implies, of course, that the larger instruments, of which Mersenne diagrams two, were either in F, C or G. Praetorius' bass instruments, we recall, were in B-flat and F. Since a B-flat instrument cannot derive a tablature from Mersenne's fingering chart, it seems likely that Mersenne's two Bass recorders were in c and F. We may now organize Mersenne's recorders in the following pattern:

PRAETORIUS		MERSENNE: PETIT JEU		GRANDE JEU	
Alt	g'	Dessus	g'		
Tenor	c'	Taille/Haute-contre	c'		
Basset	f	Basse	f	Dessus	f
Bass	B-flat			Taille/Haute-contre	c
Gross-Basse	F			Basse	F

Before leaving Mersenne, two items concerning his grand jeu

¹⁶ Ibid., p. 309.

must be considered. Mersenne provides a diagram of the members of the grand jeu in which four sizes of recorder are pictured. The three normal constituents of this ensemble have been augmented by a fourth -- a apparently a recorder in c' (i.e. the taille of the petit jeu). It seems likely that this fourth instrument was added to give the ensemble a more flexible dessus line. In some cases, therefore, the grand jeu used four different recorders, one size to each part in a four part setting. This brings us to the second item.

Mersenne gives a musical example -- a Gavotte for recorders -- to demonstrate the instrument's use. It is in four parts, showing three c-clefs and one f'clef. The ranges of the four parts -- dessus - f'-f''; haute-contre - d'-a'; taille - g'f'; and basse - A-a -- strongly suggests that this example was written with the four-member grand jeu in mind. Indeed the dessus part descends lower than the g' recorder's range.¹⁷ This Gavotte would most comfortably lie on recorders of the following distribution: dessus - on the recorder in c'; hautecontre on the recorder in f; taille - on the bass in c; and basse on the Great Bass in F.

Sometime between 1636 and 1683 the recorders were remodelled, and the dessus of Mersenne's petit jeu became dominant. The instrument underwent sectionalization, while its fundamental tone was lowered from g' to f'. Humphrey Salter's Genteel Companion (London, 1683), followed

¹⁷The fact that the normal G-clef on the first line is not used for the dessus part, moreover, demands the use of a larger recorder.

by John Carr's The Delightful Companion (London, 1684), are the first sources which describe the remodelled instrument.¹⁸ The 'James Talbot Manuscripts' of c.1690 describe a recorder in f' by Bressan that is in three sections.¹⁹ The first French source to discuss the remodelled recorder is Freillon-Poncein's La Véritable Manière... of 1700.²⁰ This is followed by Jacques Hotteterre's Principes... of 1707.

Freillon-Poncein calls his recorder, flûte. The illustrations of the instrument, although somewhat distorted, clearly show that the instrument was in three sections and heavily ornamented at the joints.²¹ Freillon-Poncein explicitly states that the right hand should be placed below the left,²² an early indication of that practice being standardized. Freillon-Poncein's recorder, an instrument in f', is given a range of two octaves plus a tone; but the author adds:

"One can, if he wished to force it, extend the range to a nineteenth, to the third A mi la [a'''], B fa si [b'''] and C sol ut [c'''], but this is not often used; thus I do not treat it as a rule which must be followed."²³

¹⁸Eppelsheim: Op.Cit., p. 71.

¹⁹See Hunt: Op.Cit., p. 65.

²⁰Both Eppelsheim (Op.Cit., p. 70) and Hunt (Op.Cit., p. 51) erroneously give Jacques Hotteterre's Principes... (1707) as the first French reference to the remodelled recorder.

²¹Sectionalization is further indicated by the appearance of only one eighth hole, instead of two as formerly. If the instrument were in sections, of course, the foot joint could be turned to suit both left and right-handed players.

²²Op.Cit., p. 12.

²³Ibid.

Before giving a fingering chart, the author provides an interesting insight into the recorder's normal employment. He writes:

"The flûte requires much subtlety with regard to the amount and equality of the breath one gives it, [the flûte] being the instrument which goes best in the accompaniments of voices, particularly the high sopranos."²⁴

This statement is of great significance, for it demonstrates that the f' instrument was customarily associated with the high dessus parts in instrumental accompaniments. It shows, further, that by at least 1700 the recorder in f' had become a solo instrument, as opposed to an ensemble instrument as it had been in the earlier seventeenth century. Hotte-terre's Principes... adds little to the information contained in Freillon-Poncein's work.

As we have seen, by 1767, the recorder in f' was called taille by Diderot and D'Alembert. We recall that the taille in Mersenne's Harmonie Universelle was a recorder in c'. Choosing between the recorder in c' and the one in f' in the mid-seventeenth century is, consequently, not always easily accomplished. It seems likely, however, that in cases where a dessus part required performance on a recorder, the instrument in f' is appropriate.²⁵ Why, then, did this instrument become termed the taille? By the second half of the seventeenth century only five basic sizes of recorder appear to have been retained: one in f';

²⁴ ibid., p. 13.

²⁵ Freillon-Poncein, as already mentioned, definitely associates this instrument with dessus parts.

one in c'; the standard instrument in f'; one in c'; and a bass in f.²⁶ It is probable that the recorder in f' was called taille because it was the third largest size of the family. In Mersenne's time, on the other hand, the recorders were apparently named for the parts in the ensemble which they normally performed.

The recorder was remodelled sometime in the late forties or early fifties.²⁷ One would expect therefore that the instrument's new function as a solo dessus instrument appeared shortly thereafter. In Lully's ballets, then, it may be assumed that a dessus part for recorder requires performance on an instrument in f'.²⁸ We may conclude, further, that the recorder in c' would be used primarily as a middle voice in large ensembles, and not as a dessus instrument. When recorders other than the one in f' are required as dessus instruments, special indications are required.²⁹ If a dessus line marked flûte descends below f', as we have already seen, it probably requires realization on a transverse flute, and not a recorder in c'. These conclusions will be tested below.

²⁶This is the same arrangement set forth in the Encyclopédie (see footnote 5). In addition a Grand Basse in C seems to have been used occasionally. See Eppelsheim: Op.Cit., p. 81.

²⁷Anthony Baines (Op.Cit., p. 277) maintains that the recorder represents Jean Hotteterre's earliest success at woodwind remodelling.

²⁸Eppelsheim agrees with this; see Op.Cit., p. 78.

²⁹Eppelsheim (Op.Cit., pp. 75-76) has found an interesting practice of the eighteenth century, where, if recorders other than those in f' are required, special dessus clefs are used. It is uncertain, of course, whether this practice would be in effect during the second half of the seventeenth century.

The Recorder in the early ballets of Lully

The use of the recorder in Lully's ballet orchestras is much more wide-spread than that of any other woodwind. No doubt, the instrument's good intonation and adaptability accounts for this versatility. Being a woodwind instrument, the recorder, nonetheless, was not considered a standard orchestral participant; rather it was employed, along with oboes and bassoons, in the scènes de champêtre or scènes de sommeil.

It becomes clear through studying instances of the recorder's treatment that only very rarely is an ensemble of recorders of different sizes used. Only the treble in f', with the tenor in c', received regular employment.

A major problem in determining the instrumentation in a scène de champêtre is the recorder's close affiliation with the oboe. We have already seen that the latter instrument's use was almost exclusively within the context of such scenes. The livrets accompanying the ballets more often than not offer little help in distinguishing between the two instruments, for the standard performers on the oboe -- the Hotteterres, Descouteaux, Destouches and Piesche -- were also recorder players. Indeed, the recorder seems to have been the instrument which was common to every member of the Hautbois et Musettes de Poitou. There is evidence, however, that Pierre Piesche and François Descouteaux were the two primary recorder players of the Ecurie.³⁰

³⁰ Pierre Piesche is given special mention in the King's accounts of 1664, where he is listed as the recorder player in the Chambre du Roi. (See M. Benoit: Musiques de Cour, Paris, 1971, p. 11). Descouteaux is cited by Benoit as being a great virtuoso on the recorder. (Ibid.)

The range of the dessus part in five-part settings of a scène de Champêtre, of course, is sometimes helpful in distinguishing between oboes and recorders; if it descends below f', oboes are probably required. The inner parts of such settings, however, are more problematic. Although the hautecontre parts rarely descend below c' (the lower limit of the tenor recorder's compass), the taille parts almost inevitably descend below this tone. In the case of oboes, as we observed in Chapter Two, the tenor instruments performed both hautecontre and taille parts. This, however, is not possible with the tenor recorder.³¹ We may conclude, therefore, that the recorders in f' and c' were used only on the dessus and hautecontre lines, and that in five-part settings, the three lower voices were necessarily performed on other instruments.

The abnormal distribution of recorders in Lully's five-part settings makes the inference of their use, in the absence of specified instrumentation, very dangerous. For this reason, only those entrées which definitely specify recorders (i.e. 'flustes') have been considered for this study. It is most likely that the employment of recorders in Lully's early ballets is more extensive than this limited sampling will suggest. No scores after 1664 have been included, to avoid the possible confusion between transverse flutes and recorders.

Five ballets contain specific references to recorders. They are: Alcidiane (1658); La Raillerie (1659); Impatience (1661);

³¹We recall that since Mersenne's time, the tenor instrument in a woodwind family was considered appropriate for both hautecontre and taille parts.

Amours Déguisez (1664) and La Princesse d'Elide (1664).

The Ballet d'Alcidiane of 1658 has been cited a number of times for the prominence it affords a variety of woodwinds. In the second entrée of Part III, recorders are to play a number entitled '6 Bergers et 6 Bergeres'. The livret, published in facsimile by Prunières, relates:

"Trois Bergers et autant de Bergeres de cette heureuse Contrée... font avec plusieurs autres un Concert Rustique, auquel un chœur de Flustes et de plusieurs autres instrumens respondent...."³²

This, of course, definitely indicates that recorders participated.

Listed as the Concertans are: Alais, Hotteterre père, 2 Hotteterre fils, Descouteaux, Brunet, Herbins, Nicolas, Jacques et Michel Destouches and Piesche.³³

The upper parts of the five-part setting are given the following ranges:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - b''-flat
hautecontre	c1	e' - c''
taille	c2	g - g'
quinte	c3	f - g'

This arrangement clearly substantiates our hypothesis that recorders in f' normally play the dessus line in Lully's five-part works, while c'-recorders perform the hautecontre part. The livret, however, stated that a 'Chœur de flustes et de plusieurs autres instrumens' played this entrée. If an entire ensemble of recorders is required, then the rather

³² Henry Prunières (edit.): Oeuvres Complètes de Jean-Baptiste Lully, Tome I, p. 28 of facsimile.

³³ ibid.

unlikely situation of a bass recorder in f on both taille and quinte parts is necessary. If on the other hand, a 'choir of recorders with other instruments' is intended, then recorders can simply be assigned the two upper parts, the other lines being performed by other instruments. The latter interpretation is probable, for, as we saw in Chapter Two, oboes are likely to have been employed in this entrée.

The subsequent number in the second entrée is called 'Air pour les mesmes'. We may therefore assume that recorders again took part. The five-part setting has the following distribution for the upper voices:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - b''-flat
hautecontre	c1	e' - e''
taille	c2	f - g'
quinte	c3	f - g'

Again the only lines available for recorders are the dessus and hautecontre, played on recorders in f' and c' respectively.

The second entrée is concluded with a 'Troisième Air-Gavotte pour les mesmes'. It retains the five-part structure and g-minor tonality of the two previous numbers. Once more, recorders in f' and c' are to be employed on the two upper lines. The following ranges are presented:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - b''-flat
hautecontre	c1	d' - d''
taille	c2	g - g'
quinte	c3	g - e'-flat

The use of the recorder in La Raillerie (1659), although within the context of somewhat unusual settings, is more characteristic than

was that in Alcidiane. In the eighth entrée (pp. 40-41 in Philidor's copy), recorders are employed with violins and voices. The entrée, which is devoted to 'Les Contrefaiseurs', contains a five-part ritournelle in g-minor. The dessus part of the ritournelle is given a range of g' to b''-flat, the hautecontre, one of b-natural to d''. It is obvious that recorders are not employed on the hautecontre part, for it descends below the range of the tenor recorder in c'. The subsequent récit, for two bass voices, however, is accompanied by two dessus parts which are given the following specifications: 'Premier dessus de Violons et de flustes' for the first; and 'Deuxiesme dessus de Viollons et de flustes' for the second. In this section, the two dessus parts are given identical ranges of g' to b''-flat.

At least two recorders in f' are required for this récit. Moreover, it seems likely that the five-part ritournelle would also exploit the recorder's sonority. Since the hautecontre line of the ritournelle descends to b-natural, however, tenor recorders in c' are not required in this entrée. We may conclude that two f'-recorders were employed on the dessus part of the ritournelle, and that this voice became divisi at the commencement of the récit, giving a single violin and recorder to each dessus part.

This pattern is repeated for the second verse of the récit, although the music is slightly altered. In the five-part ritournelle, the hautecontre part this time does lie within the compass of the tenor recorder, having a range of c' to a'. It is most unlikely, however, that the instrumentation established in the first verse of the récit would be changed in the second. Again the récit is accompanied by specified

'premier et deuxiesme dessus' of both violins and recorders, and again the ranges of the two dessus voices is g' to b''-flat.

The sonority of the recorder is employed once more in the last number of the eighth entrée entitled: 'Contrefaiseurs, pour les mesme'. The five-part setting features the dessus line in a very prominent fashion. In bars 1, 17-20, and 30-31 the orchestra drops out, leaving only the dessus. Since the dessus parts of the previous number were characterized by the use of violins and recorders, it is probable that similar treatment is required here. In g-minor, the dessus line has a range of f'-sharp to b''-flat. The use of the recorder in the eighth entrée of La Raillerie clearly shows that the treble in f' was considered the dominant member of the family.

The very first entrée of Impatience (1661) is entitled 'Un Grand qui donne une Serenade à sa Maitresse'. According to Charles Silin,³⁴ the livret specifies that the entrée was accompanied by lutes, flutes and violins. Among the instrumentalists are listed Piesche, two Descouteaux, three Hotteterre, Paisible, Alais and Destouches.³⁵ The early date of the ballet, of course, assures us that the flutes mentioned by Silin are of the recorder type.³⁶ The serenade is composed of a five-part orchestral ritournelle and récit -- 'Sommes nous pas trop heureux'.

³⁴ Benserade and his Ballets de Cour, Maryland, 1940, p. 279.

³⁵ Ibid.

³⁶ Silin's study is essentially a literary one, rather than musicological. He translates 'fluste' as flute throughout, attempting no distinction between recorders and transverse flutes.

The upper voices of the ritournelle are set up as follows:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - c'''
hautecontre	c1	d' - d''
taille	c2	g - a'
quinte	c3	g - g'

Recorders in f' would perform the dessus part, while it seems probable, as was the case in Alcidiane, that tenors in c' would play the hautecontre. The remaining voices require realization by either violins, lutes or both.

The third entrée of Part III of the same ballet is for '8 Chevaliers dansant sans Violons'. As we have seen earlier, the dramatic action here requires that the entrée begin before the violins have tuned. This, of course, necessitates the use of woodwinds; since recorders appear elsewhere in Impatience, it is most likely that they would be used at this point. Lully arranges the five-part setting in g-minor in the following way:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - b''-flat
hautecontre	c1	e' - d''
taille	c2	b-flat - a'
quinte	c3	e-flat - e'-flat

Once more, the dessus part would include recorders in f', while the hautecontre is likely to have used tenors in c'.³⁷ As mentioned in Chapter Two, there is strong evidence that oboes also participated in

³⁷The fact that the quinte part here descends to e-flat lends support to our premise that it is unlikely that bass recorders performed the taille and quinte lines, for here the quinte descends beyond the bass recorder's range (low note: f).

this entrée.

In Les Amours Déguisez of 1664, the recorder is employed in a way most reminiscent of the instrument's treatment in La Raillerie. The introductory material of the ballet includes a 'Simphonie [sic] des Arts des Graces et des Plaisirs'. As indicated in the first chapter, the music concerns an allegorical confrontation between 'les Arts' on one hand, and 'les Graces et les Plaisirs' on the other. The setting is in seven parts -- tous -- alternating with a trio of two dessus instruments plus bass -- doux. The 'extra' voices of the tous section are additional dessus and bass parts; nonetheless, only five real parts appear in this section.

The score contains explicit instructions for the performance of the number. 'Les Arts' are represented by the tous section: "tous le monde Joue". Representing 'Les Graces et Les Plaisirs' is the doux setting: "à partis simple meslé de flustes".³⁸ It is clear that recorders in f' -- that is dessus recorders -- are required in both the seven- and three-part sections of the work. It can be seen moreover, that probably only two recorders were used, one for each part in the trio, and both instruments joining the other dessus players in the tous section. In g-major, the recorders of the tous are given a range of g' to b''; in the doux sections, the recorders have a compass of a ninth, from g' to a''.

Later in the same ballet, in the eighth entrée, recorders are

³⁸ See page 205 in Philidor's copy of the ballet.

used in a most interesting fashion. The second air of this entrée is designated 'Concert de flustes pour les amours'. In g-minor, the setting shows a somewhat unusual arrangement:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	f'-sharp - b''-flat
hautecontre	c1	c' - d''
taille	c2	g - g'
basse	f4	D - b-flat

The fact that this 'Concert' is in only four parts strongly suggests that some special use of recorders is desired.³⁹ It is quite possible that through this arrangement Lully is indicating the inclusion of additional recorders. According to the established pattern, of course, treble recorders in f' would perform the dessus line, while tenors in c' would play the hautecontre. It is likely that a bass recorder in f is intended for the taille part. The bass voice, however, descends far below the range of any recorder. Even if we consider that the part is written an octave lower than it is to sound, it is still out of the reach of the two available bass recorders: the standard one in f cannot descend to d; and the 'great bass' in c, which would also have to perform the part an octave higher than written, would have great difficulty reaching the high b'-flat. We must conclude that the bass part was performed on either 'cellos, viol da gambas or bassoons, the latter being, perhaps, most likely. The upper parts were probably played by recorders in f', c' and f, respectively.

³⁹In no other ballets observed by the present author were four-part instrumental pieces in evidence.

Immediately following this four-part setting for recorders is a 'Sarabande pour les mesme'. The 'sarabande', however, is once more in the standard five-part arrangement. From this we may conclude that the bass recorder in f, employed on the taille part in the previous number, is no longer required. The upper parts of the 'Sarabande' are given the following ranges:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	g' - b''-flat
hautecontre	c1	d' - d''
taille	c2	c' - g'
quinte	c3	e - e'

Treble recorders in f' are therefore required on the dessus line, while tenors in c' are likely to have performed the hautecontre.

Two final instances of the use of recorders are to be found in La Princesse d'Elide (1664). The first entrée of this ballet contains a 'Rondeau pour les Flustes allant à la table du Roi'. According to the livret, violins also participated in the rondeau.⁴⁰ The dessus and hautecontre lines of this five-part setting are given ranges of g' to b'' and d' to e''; these would be performed by recorders in f' and c' respectively.

The sixth entrée of La Princesse d'Elide is for 'Les Bergers et les Faunes', and also involves the use of recorders. Prunières quotes the livret for this entrée in his edition of the work:

"Pendant que ces aimables personnes dansoient, il
sortit de dessous le théâtre la machine d'un grand

⁴⁰ See Henry Prunières: Op.Cit., III, p. 11.

arbre chargé de seize Faunes, dont les huit jouèrent de la flûte et les autres du violon avec un concert le plus agreable du monde. Trente violons leur repondoient de l'orchestre, avec six autres concertants de clavecins de théorbes qui étoient les sieurs d'Anglebert, Richard, Itier, La Barre le cadet, Tissu et le Moine."⁴¹

The four upper voices in this five-part setting in b-flat major have the following ranges:

<u>Part</u>	<u>Clef</u>	<u>Range</u>
dessus	g1	f' - b''-flat
hautecontre	c1	d' - d''
taille	c2	b-flat - a'
quinte	c3	e-flat - d'

The standard arrangement with recorder in f' on the dessus, and tenor in c' on the hautecontre is clearly in effect here.

Through even this limited sampling of the recorder's use in Lully's early ballets, it can be seen that this instrument was, perhaps, the most frequently employed of the woodwinds. The recorder, of course, was to retain its popularity well into the eighteenth century, although there can be little doubt that the transverse flute was becoming dominant as early as c.1700.

The reason for the recorder's extensive use in Lully's ballets is best explained by its consistently good intonation. As late as 1713 Mattheson described the recorder as the only woodwind that could be played in tune in any key.⁴² As indicated earlier, however, the re-

⁴¹ Ibid., p. 63. Large instrumental forces are obviously employed in this entrée. The eight participating recorder players probably arranged themselves with four performers on both the dessus and hautecontre lines.

⁴² Cited by Edgar Hunt: Op.Cit., p. 82.

corder in f', especially, was best-suited to flat keys. This preference is certainly evidenced in Lully's use of the instrument: of the thirteen examples studied in this chapter, eleven were in flat keys -- ten in g-minor and one in b-flat major; while only two examples were in sharp keys, both in g-major.

The recorder, besides exhibiting the best intonation of the early woodwinds, had a range that was comparable to both flutes and oboes. It is interesting that the upper extent of the recorder's compass was completely ignored by Lully. On only one occasion, in the Ballet de l'Impatience (1661), did the f'-instrument's part ascend to c'''. Curiously, in seven out of the thirteen instances analyzed the range employed was g' to b''-flat. The lower and middle range of the recorder, we may conclude, was thought most representative of the recorder's characteristic sonority.

The recorder was employed in a great variety of ensembles. It was employed with strings in large, five-part ensembles, such as in the sixth entrée of La Princesse d'Elide (1664). In La Raillerie (1659) the recorder was observed as a solo dessus instrument with single violins. It was also in La Raillerie that the recorder was used to accompany vocal récits. We recall that Freillon-Poncein, in 1700, stated that the recorder was "l'instrument qui convient le mieux aux Accompanements des voix".⁴³ The woodwind most closely associated with recorder has been shown to be the oboe; on two occasions -- in Alcidiane

⁴³Op.Cit., p. 13

(1658) and Impatience (1661) -- the two woodwinds were used together.

The most unusual use of the recorders occurred, of course, in Les Amours Déguisez (1664). In the eighth entrée of this ballet a four-part setting for recorders was observed. It has been shown that treble, tenor and bass recorders participated in this number, while the fourth part was probably played by bassoons.

Under normal circumstances, only two sizes of recorder appear to have been used by Lully -- the treble in f', and the tenor in c'. Two other interpretations of the recorder's use, however, cannot be ruled out. It is not impossible that only recorders in f' were used, being scored on the dessus line alone. Since from four to eight players are usually listed in the livrets, however, this interpretation would result in a texture which would be rather top-heavy. A second possibility is the inclusion of bass recorders in f on the taille line in five-part settings. Although this interpretation may not be discarded, it seems to be unlikely. First of all, a bass instrument playing a part marked taille would be somewhat unusual. Secondly, as we noticed in Les Amours Déguisez when Lully does want a bass recorder, special indications appear, suggesting that, normally, the bass instrument is not required.

Irrespective of the number of recorders used by Lully, it is obvious that the treble in f' was the dominant instrument; it was this instrument which received solo and trio settings in the ballets. The recorder's treatment has shown that the instrument was only rarely given special consideration. Its frequent employment, however, is a good example of Lully's understanding of the potential of woodwind colour within the orchestra.

CONCLUSIONS

To fully understand the nature of mid-seventeenth-century woodwinds, a study of their use in the early ballets of Jean-Baptiste Lully is essential. Through the medium of the ballets one may gain valuable insights into certain physical characteristics -- for example, the serviceable ranges -- of the woodwinds. More significantly, the employment of bassoons, oboes, flutes and recorders frequently demonstrates how these instruments were regarded by the composers and musicians of the time.

It has been shown that the woodwinds with which this study is concerned underwent remodelling in France during the middle decades of the seventeenth century. Since theoretical sources dealing with these instruments are completely lacking from c.1640 to c.1680, musical evidence of their use in the ballets assumes paramount importance.

Lully's early ballets have provided examples of the earliest use of two remodelled woodwinds -- the oboe¹ and the flute. With respect to the latter, this study has made it possible to put back the date of the remodelled flute's first appearance by from ten to fifteen years.² The remodelled recorder and bassoon, moreover, are likely to have received their first standardized treatment in the ensembles of Lully's

¹ In the Ballet de l'Amour Malade (1657); see Joseph Marx: "The tone of the Baroque Oboe", Galpin Society Journal, IV, p. 14.

² In the Ballet des Muses (1666); see Chapter 3, footnote 45.

ballet orchestra.

Of the nineteen ballets considered for this study, a small number have emerged as of primary significance, owing to the prominence they afford woodwind instruments. L'Amour Malade (1657) and Les Muses (1666), of course, must be singled out as milestones, owing to their introduction of the new oboes and flutes, respectively. Alcidiane (1658), however, made more use of woodwinds than any other ballet: nine numbers from this production involved either recorders, oboes or bassoons. The ballet, La Grotte de Versailles of 1668, with its extensive employment of both flutes and bassoons, deserves special mention. As one would expect, the later ballets exploited woodwinds more and more frequently.

The importance of music, (and therefore woodwind instruments) in the ballets cannot be over-emphasized. The knowledgeable patrons of these spectacles often took great pains to describe in detail the productions they had witnessed. A spectator at the premiere of L'Amour Malade (1657) writes:

"Là, s'entendent des Harmonies,
Dont les douceurs presque infinies,
Procèdent des acors charmans
De plus de soixante Instrumans
Avec les voix rares et belles,
De trois mâles et trois femelles...."³

Seven years later, the same gentleman says of the music of Les Amours Déguisez (1664):

³Cited by Charles Silin: Benserade and his Ballets de Cour, Maryland, 1940, p. 262. The affected language of this letter is typical of the grande siècle. The reference to sixty instrumentalists is, no doubt, an exaggeration.

"Il s'y fit des Concerts si rares
 Qu'ils eussent touché des Barbares,
 On chanta quatre ou cinq Recits
 Qui tenoient tous nos sens surcis
 Ces trois aimables Demoiselles,
 Qui sont si bonnes Chanterelles,
 Dont tu vois les noms à côté,
 N'avoient jamais si bien chanté."⁴

Although instrumentalists are rarely singled out in these letters, the lavish praise afforded the music in general indicates that the performances were of a high standard.

With the exception of only one or two instances,⁵ woodwinds characteristically entered the orchestras near the conclusions of dramatic units in the ballets. In these large ensemble finales, woodwind sonorities are both joined to, and contrasted with that of the normal string orchestra. The principle of alternation is, indeed, a prominent feature of Lully's orchestral technique.⁶

⁴Ibid., p. 329.

⁵Notably Les Noces de Village (1663) and l'Impatience (1661), where oboes and recorders, respectively, are used in the initial entrées.

⁶There is strong evidence that the principles of 'grand' vs. 'petit chœur' are in force during the period of Lully's early ballets. This technique, exploited extensively in French orchestral music of the late seventeenth and early eighteenth centuries, employed a standard group of solo performers which was contrasted with the tous, or full orchestra. The normal petit chœur of the eighteenth century included continuo instruments, along with two violins and two flutes. Since transverse flutes do not figure in Lully's earlier ballets, the earlier practice clearly exists in a somewhat varied format. In La Raillerie (1659) and La Grotte de Versailles (1668), the markings f[ort], d[oux] with '\$' and X occur regularly. In addition, a number of entrées scored for five parts in La Raillerie are headed with 'tacet'. It is obvious that the orchestral texture was frequently altered in Lully's ballets. Woodwinds must have played an important role in these variations.

Woodwind instruments are used in rustic and idyllic scenes with predictable regularity. Within such stereotyped situations, however, they participate in a great variety of ensembles. Five-part settings, of course, are most common; but in three-part ensembles the instruments seem to receive their most characteristic treatment. Four-part, six- and even seven-part settings are also apparent, when the instrumental forces are augmented by voices, or special instruments, such as trumpets and drums.

Lully's use of woodwinds, however, is more than an essay in orchestral colour. Besides providing the necessary musical accompaniments, the instruments and their players also participated in the dramatic action of the ballets.

In an effort to lend unity to the disparate elements of these productions musicians were closely associated with the dancers. To this end, instrumentalists, disguised and masked, were usually first to march on stage, while playing the initial musical numbers of the ballet.⁷ They then assumed their positions, often moving to a location where they could be employed as a part of the unfolding drama. An example of musicians playing essential roles in the action of the ballet occurs in Les Noces de Village (1663). After the opening ouverture and récit, the bride and groom make their first appearance. Violins and oboes literally lead them on to the stage, just as the livret explains.

The involvement of musicians in the action is at times even

⁷Silin: Op.Cit., p. 191.

more explicit. Silin relates:

"Sometimes the musicians impersonate definite roles and are given costumes representing Tritons, Sirens, Fauns, Furies, Nymphs, or whatever the subject of the ballet calls for. In such cases they are often part of the mise en scène, appearing in niches, in grottoes, on palace balconies, or perched on chariots, clouds, ships, or animals."⁸

Their participation in the drama, then, greatly contributed to the audience's appreciation and understanding of the plot.

Just as the stories and themes of the ballets were created and understood on a number of levels, Lully's use of woodwinds in various entrées had many symbolic connotations. In a genre that thrives on myth and allegory, it is only natural that a number of set symbols and patterns should emerge. Instruments, too, were associated with these patterns.

In simple terms, violins, viols, lutes, theorboes and clavecins represented intangibles -- the gods, emotions or spirits, for example -- while instruments, such as bassoons, oboes, flutes and recorders, were associated with natural or 'real' events. It is for this reason, of course, that we consistently encountered woodwinds in idyllic scenes and scènes de champêtre. Not only were double reeds and flutes the instruments of the country dwellers, but they were also illustrative of human activity.

A clear example of instrumental symbolism occurs in Les Amours Déguisez of 1664. The opening argument, we recall, involves a confron-

⁸Ibid., pp. 191-192.

tation between Les Arts and Les Graces et les Plaisirs. Predictably, Les Arts are accompanied by the full string orchestra, while Les Graces et les Plaisirs are scored for 'partis simple meslé de flustes'. To the seventeenth-century Frenchmen, obviously, art was a mystical link with the spiritual world.⁹ Graces and pleasures, on the other hand, were man-imposed phenomena. Seen in this light, Lully's orchestration is highly refined and most subtle in nature.

Lully was, above all, a practical musician. His immediate grasp of the remodelled woodwind's potential is a credit to his creative capability; nonetheless, it is certain that he would not jeopardize his reputation at court by introducing instrumental forces with which he was unfamiliar. Although L'Amour Malade and Les Muses represent important firsts in the orchestral use of woodwinds, we can be sure that both oboes and flutes were heard socially, if not publicly, before their inclusion in Lully's orchestra.

Documentation concerning the initial appearances of the remodelled oboe is almost non-existent. In the case of the flute, however, we have seen that Philibert already had gained considerable renown through his concerts at Jean Brunet's social gatherings when he entered the records of the Grande Ecurie in 1667. It is likely that all the remodelled woodwinds underwent similar stages of 'indoctrination'.

Lully's employment of the new instruments, moreover, depended on the availability of competent performers. It seems to be more than

⁹See Robert Isherwood: Music in the Service of the King, Ithica, New York, 1973, Chapter I, for an enlightened discussion of French musical aesthetics under the Roi Soleil.

coincidence that the first mention in Court records of such players as Jean Hotteterre with his sons, and Descouteaux is 1657 -- that is, the year that Amour Malade was produced, and the year of the earliest known public performance on the new oboe. Similarly, Philibert's first appearance at court occurs with the production of Les Muses in 1666.¹⁰ Clearly, Lully chose his instruments and performers with characteristic shrewdness.

This study of woodwind treatment in Lully's early ballets has necessarily employed a limited amount of source material. A more comprehensive documentation of this treatment is certainly possible. Correlating Philidor's copies of the full scores with the numerous extant orchestral parts, and the Philidor collection at St. Michael's College in Tenbury, would provide the additional documentation. Access to a complete corpus of the ballet livrets, moreover, is essential for a thorough understanding of Lully's use of woodwinds.

It has been possible, nevertheless, to come to a number of conclusions concerning Lully's employment of four woodwinds. Although we have seen that the composer's use of bassoons, oboes, flutes and recorders is more extensive than hitherto believed, and although we have found considerable subtlety and nuance in the instrumentation of the ballets, Adam Carse's assessment of Lully's contribution to the establishment of standard orchestral practice, shows much insight. Carse

¹⁰The chronological problems of Les Muses, which premiered in December of 1666, but which was performed until February, 1667, have been discussed in Chapter 3.

concludes:

"In view of the opportunities enjoyed by Lulli his orchestration seems unenterprising and more a matter of routine than of artistic impulse; but as an example to others that very quality no doubt had its value in helping to stabilize and conventionalize some principles which were necessary for the further development of orchestration."¹¹

¹¹Adam Carse: History of Orchestration, 1925, p. 88.

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- I The following scores from the Collection Philidor, Bibliothèque Nationale de Paris have been consulted:

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 Arts, les (1663): Rés. F. 654.
 Bourgeois Gentilhomme, le (1670): Rés. F. 657 (folio 63).
 Flore (1669): Rés. F. 515.
 Grotte de Versailles, la (1668): Rés. F. 532.
 Impatience, 1' (1661): Rés. F. 509.
 Jeux Pithiens, les (1670): Rés. F. 657 (folio 101).
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- II Prunières, Henry (edit.): Oeuvres Complètes de Jean-Baptiste Lully, Paris, Editions de la Revue Musicale, 1931, Tomes I and II; Les Ballets; Tome III, Les Comédie-Ballets.

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