

TOOTERS AND TUTORS: Flute Performance Practice Derived from
Pedagogical Treatises of the Paris Conservatoire
1838-1927

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ABSTRACT

Throughout the two hundred years of the Paris Conservatoire, the Professors of Flute have carefully documented their philosophies in numerous large-scale, comprehensive treatises. Building on the biographical and historical studies by earlier scholars, this dissertation will study three major treatises by Professors of Flute at the Paris Conservatoire to shed light on the performance practice of the flutists performing or trained in Paris: the *Méthode pour servir à l'enseignement de la nouvelle flûte* [1838] by Victor Coche, the *Méthode pour flûte système Boehm* [c. 1880] by Joseph Henri Altès, and *L'Art de la flûte* collected by Claude Paul Taffanel, completed in two parts by Philippe Gaubert [*Méthode complète*, 1923] and Louis Fleury ["La Flûte," 1927].

Chapters 1 through 4 provide an historical context for the dissertation, including: a history of the Paris Conservatoire with particular emphasis on prevailing pedagogical trends at that institution, the evolution of the flute culminating in the innovations of Theobald Boehm, factors bearing on the professional flutist in Paris, and historical information on the flute treatises examined. In chapters 5 through 7, each of the three method treatises by Coche, Altès, and Taffanel with Gaubert and Fleury are

evaluated for implications of performance practice based on the type of instruction and exercises devoted to the various component parts of each of six proposed elements of music - pitch, rhythm, timbre, dynamic, form and musical style - as well as areas of interest receiving special emphasis by each treatise composer. The concluding chapter collates the data of the earlier chapters and offers illumination on flute performance practice in France during the period 1838 to 1927.

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Introduction

Young students, you who must grieve the waste of even one precious moment of your studies, it is upon you to promote by your abilities the artists who have lavished their attention on you: Devote yourselves entirely to the art which you embrace, so that the hope of deservedly celebrating the heroic acts, which are fashioned every day by republican pageantry, arouses and governs your emulation! You do honour to your country! The fame of the French school will be the recompense of your masters.¹

The Paris Conservatoire flute school has enjoyed a continuous development over the past two hundred years with many flute alumni assuming the position of Professor of Flute at that institution, thus carrying on the philosophies of their teachers. Such an unbroken chain of instruction

¹ [François] Gossec, "Discours--Prononcé par le citoyen Gossec, doyen d'âge des inspecteurs de l'enseignement du Conservatoire de Musique" reprinted in *Organisation du Conservatoire de musique* [1795], published under the auspices of Paris Conservatoire nationale de musique et de déclamation (Paris: Imprimerie de la République, an V), 57: "Jeunes élèves, vous qui avez dû gémir de la perte d'un temps précieux à vos études, c'est à vous de seconder, par votre aptitude, les artistes qui vont vous prodiguer leurs soins: livrez-vous en entier à l'art que vous avez embrassé; que l'espoir de célébrer dignement les actes héroïques dont, chaque jour, les fastes republicains sont formés, anime et dirige votre émulation! Vous illustrez votre pays; la gloire de l'école française sera la récompense de vos maîtres."

bearing the names of so many flute virtuosi has not existed at any other time or place. The system and philosophy of flute instruction and flute performance at the Paris Conservatoire have been extensively recorded by the Professors of Flute in the form of comprehensive method treatises.

The Paris Conservatoire has been at the forefront of flute performance practice and pedagogy throughout its two hundred year history. However, during the nearly ninety years from 1838 to 1927, the Professors of Flute at the Paris Conservatoire gave birth to and nurtured two important historical events: the large-scale adoption of the silver Boehm-model flute, our modern flute, as the official instrument of the Paris Conservatoire and thus of all France, and the exportation of several prominent Paris Conservatoire-trained flutists to the new orchestras of North America, planting the seeds for what has become in the twentieth century the North American Flute School.

The importance of the Paris Conservatoire Professors of Flute has been neither overlooked nor denied in critical writings of the past fifteen years. Several dissertations and small monographs dealing with various facets of the French Flute School have paved the way for further research through documentation of biographical information.

One of the first biographical works is the 1980 M.A. thesis by Patricia Joan Ahmad, "The Flute Professors of the Paris Conservatoire from Devienne to Taffanel, 1795-1908" (MA Thesis, North Texas State University, 1980). This fairly brief work surveys the lives and compositions of the various Professors active during the inclusive dates as drawn from standard sources on music and musical life of the period. In addition, Ahmad gives the briefest of biographical sketches on many of Paul Taffanel's students who were active in France during the early twentieth century.

In the similarly formatted monograph *The French Flute School, 1860-1950* [1983, translated by Edward Blakeman (London: Tony Bingham, 1986)], Claude Dorgeuille explores the biographies of important figures of the French Flute School. Dorgeuille's main focus is, however, to assess and document the qualities and characteristics of the French Flute School through an analysis of numerous sound recordings released between 1903 and c. 1950 by Paris Conservatoire flute Professors and students. The most valuable contributions which Dorgeuille makes include a comprehensive list of first prize winners and compositions of the annual competitions held at the Paris Conservatoire during the time of his study, a large flute discography and bibliography, as well as publication of several articles,

interviews, and "recollections" contributed by important figures of the French Flute School.

Only one writer has accepted the challenge to produce a detailed study of one of the most distinguished flutists of the late nineteenth and early twentieth centuries. Penelope Ann Fischer's dissertation "Philippe Gaubert: Flutist, Composer, Conductor, Teacher" (DMA, University of Maryland, 1982) explores the life and influence of this musician.

David Eugene Etienne has written the only paper specifically devoted to the teaching methods of recent Paris Conservatoire flute Professors and their students - "A Comparison and Application of Select Teaching Methods for the Flute by Henri Altès, Paul Taffanel, Philippe Gaubert, Marcel Moyse and Trevor Wye" (DMA dissertation, Louisiana State University, 1988). This dissertation is a brief account of how each of the men enumerated above taught or teaches four components of flute performance and instruction: embouchure formation, single tongue, double tongue, and daily exercises. Etienne gives only limited emphasis to performance practice.

The French Flute School figures prominently in Wanda Sue Swilley's dissertation "A Comprehensive Project in Flute Literature with an Essay on Flute Embouchure Pedagogy in the United States from ca. 1925-1977 as Described in

Selected Writings" (DMA, University of Iowa, 1978).

Swilley's discussion deals with the French approach as it is specifically applied to the instruction and development of the flute embouchure pedagogy practiced in the United States.

A number of scholars have addressed various specific topics with regard to the French flute school through articles published largely in flute trade journals - *The Flutist's Quarterly* (Journal of the National Flute Association, USA), *Flute Talk*, *Pan* (Journal of the British Flute Society) - and other smaller flute journals throughout the past two decades. A number of articles have also appeared in broader-based musicological journals from the early decades of this century to the present. For the most part these have been limited to biographical and brief historical surveys of important figures and trends.

Beyond these specialized works of scholarly research, numerous books on the general history of the flute and other woodwind instruments have devoted a cursory amount of space to the life and influence of the Paris Conservatoire flute Professors. These titles may be found in the concluding bibliography.

The man who holds the position of Professor of the flute class at the Paris Conservatoire is extremely

influential.² Throughout most of the nineteenth and early twentieth centuries, the same man often holds not only the position of Professor, but the principal chair in both the Opéra orchestra and the Société des concerts. As a result, he is the model for the current generation of French flutists. His sound, his style, his manner of playing the instrument is the standard of flute performance practice. The nineteenth and twentieth-century exportation of Paris Conservatoire-trained flutists to North American shores gives increased breadth to the influence of the Professors of Flute.³ Because of the stature of the position, it is possible to derive the prevailing performance practice from

² There have been no female Professors of Flute at the Paris Conservatoire until the 1980s.

³ Charles Molé, a student of Altès, played with the Boston Symphony from 1887 to 1896. He was succeeded by another Altès student, Léon Jacquet for three years. Jacquet was followed by yet another Paris Conservatoire student André Maquarre (he was joined in the section by his brother Daniel for a brief time). André Maquarre ultimately left Boston for the Los Angeles Philharmonic Orchestra. The French lineage in Boston continued into the twentieth century with Georges Laurent who held the principal chair for over three decades. In New York, the Paris influence was driven by the towering figure of Georges Barrère for much of the first half of the twentieth century (Adrian Brett, "The French Style in America," *The Flute Worker*, vol. 2, no. 2 (December 1983), 1, 5). René LeRoy, a student of Taffanel, taught at the Conservatory of Quebec for a number of years before returning to Paris (Harry Moskowitz, "René LeRoy," *Woodwind World, Brass and Percussion*, vol. 14, no. 1 (January 1975), 14) In the latter half of this century Taffanel's student Marcel Moyse has continued the French traditions in North America. The lineage of Paris Conservatoire teachers and their students in North America is expanded further in Appendix 1.

the writings of one single flutist, the Professor at the Paris Conservatoire.

What was the style and manner of flute playing demonstrated and taught by the masters of the Paris Conservatoire during the most active period of the Conservatoire Flute School (1830 to 1930)? Building on the biographical and historical studies by earlier scholars, this paper will study three major treatises by Professors of Flute at the Paris Conservatoire to shed further light on the performance practice of the flutists performing or trained in Paris. The treatises which will be the subject of this study are the *Méthode pour servir à l'enseignement de la nouvelle flûte* [1838] by Victor Coche, the *Méthode pour flûte système Boehm* [c. 1880] by Joseph Henri Altès, and *L'Art de la flûte* collected by Claude Paul Taffanel, completed in two parts by Philippe Gaubert [*Méthode complète*, 1923] and Louis Fleury ["La Flûte," 1927]. The first two of these treatises will be the subject of scholarly research for the first time. Analysis of Paris Conservatoire flute treatises with an eye to their performance practice implications has never before been conducted. Based on our knowledge of the great pedagogical treatises from the eighteenth century by Quantz for flute, Leopold Mozart for violin, and C.P.E. Bach for keyboard, it may be assumed that the Paris Conservatoire flute treatises

will contain valuable information on the technique of playing the flute, as well as on the interpretation and performance of contemporary music.

This dissertation will be presented in two informal sections. The first section will include three chapters devoted to the historical information necessary to put flute pedagogy at the Paris Conservatoire and flute performance practice in France during the period from 1838 to 1927 into perspective. The second section will include five chapters which will present the results of my research into the performance practice implications of the three treatises.

The first chapter will offer a brief history of the Paris Conservatoire with particular emphasis on prevailing pedagogical trends at that institution. A composite list of winners of the annual competition in flute and a family tree displaying the many generations of pupil-teacher relationships which carry down to this day will be presented in conjunction with this chapter in the form of appendices. The second chapter will be devoted to a brief study of the evolution of the flute culminating in the innovations of Theobald Boehm, the merits and disadvantages of this new model flute, as well as the controversies surrounding the advent of Boehm's flute and competitors' models derived from combinations of the Boehm-flute and the

traditional eight-keyed flute. The third chapter will investigate the three major factors bearing on the professional flutist in Paris during the time of the study: the music profession in Paris, French tendencies in composition, and the standard repertoire of the flutist.

Chapters four through seven will deal primarily with the flute method books written by the professors at the Conservatoire 1838 to 1927. Chapter four will comprise a survey of the prominent flute treatises written for use at the Paris Conservatoire or by the Paris Conservatoire professors. In the following three chapters, each of the three method treatises by Coche, Altès, and Taffanel (with Gaubert and Fleury) will be studied and evaluated for implications of performance practice based on the type of instruction and exercises devoted to the various component parts of each of six proposed elements of music - pitch, rhythm, timbre, dynamic, form and musical style - as well as areas of interest receiving special emphasis by each composer of a treatise.

In the concluding chapter, the three flute methods will then be compared and contrasted based on the type of instruction offered, assumed starting and completion level of the student, and the variations in each professor's emphasis of various facets of the educational process. Correlations between demands and expectations presented in

the treatises and the flute compositions outlined in chapter three will be included as deemed appropriate. Statements will then be proposed suggesting the state of flute performance practice in France during the period 1838 to 1927 based on findings from the research conducted on the method treatises.

Chapter 1

History of the Paris Conservatoire

Returning to the Grand Boulevards, the next street on the left is the Rue Rougemont, and if we take this we come in a few moments to the Conservatoire where so many famous musicians have been taught....⁴

The Paris Conservatoire was founded in 1795 in the wake of the French Revolution as a response to the new demand for musicians to perform for state festivals and occasions. For nearly two hundred years, the Conservatoire has been at the centre of French music and society. From Paris, the standards of the Conservatoire emanate into the countryside through an elaborate system of music schools. A roster of Paris Conservatoire Professors and students reads like a veritable *Who's Who* of French, and in many respects, international musicianship.

Since its founding, the Conservatoire has been a leader in the pedagogy of composition, voice, and wind instruments. A great conductor of the New York Symphony, Walter Damrosch, himself directly responsible for enticing so many Paris Conservatoire trained musicians to North

⁴ E. V. Lucas, *A Wanderer in Paris*, 10th ed. (London: Methuen and Company, Ltd., 1913), 251.

American shores, eloquently and succinctly identified the source of French dominance in music with these words:

The French have the gift of instruction: they have clarity and they have enthusiasm; with these two qualities one performs miracles, and it was indeed a miracle which these French masters realized.⁵

In support of this observation, it may be readily noted that many professors who have served the Conservatoire in every discipline have left treatises of instruction which, through the years, have formed the foundation of the Conservatoire's curriculum; a number of treatises have become a standard for music instruction world-wide. Two centuries of continuous pupil-teacher relationships, particularly in the flute class, have left a permanent record of the changes in pedagogy as they are presented in the numerous treatises and methods. To this day the Paris Conservatoire continues to be a vital and active institution in international music.

Literature dealing with the Paris Conservatoire may be divided into three very distinct groups. One group consists of information found in anecdotal form; such tidbits of information, sometimes serious, sometimes

⁵ René Dumesnil, *Le Monde des Musiciens* (Paris: G. Cres, 1923), 190. The original quotation appeared in an interview with Walter Damrosch published in the *New York Herald*, 3 May 1920. Dumesnil has translated this passage into French: "Les Français ont le don de l'enseignement: ils ont la clarté et ils ont l'enthousiasme; avec ces deux qualités on fait des miracles, et c'en fut un vraiment que réalisèrent ces maîtres français."

humorous, may be readily found in memoirs, personal letters, and biographical sources. The Paris Conservatoire is also the subject of a number of monographs devoted to humorous and even sarcastic parody of the events and personalities associated with the institution. Working with these materials can be somewhat like looking at a family archive of snapshots and video recordings - entertaining, fascinating, but altogether sketchy in their presentation of only selected highlights.

The second group of sources consists of the several substantial monographs and encyclopaedias which have been compiled with great care and completeness, seemingly a result of the French penchant for recording all-encompassing histories. Investigation of these materials can produce a feeling that one is witnessing a long documentary history, and yet, at the same time, can be fascinating in the minute details which they record.

The third group of sources is the vast number of treatises and methods prepared by professors and students of the Conservatoire. These texts are invaluable for information, and begin to tell the story of what members of the Conservatoire considered fundamental to the education of young musicians. More than records of the curriculum, these treatises offer a glimpse of the Conservatoire's aesthetics.

Drawing from the sources in the first two categories noted above, this chapter will present a brief history of the Paris Conservatoire from its earliest predecessors through the closing date of this study with an emphasis on general pedagogical developments as they are represented in non-pedagogical sources. It will also present a synopsis of student life and Conservatoire student requirements during the time-frame of this study. While it is at times cumbersome to wade through both the facts and humorous details of this great institution, it is necessary to highlight the traditions of the Conservatoire in order to provide an historical perspective of the pedagogical impetus behind the composers of the treatises which are the subjects of this study. Along with chapters 2 and 3, chapter 1 will serve to place the performance and teaching practices of the Paris Conservatoire flutists in historical perspective.

The Establishment of the Paris Conservatoire

The movement to form a national music school in France began over a century before the founding of the Paris Conservatoire. The *Encyclopédie de la musique* simply states that:

...before 1789, musical instruction was assured by 400 masters. Their mission was to form the

ensembles necessary for religious functions and demonstrations.⁶

However, under the leadership of royalty, or in some cases, prominent musicians, musical instruction prior to 1789 was a great deal more directed and organized than this passage might suggest. Various institutions were established during the seventeenth and eighteenth centuries with a greater or lesser degree of success.

The first attempt at forming a centralized association of musicians and institution for music came as early as 1671 when Pierre Perrin and Robert Cambert founded the Académie royale de musique. The new institution brought together some of the best "graduates" from the church schools of France. When the most respected singers left the church schools, they were recruited or even ordered to perform with the Gentilshommes de la chambre du Roi. Incorporating these singers into its ranks, the Académie became a dominant force on the Parisian music scene throughout the late seventeenth and eighteenth centuries.⁷

In September of the next year (1672), a school of singing to be associated with the Opéra was proposed. As a

⁶ François Michel, et al., eds., *Encyclopédie de la musique*, vol. 1 (Paris: Fasquelle, 1958), 154: "Avant 1789, l'enseignement musical était assuré par 400 maîtrises. Leur mission était de former ensembles nécessaires aux services et aux manifestations religieuses."

⁷ Lassabathie, *Histoire du Conservatoire imperial de musique et de déclamation suivé de documents recueillis et mis en ordre* (Paris: Michel Levy, 1860), 1.

result, Lully established and assumed the directorship of the École de chant et de déclamation under the auspices of the Paris Opéra.⁸

M^{lle} Marthe Le Rochois, a retired actress, established a supplementary École de chant et déclamation. This school, open until 1726, produced many successful performers for the stage, and must, therefore, have had the support of fine instructors. However, neither of these schools nor the Académie royale accomplished the desired goal of creating a national centre for music education.⁹

During the decades of the eighteenth century preceding the Revolution, several other schools of instruction in the performing arts were founded. In 1713, Louis XIV, recognizing the disgraceful state of singing in Paris, issued a decree forming a new school of music which would prepare students to perform as dancers and musicians in the Académie royale de musique. This school came to be known as the Magasin, named after the building in which it was housed. The Director and associates of the Magasin were persons attached to the Académie royale.¹⁰ Girls were

⁸ Ibid.

⁹ Ibid. The date on which this École de chant opened is unclear from the literature.

¹⁰ Théodore Dubois, "L'Enseignement musical," *Encyclopedie de la musique et de dictionnaire du Conservatoire*, part 2, vol. 6, Albert Lavignac and Lionel de la Laurencie, eds. (Paris: Delagrave, 1931), 3445.

admitted to the Magasin to study voice and dance. Standards for the *filles du Magasin*, as the female students were known, were rigid. To be accepted to the Magasin, a woman had to possess the manner, carriage, and character necessary to perform well at the Opéra. Upon her matriculation at the school, a woman's family and husband had to relinquish all rights of guardianship to the Magasin. The Magasin was open to students through the 1770s.¹¹

More determined steps toward the formation of a national music school were initiated in December of 1783. On behalf of Louis XVI and the Queen, the Baron de Breteuil, *Ministre de la Maison du Roi*, sent a letter to the *Contrôleur Général des Finances* expressing the royal desire to form a national school of music based on the Italian conservatories.¹² Action was quickly taken, and on 3 January 1784, an order of the *Conseil d'État de Roi* established the *École royale de chant et de déclamation*.

The King, having recognized that that which can contribute most effectively in giving a new degree of perfection to a spectacle so interesting

¹¹ [Théodore] Lassabathie, 1-2. This source shows a list of Directors of the Magasin dated until 1775.

¹² Donald L. Hefner, "The Tradition of the Paris Conservatory School of Oboe Playing with Special Attention to the Influence of Marcel Tabuteau" (Ph. D. Dissertation, The Catholic University of America, 1984), 1. Lassabathie (p. 3) supports Hefner's suggestion that the Italian Conservatories, and in particular the *Pieta* at Naples, were the inspiration for founding the *Ecole royale de chant et de déclamation*.

to the public (such as the Opéra) might be to establish a school where one would be able to develop, at the same time, the skills useful to the Académie royale de musique and the proper bearing for service of the Chapel of His Majesty, ordains:

ARTICLE 1.--- On the 1st of August next, a school will be established staffed by skillful masters of music, of the clavecin, of declamation [spoken theatre], of French and of other languages, who will be charged with the instruction of music, composition, and in general, all that which is able to assist in perfecting diverse talents.¹³

The École royale opened 1 April 1784 and remained open until 1789.¹⁴

The period following the French Revolution witnessed many changes in the musical organizations of Paris;¹⁵ these changes prepared the way for the establishment of the Paris Conservatoire. Patricia Ahmad notes this development, stating that "[t]he revolution may

¹³ Lassabathie, 2: "Le Roi, ayant reconnu que ce qui pourroit contribuer le plus efficacement à donner à un spectacle aussi intéressant pour le public (que l'Opéra) un nouveau degré de perfection, ce serait d'établir une école où l'on pût former tout à la fois des sujets utiles à l'Académie Royale de Musique et des élèves propres au service de la chapelle de Sa Majesté, ordonne:

Article Premier.--- A compter au 1^{er} août prochain, il sera pourvu à l'établissement d'une école tenue par d'habiles maîtres de musique, de clavecin, de déclamation, de langue française et autres, chargés d'y enseigner la musique, la composition et en général tout ce qui peut servir à perfectionner les différents talents."

¹⁴ Ibid., 3.

¹⁵ Edward Bellasis, *Cherubini: Memorials Illustrative of His Life* (London: Burns and Oates, 1874), 72-73.

have brought 'irretrievable disaster' to non-musical institutions, but it gave birth to a musical institution."¹⁶

Following the July 1789 Revolution, Bernard Sarrette, Staff Captain of the National Guard, assembled forty-five musicians to re-establish the nucleus of the Musique de la garde nationale. In May of 1790, the municipality of Paris seized control of the Musique de la garde nationale and increased its ranks to seventy members. On 9 June 1792, a decree was issued from the Commune of Paris forming the École gratuite de musique de la garde nationale parisienne to train boys and young men for entrance into the Musique de la garde nationale. Students were accepted to the École gratuite only between the ages of ten and twenty years. Each student was issued a uniform, an instrument, and the music paper necessary to complete the lessons which he received for one hour every day. Each week the students received two solfège lessons and three instrumental lessons in addition to the general music lessons already noted.¹⁷

The spirit of the Revolution and a growing desire on the part of the French to emulate the societies of ancient Greece and Rome, in particular to conform to the

¹⁶ Patricia Ahmad, "The Flute Professors of the Paris Conservatoire from Devienne to Taffanel, 1795-1908," MA Thesis, North Texas State University, 1980, 5.

¹⁷ Lassabathie, 18-19.

ideals laid out by Plato in his *Republic*, led to the use of music in all public spectacles and ultimately to a deep belief in government support of music education.¹⁸ To this end, a decree of the National Convention, 18 brumaire an II (8 November 1793), formed the Institut national de musique composed of 115 musicians for the purpose of providing music for national festivals and providing music instruction for six hundred students.¹⁹ Lassabathie writes:

From the School of Music came the numerous students who, spread throughout the French camps, enlivened the intrepid courage of our armies with warlike strains: It is from there that our civic songs, disseminated from one corner of France to the other, moved abroad, even into the tents of the enemy to trouble the repose of the despots allied against the Republic; it is there that the brilliant and solemn hymns were inspired which our warriors sang upon the mountains of Argonne, in the plains of Jemmapes and Fleurus, and in taking the passages of the Alps and the Pyrenees by storm.²⁰

¹⁸ Dubois, 3446.

¹⁹ Lassabathie, 20.

²⁰ Ibid., 21. From the 3 August 1795 report to the National Convention by Marie-Joseph Chenier: "...c'était de l'École de musique qu'étaient partis de nombreux Elèves qui, répandus dans les camps français, animaient, par des accords belliqueux, l'intrépide courage de nos armées: C'est de là... que nos chants civiques, disséminés d'un bout de la France à l'autre, allaient jusque chez l'étranger, jusque sous les tentes de l'ennemi, troubler le repos des despotes ligés contres la République; c'est là qu'ont été inspirés ces hymnes brillant et solennels que nos guerriers chantaient sur les monts de l'Argonne, dans les plaines de Jemmapes et de fleurus, et en forçant les passages des Alpes et des Pyrénées."

Two years later, on 19 thermidor an III (3 August 1795), the National Convention, in one bold stroke, suppressed both the Musique de la garde national and the École royale, and put forward plans by Marie-Joseph Chenier for the establishment of a national conservatory of music under the name of the same Institut national which had been established on 8 November 1793. On the same day, the Convention established that five Inspecteurs, chosen by the Institut from among its composers, would be responsible for the overseeing of student instruction. These five Inspectors along with four professors would form the administration. Furthermore, the same day witnessed the founding of the Bibliothèque at the Institut, established salaries and scholarships, set the number of professors for each discipline, and approved 240,000 francs to underwrite the expenses of establishing the Institut, which would be located at the Menus-Plaisirs.²¹

The Paris Conservatoire was formally established on the 25th of October 1795 as the Conservatoire national de musique.²² Bernard Sarrette was appointed as the new Conservatoire's director, and Messieurs Lesueur, Grétry, Gossec, Méhul, and Cherubini were appointed as Inspectors. The last three men were also hired to teach counterpoint.

²¹ Ibid., 21-22.

²² Bellasis, 73.

A commission charged with the task of organizing the new Conservatoire submitted their final plan on 15 messidor an IV (3 July 1796) under the signature of M. Benezech. The plan provided for administration of the Conservatoire, nomination of temporary officers, inspection of the curriculum, establishment of the Bibliothèque, public performances and inspection [*exercices*], duties for the national festivals, duties of the legislative board, responsibilities for lessons, admission of students, order of study, responsibilities of the students, holidays and leave, offenses and punishment.²³ Provisions were made to establish a minimum of twenty classes: solfège, clarinet, flute, oboe, bassoon, horn, trumpet, trombone, serpent, buccina, *tubae corvae*, timpani, strings, clavecin, organ, vocalization, voice (simple and operatic), accompaniment, and composition.²⁴ The Conservatoire opened to students on 30 October of the next year.²⁵

The issue of public functions [*exercices publics*] had finally been settled in the Benezech report of 3 July 1796. Fresh in the memories of the Conservatoire administrators was the École royale du chant production of Piccini's Roland in 1786, which was the first function for

²³ Lassabathie, 219-237.

²⁴ Dubois, 3446.

²⁵ Lassabathie, 23.

that institution. The production of an public function was not a new event in the life of institutions of music instruction, but that of the École royale was the first one held for Paris in twenty years. The École de musique de la garde nationale had provisions for a function written into its by-laws, but none was ever performed. It was finally decided that the Conservatoire would institute six functions annually, and an annual competition at which prizes would be awarded to Conservatoire students for demonstrated accomplishment. The public functions would be held in the Great Hall of the Conservatoire in the presence of the Director, the Ministers, and the Institut [nationale de sciences et arts]. The first function was held in the Salle de l'Odéon on 24 October 1797 with great success.²⁶ The public functions have continued to this day in one form or another.

One profound manifestation of the public functions was the founding of a series of twelve orchestral concerts annually in 1803 which was the embryo of the Société des concerts du Conservatoire (that group was formally established in 1828). This magnificent orchestra, made up of professors and students, has functioned as a forum for contemporary French performing talent since its founding.²⁷

²⁶ Dubois, 3448.

²⁷ Ibid. Dubois continues his article with a lengthy discussion of the evolution of the public exercises. The

The Conservatoire underwent a second period of organization in 1800. The committee report was issued under the signature of the Ministre de l'Intérieur, M. Cretet.²⁸ Most administrative aspects of the Conservatoire remained intact with only slight alteration. However, by order of the report, several important aspects of the curriculum were either defined or redefined.

Chapter 1, article 3 of this report established the order of study through four levels. The first level included successful completion of the rudiments of music, solfège, and preparatory vocal classes. The second level comprised classes in vocal declamation or individual instruments. The third level included the study of the voice with instrumental accompaniment, ensemble study including both private and public performances, as well as harmony and composition. Finally, the fourth level included the complete study of music along with physics, mathematics, and philosophy.

Further requisites of study are shown in article 4 of the same chapter. In this article, the Conservatoire mandates that: 1) a student studying solfège must also study an instrument concurrently; 2) a student may not study

Société des concerts du Conservatoire is discussed at greater length in chapter 3 of this paper.

²⁸ Lassabathie, 238-263.

two instruments simultaneously; and 3) on completion of the solfège class, a student must study harmony if he or she still wishes to study an instrument.²⁹

Methods and Treatises

The new Conservatoire soon found itself in the position of offering instruction without the benefit of approved texts. The Magasin de musique (not to be confused with the music school called the Magasin) had been established in 1793 under Bernard Sarrette and the Musique de la garde nationale for the purpose of propagating the spirit of the Republic and augmenting the resources of music through publication. The Magasin was transferred to the Conservatoire with the new mandate of publishing theatrical works, classical works for the voice and instruments, as well as teaching materials, methods, and studies.³⁰ The

²⁹ Formal revisions in the Conservatoire administration have been made at irregular intervals since the Report of 1800 by various commissions, notably in 1808, 1822, 1841, 1850, 1855, 1878, 1894 and 1905. After this point, information ceases to be available through North American library circulation. These revisions have altered only the finer points of the administrative plan of the Conservatoire. No major pedagogical shifts have been laid out by the authority of these more recent commissions. The first five dates are dealt with in Lassabathie, 263-334. The last four are considered in Gail Hilson Woldu, "Gabriel Fauré, directeur du Conservatoire les réformé de 1905," *Revue de Musicologie*, vol. 70 (1984): 199.

³⁰ Constant Pierre, *Le Magasin de musique à l'usage des Fêtes nationales et du Conservatoire* (Paris: Librairie Fischbacher, 1895; Geneva: Minkoff Reprint, 1974), vii-x (hereafter cited as *Le Magasin de musique*).

resource for publishing teaching methods now existed; however, there was still a lack of adequate materials prepared and available for publication. A commission of fourteen men was appointed in December of 1801 to prepare a harmony treatise for use by the Conservatoire. In February 1802, a text prepared by one of the commission members, C. S. Catel, was selected as the official harmony treatise of the Conservatoire.³¹

Professors from other disciplines were obviously approached at about the same time with the intent of developing methods specifically for Conservatoire use. François Devienne, one of the first professors of flute at the Conservatoire, had already drawn up a thorough method (*circa* 1795) for the use of his Conservatoire students. A. Hugot and J. G. Wunderlich, also professors of flute, submitted their method (begun by Hugot, completed by Wunderlich) to Sarrette for approval in 1804. Approval was granted the next day.³² Other texts approved at about the same time for use in other disciplines include: L. Adam, *Méthode de Piano*, 1805; F. J. Gossec et al., *Principes élémentaires de musique...suivés de solfèges*, 1800-1802; L.

³¹ Bellasis, 73.

³² David Jenkins, introduction to A. Hugot and J[ohann] G[eorg] Wunderlich, *Méthode de flûte du Conservatoire [adoptée pour servir à l'étude dans cet établissement]* ([1804]; reprint, Buren: Fritz Knuf, 1975), intro.

Cherubini, *Solfèges de l'Italie*, n.d.; and N. Roze, *Méthode de plain-chant*, 1814.³³ The tradition of professors compiling their pedagogical methods, materials, and philosophies by writing large pedagogical treatises for the Conservatoire continues into the twentieth century in many disciplines.

The Succursales

The influence of the Conservatoire soon began to spread throughout the countryside. Chapter 1, article 15 of the 1800 Report mandated the establishment of *ouvrages élémentaires*, the development of standards for uniformity in music education throughout France. This mandate led to the eventual establishment of a network of music schools [succursales] throughout the country. The network of schools was first proposed by Bernard Sarrette in 1795, and originally sought to establish fifty-six regional schools divided into four levels according to the type of instruction which each institution would offer.³⁴ There were thirty schools planned for the first level at which one

³³ Henri Vanhulst, "La Musique du Passé et la Création du Conservatoire de Paris: sa présence dans les premières méthodes," *Revue Belge de Musicologie*, vol. 24-7 (1972): 55.

³⁴ Geoffrey Hindley, ed., *Larousse Encyclopedia of Music*, based on *La Musique: les hommes; les instruments; les oeuvres*, edited by Norbert Dufourcq, 1965 (London: The Hamlyn Publishing Group, Ltd., 1971), 154-155.

teacher would teach solfège and diverse instruments to fifteen students. There would be fifteen second level schools comprising four teachers and forty students with a curriculum consisting of solfège, voice, and strings. The third level was to include ten schools made up of fifteen professors and 120 students. At these schools, students could study solfège, voice, harmony, flute, clarinet, serpent, horn, and bassoon. At the fourth level was the Conservatoire supporting eighty professors and four hundred students.³⁵ The regional system has continued to grow since its establishment, and was given its most recent revision in 1954.³⁶

Directors of the Paris Conservatoire

The men who have held the position of Director of the Paris Conservatoire have been in a unique position to affect the course of pedagogical events at the Conservatoire and, to a certain extent, the musical climate of France for many years following their tenure.

In the early decades of the nineteenth century, the directorship of the Conservatoire had been a pawn of the

³⁵ This proposal pre-dated the establishment of the Paris Conservatoire, and no action was taken on the proposal until 1800.

³⁶ Hindley, 156-159. This is the most recent documentation available on the subject to this author's knowledge.

government. With the overthrow of Napoleon in 1814, development of the Conservatoire was suspended, and Sarrette was removed as director on November 14 of that year. When Napoleon returned to power in 1815, Sarrette was reinstated 23 March 1815. With the return of the Bourbon House to the throne, Sarrette was dismissed for the last time on 26 December 1815, and the Conservatoire was reorganized under strict control as the *École royale de musique et de déclamation*.³⁷ The post of Director was dissolved, the Committee of Inspectors was disbanded, and Perne was placed as Inspector-General of Classes, a post which he held until 1822. With Luigi Cherubini's appointment as Director in 1822, the directorship was reinstated.³⁸

Cherubini was Director of the Conservatoire from 1822 to 1842, and his tenure came immediately on the heels of a very turbulent time for the Conservatoire. The early years of the Conservatoire had successfully produced a generation of highly trained instrumentalists, assisted in the publication of numerous treatises, and witnessed the founding of a free library. Nevertheless, the task ahead of Cherubini was not an easy one as the Conservatoire was

³⁷ Dubois, 3446-7.

³⁸ Constant Pierre, ed., *Le Conservatoire National de Musique et de Déclamation. Documents historiques et administratifs* (Paris: Imprimerie Nationale, 1900), Sommaire-Table (hereafter cited as *Documents historiques*).

rapidly falling into a frightful state. The results of the instruction at the Conservatoire regularly brought forth accusations of poorly trained vocalists and poor fundamental musicianship.³⁹

Cherubini immediately set about remedying the situation. His first point of attack was the composition class upon which he imposed strict study of counterpoint, harmony, and fugue. For the Conservatoire as a whole, Cherubini's formula was a simple one. First, he assembled the best teachers of composition, singing, and instrumental methods that he could find. Then he required that teachers and students alike adhere to strict rules of attendance. He even went so far as to keep a "register of the house" for each class so that everyone would have to sign in and sign out. Abuses of the rule were not tolerated. His plan worked and the Conservatoire flourished.⁴⁰ Speaking of this period in the Conservatoire's history, Jacques Barzun offers the following:

The institute [Conservatoire] meant to conserve the gains made by the art of music during the French Revolution....It established the first thorough and systematic curriculum for the study of all branches of secular music anywhere in Europe....The textbooks written by its specialists were standard. By 1830 Cherubini's discipline made it inevitable that any student on its rolls

³⁹ David Charlton and John Trevitt, *New Grove's Dictionary of Music and Musicians*, 6th ed., s.v. "Paris, VI, 5," 212.

⁴⁰ *Ibid.*, 252.

should do at least two things: work extremely hard and master the system. Today this system may well seem antiquated and deficient, but at least it enforced industry and imparted technique.⁴¹

Daniel-François-Esprit Auber became Director of the Conservatoire in 1842 and remained at that post until 1871. Little is known of Auber's tenure at the Conservatoire. His directorship is described by Dubois as being:

...paternal, almost impersonal, but the imposition of regularity, of order, of duty, was so much a part of everyone's habit that it was an epoch of tranquil prosperity for the Conservatoire.⁴²

However Albert Lavignac has singled out the following anecdote to relate the lighter side of this "almost impersonal" director. Lavignac relates:

Through the cracks of the closed windows, as if all were present, a vague and indescribable babbling formed by the whistling of the flutes, the sniffing of the oboes, the quacks of the clarinets, the farting of the bassoons, the grating of the violins, the grunting of the cellos, the snoring of the contrabasses, and the sweet cooing of the chanteuses, ...in the end, that troubling murmuring so characteristic, so peculiar to our dear old courtyard, which one expects nowhere else, and to which one becomes cordially attached without knowing why.

Auber said nothing, the Minister said no more. They listened....

Suddenly, a frightful cry, raucous [and] guttural escaped from one of the windows on the first floor. The Minister, although courageous

⁴¹ Barzun, 138-139.

⁴² Dubois, 3447: "...paternelle, presque impersonnelle, mais l'impulsion de la régularité, de l'ordre, du devoir, étaient tellement dans les habitudes de tous, que ce fut une époque de tranquille prospérité pour le Conservatoire."

and having often visited asylums for the insane, jumped back. Auber, very calm, said to him, "Nothing to fear, Excellency, it is only a tenor who is being bled."⁴³

Ambroise Thomas became Director of the Paris Conservatoire following Auber's death in 1871. He is considered to have been a hard working and devoted Director who respected the traditions of the Conservatoire, but did not hesitate to bring about change where he perceived it was necessary. The modifications brought about to the curriculum during his tenure included the addition, particularly in academic and preparatory music, and deletion of classes as necessary, as well as the increasing of the number of students enrolled in each class, and of the maximum length of time students could remain at the Conservatoire.⁴⁴

⁴³ Albert Lavignac, *Les Gaietés du Conservatoire* (Paris: Librairie Ch[arles] Delagrave, [1899]), 27-28: "Des fenêtres fermées s'échappait par les fissures, tout comme à présent, un vague et indescriptible gazouillis formé du sifflement des flûtes, du nasillement des hautbois, des couacs des clarinettes, des pétarades des bassons, du grincement des violons, du grognement des violoncelles, des ronflements des contrebasses, des doux roucoulements des chanteuses, ... enfin ce bruissement troublant si caractéristique, si particulier à notre chère vieille cour qu'on ne l'entend nulle part ailleurs, et qui fait qu'on s'y attache cordialement, sans trop savoir pourquoi.

"Auber ne disait rien, Le Ministre non plus. Ils écoutaient le travail..."

"Soudain, un cri effroyable, rauque, guttural, se fait entendre à l'une des fenêtres du premier étage. Le Ministre, bien que courageux et ayant souvent visité des maisons de fous, fait un bond en arrière; Auber, très calme, lui dit: "Ne craignez rien, Excellence, c'est un ténor qu'on saigne."

Thomas' most important contribution to the Conservatoire and to the contemporary performance repertoire was his emphasis on teaching and studying the classics, particularly Beethoven.⁴⁵ Prior to 1870, composition and performance, spurred on by the annual competition for the Prix de Rome, emphasized dramatic and not symphonic works. However, because of his commitment to the classics, Thomas' tenure initiated "...a new artistic generation, a new music, a new spirit...."⁴⁶ Thomas retired as Director in 1896.

Théodore Dubois, who assumed the Directorship of the Conservatoire in 1896, is credited with three important pedagogical reforms.⁴⁷ First, he re-established the orchestra as a class under the direction of flutist-conductor-composer-pedagogue Paul Taffanel. Second, and perhaps most important, he worked against the perception of solfège as a useless luxury and toward its establishment as the most important element of musical study. Third, he contributed to the repertoire of wind instruments by annually commissioning from contemporary composers the works

⁴⁴ Ibid.

⁴⁵ Charles Koechlin, "La Pédagogie musicale," in *Rapport sur la Musique Française Contemporaine*, edited by Paul-Marie Masson (Rome: Armani and Stein, 1913), 141.

⁴⁶ Ibid: "...une nouvelle génération artistique, une nouvelle musique, un nouvel esprit...."

⁴⁷ Louis Fleury, "Souvenirs d'un flutiste," *Le Monde Musical*, vol. 35, no. 24/25 (December 1924): 404.

to be performed at the final examinations. These pieces reflected not only the prevailing tastes of French audiences of the time, but they also paralleled the developments in the musical instruments themselves by exploiting their idiomatic tendencies.⁴⁸ As a result, many of what are now considered the most important works of the individual wind instrument repertoires were written for the Conservatoire competitions during Dubois' tenure. Dubois left his post in 1905.

Gabriel Fauré breathed similar life into the Conservatoire of the early twentieth century. At his appointment in 1905, Fauré received a letter from Claude Debussy in which Debussy notes "how much dust of old traditions there is to shake off" the Conservatoire.⁴⁹ Fauré began to conduct house-cleaning exercises immediately.

Major reforms of the curriculum were instituted at Fauré's direction in 1905. The first major reforms were directed toward the singing class, which was coming under tremendous attack for increasingly poor quality. Fauré forbade the singing of arias designated for the annual competitions in the first year of study and implemented a

⁴⁸ Lee Lattimore, "Metamorphosis of the *Morceaux de Concours* for Flute of the Paris Conservatory, 1829-1900," *The Flutist's Quarterly*, vol. 14 (Spring 1989): 41-48 (henceforth cited as "Metomorphosis").

⁴⁹ François Lesure, ed., *Debussy Letters*, translated by Roger Nichols (London: Faber and Faber, 1987), 153.

requirement of scales, vocalise exercises, and diction as part of the singing competition. He also required the study of non-dramatic works - cantatas and lieder. Like Cherubini, Fauré instituted strict regulation of attendance for the harmony and composition classes under penalty of dismissal. He separated the counterpoint and fugue classes, placing them under the tuition of two separate professors. For the institution as a whole, Fauré set forth a policy which revoked the traditional concentration on nineteenth-century French music in favor of a policy integrating Renaissance, Baroque and Classical music into the curriculum.⁵⁰ Ten years later (16 October 1915), Fauré writing to Camille Saint-Saëns noted that there was still "...talk of major reforms at the Conservatoire."⁵¹ In the letter Fauré again singled out the composition class, saying that he hoped to institute a French language and poetry class specifically for composers to give them familiarity with the language which they set to music; however, there is no indication the fulfillment of this plan.

⁵⁰ Woldu, 199-200, 206-218.

⁵¹ Jean-Michel Nectoux, ed., *Gabriel Fauré: His Life through His Letters*, translated by J. A. Underwood (London: Marion Boyars, 1984), 298.

Course of Study

Most of France's finest musicians have been trained at the Paris Conservatoire. Some of the most famous among them gained their fame despite their intense dislike of the Conservatoire and its traditions. Throughout the literature, the composition class received the most frequent criticism from its students. David Ewen notes that Ernest Chausson and Édouard Lalo found the formality, the academic restrictions, and the traditional curriculum of the Conservatoire particularly stifling.⁵² François Lesure has suggested that Debussy did not do well in the Conservatoire's harmony class because he did not like the student exercises and the need to "apply established procedures."⁵³

Debussy's own letters confirm Lesure's opinions, clearly indicating the lasting disdain which he held for his Conservatoire days; not even Fauré's reforms could erase Debussy's memories. A letter to Jacques Durand, 17 July 1907, speaks of Debussy's contempt for the Conservatoire's imposed standards. With respect to an up-coming revival of his *L'Enfant prodigue*, Debussy offers, "I am pretty sure the 'original' orchestration smells of 'exams,' 'the

⁵² David Ewen, *Great Composers, 1300-1900: A Biographical and Critical Guide* (New York: The H. W. Wilson Company, 1966), 84, 202 (henceforth cited as *Great Composers*).

⁵³ Lesure, *Debussy Letters*, 1.

Conservatoire,' and tedium...."⁵⁴ In 1909, shortly after he had sat on the entrance juries for the Conservatoire, Debussy commented that "the Conservatoire remains the same gloomy, dirty place we remember, where the dust of unhealthy traditions still sticks to the fingers."⁵⁵ Yet despite the contempt which Debussy and the other composers felt for the Conservatoire's traditions, it is tradition upon which the Conservatoire had been founded.

Isidor Philipp and Théodore Dubois have each thoroughly discussed the course of study including entrance and graduation requirements.⁵⁶ These accounts, along with personal narratives of Conservatoire students, offer a clear, vivid picture of student academic life and expectations for the decades surrounding the turn of this century.

Admission procedures were in an abysmal state of disorganization. Despite strict limitations on class sizes and attempts to regulate the number of applicants, the annual applicant pool skyrocketed, especially for the theatrical classes, from 280 students in 1851 to over 1000

⁵⁴ Ibid., 179.

⁵⁵ Ibid., 216. Letter to Albert Carré, October 1909.

⁵⁶ Isidor Philipp, "The French National Conservatory of Music," translated by Frederick H. Martens, *The Musical Quarterly*, vol. 6 (1920): 214-226. See also Lavignac, *Encyclopedie du Conservatoire*, 3451-3452.

in 1914 (only 146 students were accepted from those who applied in 1914). These figures continued to be exceeded into the 1920s.⁵⁷ Attempts to the contrary, the initial goal of a maximum of 600 students enrolled at the Conservatore was consistently exceeded after 1857, rising as high as 735 students in 1885.

With such a rapid increase in applicants, requirements were reduced to a bare minimum, allowing students to register even up to the time of the audition with not much more than proof of age. No set repertoire was required for the entrance auditions. As a result, numerous ill-prepared and under-qualified students were allowed to audition.

By the time of Philipp's article (circa 1915), regulations for the audition procedure had been implemented, and were strictly enforced. These regulations included a firmly set application deadline, a requirement for sufficient supporting documentation to prove the applicants' preparedness, and a uniform audition list.⁵⁸ During the middle 1920s, the audition process for the instrumental classes was carried out in two rounds of competition. At the first round, candidates were permitted to perform the selection of their choice; this was then followed by sight

⁵⁷ Dumesnil, 180.

⁵⁸ Ibid., 215-217.

reading. The finalists chosen from this first round returned three weeks later to perform a programme of three works chosen by the committee.⁵⁹ Admission procedures have remained fairly constant to this day.⁶⁰

Age limits for admission appear to have covered a broad spectrum. During the nineteenth and early twentieth centuries, new students are known to have been admitted from nearly infant ages up through their mid-twenties. Georges Bizet, Jacques Halévy, Jules Massenet, and Jean Françaix were all admitted at age ten or younger.⁶¹ On the other hand, Ernest Chausson, Charles Gounod, and Ferdinand Hérold were admitted in their late teens and twenties, the oldest being Chausson at age twenty-five.⁶² The first concrete indication of restrictions on the age of admissibility is documented in 1909. At this time a student could be admitted between the ages of 9 and 26, although there was some variability of these ages for some classes.⁶³

⁵⁹ Ibid., 179.

⁶⁰ Frances Lapp Averitt, "An Outsider's View Inside the Paris Conservatoire," *Flute Talk*, vol. 7 (March 1988): 11-12. The procedure outlined by Averitt for the 1987 admission audition varies only slightly from the procedure given by Dumesnil more than sixty years earlier.

⁶¹ Ewen, *Great Composers*, 42, 171, 241. See also, David Ewen, *European Composers Today: A Biographical and Critical Guide* (New York: H. W. Wilson and Company, 1954), 53-54.

⁶² Ewen, *Great Composers*, 84, 160, 181.

⁶³ Mathilda Daubresse, "Rapport sur l'enseignement musical en France," *Haydnzenterfeier III. Kongress der*

Once admitted to the Conservatoire, a student could expect to be instructed according to time honoured traditions, and to be held to traditional requirements of study and practice. Gustave Charpentier wrote:

I study day and night so as to never be a long time without touching my violin, here is how I have it arranged. On the days that I do not go to the Conservatoire, I study from 9:30 a.m. to noon, from 1:30 to 4:00, from 5:00 to 6:30, 8:30 to 10:00 and from 1:00 a.m. to 2:00. I shall not be able to continue at this pace because it tires me awfully, and the neighbours are in an uproar because I prevent them from sleeping.⁶⁴

While attending class, students were instructed in the manner chosen by their individual professors. Isidor Philipp reminds us that at the Paris Conservatoire the importance of successful completion of the annual competition is a determining factor in the methods employed in the classroom.

The professors are allowed the greatest latitude with respect to the means they employ: the end in view is all that matters....Granted, there is a traditional doctrine, a collective body

Internationale Musikgesellschaft, Wien, 25. bis 29. Mai 1909
(Vienne: Artaria and Co., 1909), 508.

⁶⁴ Gustave Charpentier, *Lettres inédites à ses parents: La vie quotidienne d'un élève du Conservatoire 1879-1887*, edited by Françoise Andrieux (Paris: Presses Universitaires de France, 1984), 21: "J'étudie jour et nuit de manière à n'être jamais longtemps sans toucher mon violon, voici comme je m'arrange: J'étudie de 9h 1/2 du matin à midi, de 1h 1/2 à 4 heures, de 5h à 6h 1/2, 8h 1/2 à 10h et de 1h du matin à 2 heures, les jours que je ne vais pas au Conservatoire. Je ne pourrai pas continuer à ce train-là, car ça me fatigue rudement et les voisins chahutent après le mur car je les empêche de dormir."

of technical exercises to form the basis of instruction; yet every student is led to acquaint himself with them in accord with his individual aptitude, his proper degree of intelligence, his measure of progress, the quality of his talent, etc.

Therefore it is necessary to take into consideration not the means employed but their results. These last are most satisfactory in the major portion of the study branches, as the competitions at the end of the year testify.⁶⁵

In most classes students received individual instruction in front of their class of about ten to twelve students. Class instruction was, however, received in courses which by their nature and content did not lend themselves to individual tuition: vocal ensemble, orchestra, music history, history of dramatic literature, as well as dictation and theory sections of the solfège class. Lavignac eloquently defends the Conservatoire's system of class teaching in his monograph *Musical Education*:

The intercourse with a large number of comrades studying the same specialty, the habit of judging them, the fact of following their progress and comparing it with their own, all the lessons being given in common, the facility of meeting and conversing with pupils who have embraced other branches, and belong consequently to other classes, all contribute strongly to developing in the young artist a lot of technical knowledge of which private teaching would never have given him an idea even, and which may be very profitable to him.⁶⁶

⁶⁵ Philipp, 218.

⁶⁶ Albert Lavignac, *Musical Education*, translated by Esther Simpleton, Appleton's Musical Series (New York: D. Appleton and Co., 1903), 382.

Great liberty is offered to the professors in choosing their instructional materials and methods, and the professor is considered king of his particular hill.

Again, Lavignac writes:

...The Professor is considered there as impeccable and infallible, what he says must be accepted as an article of faith, and the example that he sets must be severely imitated. If he is a singer or instrumentalist, he teaches his pupils to sing or play like himself, in his particular manner, to breathe, to pronounce and to hold the bow as he does. He communicates to them something of his own style, and fashions them in his own image....[T]he master inculcates them with his ideas and methods..., making them share in his admirations or antipathies, while yet having the very sincere general intention of allowing them the greatest latitude, merely preventing them from straying; and, in reality, he often communicates to them, not his genius, which, alas! is untransferable, but much of his method, his talent, his *sleights of hand*, or familiar formulæ.⁶⁷

Retired Director Théodore Dubois gave an excellent and succinct account of the instruction offered in the various Conservatoire classes during the last decades of the nineteenth century. The following is adapted from that source.⁶⁸

The classes for basic musicianship included solfège, harmony, music history, and the history of dramatic literature. As noted earlier, the reforms from the year

⁶⁷ Ibid., 379-381.

⁶⁸ Théodore Dubois, "L'Enseignement musical," *Encyclopedie de la musique et dictionnaire du Conservatoire*, part 2, vol. 6, edited by Albert Lavignac, 3451-3452.

1800 made solfège and harmony mandatory for all Conservatoire students. In later years, music history became obligatory for harmony and composition students. Likewise, the history of dramatic literature was mandatory for the students of declamation. For all other students, these last two courses were optional, but encouraged. The Conservatoire solfège class included the traditional disciplines of dictation and theory, along with lectures on changing clefs. Separate classes were offered for the study of chords, and the realization of harmony for a given bass or melody in differing styles. Instruction in counterpoint and imitation was treated as a separate discipline.

The Conservatoire composition class was designed to prepare students for the Prix de Rome competition. The course included rigorous drill in strict species counterpoint, fugue, compositions for voice and instruments, both symphonic and dramatic, aesthetics, methodical analysis of conducting, and instrumentation.

The various instrumental and vocal classes offered complete instruction in all basic skills necessary to perform well upon the instrument. The organ class included instruction in the accompaniment of plain chant, improvisation of fugue and improvisation of modern compositions from a given theme. In addition to these technical skills, the masterworks of the repertoire were

studied. Similarly, the piano class offered instruction in the realization of a figured bass, improvised accompaniment on a given melody, transposition, improvised reduction of an orchestral score, and standard repertoire. Simple vocal classes dealt with vocal production and fundamental skills. Vocal declamation and dramatic declamation included study of scenes from their given repertoires. Finally, instrumental classes instructed students in instrumental technique, as well as works from the traditional and modern repertoires. The wind classes seemed to have been particularly successful in producing excellent results if the following comment by Emile Vuillermoz concerning the 1914 annual competition is to be taken as accurate:

Once again the wind players astounded us with their thorough musical training, their technical perfection, their delightful sonority. You really should hear those velvety horns and flutes....You really should hear them...and hurry up, because you hardly ever hear them anywhere else.⁶⁹

Several ensemble classes were offered to prepare students for performances to be held during the annual public exercises. Among these were classes in vocal ensemble and orchestra. In addition, three classes made up of the best instrumental students were offered in order to study the masterpieces of the chamber music repertoire.

⁶⁹ Claude Dorgeuille, *The French Flute School 1860-1950*, translated and edited by Edward Blakeman (London: Tony Bingham, 1986), 49.

Albert Lavignac makes the point that in addition to offering instruction to students on the discipline at hand, many professors utilized the skills of older and more advanced pupils by having these students take over the teaching of the younger and less advanced students. He notes that this:

...affords the incomparable advantage of teaching the pupil how to teach, and transforms the Conservatory into a normal school for teachers. And this is not a thing to be neglected; for, to be a good teacher, it is not sufficient merely to know one's profession as an artist perfectly and to be capable of giving good examples. One must accustom oneself to presenting things with clearness and method....⁷⁰

Each class is assessed twice each year through general evaluations in January and June. At each exam, the committee announces who will be dismissed and who will be allowed to continue to study. Every student receives a written evaluation of his or her work. The results of the June examinations determine which students will be eligible to compete in the graduating examination. The term examinations are also used to evaluate the class as a whole, and thereby the work of the professor.⁷¹

Isidor Philipp has provided a complete outline of the concours procedures for each class during the first

⁷⁰ Lavignac, *Musical Education*, 383.

⁷¹ Dubois, 3451-3452.

decades of the twentieth century.⁷² In his prefacing statements, Philipp notes the following:

Now this competitive method of judgement necessarily establishes one identical test for all students, and it is possible, with reason at times, to criticize its failings. Yet, what other manner of procedure offers? Should we, as is done in the foreign conservatories or schools, institute general examinations and deliver certificates or diplomas for study courses absolved or for aptitude demonstrated? It is by no means certain that we would gain thereby. Would a diploma do more to establish an artist's reputation than a first prize?⁷³

Philipp's point is clear. Since its inception, the system of graduating examinations has been based on an evaluation of ability, not the number of classes completed. Through the examinations, the Conservatoire attempted to guarantee that a student who graduates from the institution possesses the skills, not merely the knowledge, to compete successfully in the musical world. To this end, a series of prizes is awarded annually at the examination based on an evaluation of a student's standing against a system of requisite standards; this is not a system which ranks competitors. First and second prizes [*prix*], as well as first and second honorable mentions [*accessit*] can be awarded or denied as standards are met. A student is allowed to compete until he or she gains a first prize

⁷² Philipp, 219-222.

⁷³ Ibid., 218.

marking their graduation from the Conservatoire. The list of flutists who have taken prizes at the concours demonstrates that most students attempt the concours once or more times unsuccessfully before obtaining the coveted first prize (see Appendix 2). Failure to win a prize or honorable mention after several attempts can result in the student's expulsion from his or her class.⁷⁴

Isidor Philipp has carefully outlined the procedure for the examination in solfège, harmony, keyboard accompaniment, and organ. This outline of the various concours tests demonstrates that the examination committee attempted to provide a strong balance between thorough testing and ample opportunity for success.⁷⁵

The Conservatoire has never offered an examination in composition; rather it has encouraged students to compete in the national Prix de Rome competition. The Prix de Rome was established by the French Republic in 1803 to assist

⁷⁴ Arbie Orenstein, *Ravel: Man and Musician* (New York and London: Columbia University Press, 1975), 14, 26. The unfortunate case of Ravel demonstrates the Conservatoire's resolve to maintain its standards. Ravel was dismissed from both the piano and the harmony classes in 1895 for failing to win a prize in three attempts. He returned to the Conservatoire in 1898 only to be expelled from the composition class two years later for failing to win a prize in two attempts.

Current practice in the instrumental classes allows the student to attempt twice to win a first prize after successfully obtaining a second prize (Averitt, 11).

⁷⁵ Philipp, 219-222.

young composers by means of an extended stipend. From that time until 1863, the contest was administered by the Institut de France. The Paris Conservatoire administered the contest on behalf of the state from 1864 to 1871, at which time the Prix was taken over by the Académie des beaux-arts upon presidential decree. The entire competition lasts a grueling two months each year. Like the Conservatoire prizes, the Prix de Rome may be withheld. The benefits of winning the Prix de Rome are many.⁷⁶ Not only does the winner have the privilege of receiving the most coveted prize, but he or she is now able to expect state support to continue his or her efforts for four to seven years. The first two of these years must be spent in Rome, the third in Germany or Austria, and the fourth in Paris or Rome. During this time, the recipient is required to

⁷⁶ Orenstein, 33n-35. Ravel's experience with the 1901 Prix de Rome may be used to demonstrate the process. During the first week in May, the competitors are required to compose a four-voice fugue on a subject provided by the administrators of the contest, as well as setting a short text (also provided) for chorus and orchestra. These two projects must be completed within the week. During the following week, the judges narrow the field of twenty competitors down to five or six. Also during the week, the adjudicators select a cantata text which is to be set for chorus, soloists and orchestra as the second round of the competition; in 1901 *Myrrha* by Ferdinand Beisser was selected. The remaining competitors are then locked away in individual studios for a full month, mid-May to mid-June, to complete their cantatas. All of the cantatas are performed about ten days after their completion. The award is decided the next day. The winning cantata would be performed the following October.

complete a certain number of works for orchestra and/or voices.

Because no information is available concerning the process of the instrumental examinations during our period of exploration, the 1987 flute examination, although removed from the time period of concentration by six decades, will be taken as an example of the twentieth-century trends in this procedure.⁷⁷ For the 1987 examination three compositions were selected by the committee to comprise a program of approximately twenty minutes: *Sonata in E major* by J. S. Bach, *Syrinx* by Claude Debussy, and *Explosante fixe* by Pierre Boulez. Programme order and the decision to memorize were left to the performer. On the day following the performance of these works, a second test of sight-reading and orchestral excerpts was completed.

⁷⁷ Averitt, 11.

Chapter 2

The Development of the Flute

The flute is the most ancient of all musical instruments. Its use has never been interrupted, yet the instrument has always remained imperfect. The improvements brought about by manufacturers are far from satisfactory to the artist. They [the artists] know that the instrument stands in the way of all of the developments which art and talent might be able to attain through its irregular construction and doubtful sonority. The distance is great between the flute which they desire and the flute in use today is great. Take as a point of comparison the common flute with six holes and one key: the difference between it and our flute with twelve keys is less great than the difference which exists between the twelve-keyed flute and Boehm's flute.⁷⁸

The transverse flute has been used in western classical music for nearly six centuries. During this time,

⁷⁸ V[ictor] Coche, *Examen critique de la flûte ordinaire comparée à la flûte de Bôhm, présenté à MM. les Membres de l'Institut (Académie royale des beaux-arts, section de la musique)* (Paris: Chez l'auteur, 1838), 3: "De tous les instrumens de musique, la flûte est le plus ancien; c'est celui dont l'usage n'a jamais été interrompu, et qui néanmoins est resté toujours imparfait. Aussi les perfectionnements auxquels les facteurs ont atteint, sont loin de satisfaire les artistes; ils comprennent que l'instrument s'oppose, par sa construction irrégulière et sa sonorité douteuse, à tous les développemens que l'art et le talent pourraient obtenir. Entre la flûte qu'ils désirent et celle dont on se sert aujourd'hui, la distance est grande. Et si l'on prenait pour point de comparaison la flûte vulgaire à six trous et à une clé, on pourrait dire que la différence entr'elle et notre flûte à douze clés est moins grande que celle qui existe entre cette dernière et la flûte de Bôhm."

the transverse flute has evolved from a simple wooden pipe bored with six finger holes and one embouchure hole to a silver tube fitted with keys designed to open and close each of at least fourteen holes bored into the tube. Manufacturers and performers have introduced "improvements" to the flute throughout the last six centuries; however, the move to improve the primitive six-holed flute began in earnest near the middle of the eighteenth century and culminated with the introduction of the Boehm-system flute in the mid-nineteenth century. The introduction of Boehm's flute, particularly in France, is central to this study, because it is the acceptance of this instrument as the instrument of choice by professional flutists which necessitated the development of a pedagogy and performance practice suited to the new instrument. Because the following study deals directly with this last aspect of the flute's history, the historical development of the flute is traced here so that the reader will be better informed as to the developments which lead up to the writing of the three treatises which are the subject of the ensuing study.

Prior to the developments realized by Theobald Boehm (1794-1881), instrument builders had concentrated their efforts on simply improving the existing instrument. However, Boehm's modifications (1831, 1832, and 1847) represented a radical departure from the system in current

use. The Boehm-system flute marked a positive step on the road of evolution as a result of the new and increased technical possibilities which this flute embodied, but the arrival of the new flute on the European music scene ignited controversy, confusion, and scandal. Unfortunately for the partisans and practitioners of the flute in current use, the coming of the Boehm-system flute shook the foundations of the established flute community with Darwinian certainty of evolution and ushered in a new era of flute performance as the practitioners of the Boehm-system flute surpassed their counterparts on the old-system instrument.

Several scholars have compiled complete and thoroughly documented histories of the transverse flute. In chronological order, the most prominent of these authors and their works are: Richard Shepherd Rockstro, *A Treatise on the Construction, the History, and the Practice of the Flute* (1890); Paul Taffanel and Louis Fleury, "La Flûte," *Encyclopédie de la musique et dictionnaire du Conservatoire* (1923); and Nancy Toff, *The Development of the Modern Flute* (1986). Numerous other authors, be they scientists, scholars, or performers, have contributed smaller pamphlets and monographs exploring specific events surrounding the introduction of the Boehm-system flute. The written works by Theobald Boehm, Christopher Welch, and Victor Coche are central to this body of works. A number of doctoral

dissertations, notably those by Amy Hamilton, Lee Lattimore, and Andra Bohnet, have explored the impact of various changes in construction of the transverse flute, primarily those introduced by Boehm, on composition for flute and on flute performance practice. Numerous journal articles complete the body of literature concerning the general history of the transverse flute. This chapter will briefly review the history of the transverse flute as presented in these sources, concentrating on the introduction, modification and acceptance of the Boehm-system flute in France during the mid-nineteenth century.

The Flute before Boehm

In its simplest form, the transverse flute is a tube, usually made of wood, metal, glass, porcelain, or ivory, closed by a stopper at one end, open at the other, and bored by a series of holes, one very close to the stopped end (the embouchure hole, used for channelling the breath of the performer into the instrument), the remaining holes spaced at fairly regular intervals, set closer to the open end of the tube (the tone holes, opened and closed by the performer's fingers, directly or by means of keys, for the modification of the musical pitch). Despite the fact that the tube of the transverse flute is stopped at one end, the position and function of the embouchure hole results in

the transverse flute's acoustic classification as an "open-tube."⁷⁹

The simple transverse flute (one embouchure hole, six tone holes) has been a part of western music since the early fourteenth century, and perhaps even earlier.⁸⁰ Interesting historical accounts and construction details of the simple flute appear in several early treatises: Sebastian Virdung's *Musica getutscht* (Basel, 1511), Agricola's *Musica Instrumentalis Deutsch* (1528), Praetorius's *Theatrum instrumentorum* (1628), and, most important, Mersenne's *L'harmonie universelle* (1636). Mersenne's treatise is notable for both the quality and quantity of details on the construction and acoustics of the transverse flute. The importance of Marin Mersenne (1588-1648) to this study lies in his account of the transverse flute with six large tone holes and a cylindrical bore.⁸¹ The cylindrical bore and large tone holes fell out of use for most of the seventeenth, eighteenth, and nineteenth

⁷⁹ Paul Taffanel and Louis Fleury, "La Flûte," *Encyclopedie de la musique et dictionnaire du Conservatoire*, part 2, vol. 3, 1487. The reader is directed to this source for more complete information on the acoustic properties and principles of the transverse flute.

⁸⁰ *Ibid.*, 1488.

⁸¹ Marin Mersenne, *Harmonie universelle contentant la theorie et la pratique de la musique*, book 3 (Paris: n.p., 1636; Reprint, Paris: Éditions de Centre National de la recherche scientifique, 1986), 241-245.

centuries, only to return with the later discoveries of Theobald Boehm (1847).

By the late seventeenth century, manufacturers of the flute made two significant changes in the construction of the instrument: the flute came to be bored with a conical bore which tapered toward the lower extremity, and its tone holes came to be bored smaller than on Mersenne's flute.⁸² Since the baroque flute had at most only one or two keys, the tone holes had to be bored no further apart than the performer's fingers could reach comfortably.⁸³ Both the tapering conical bore and the smaller tone holes adopted on the baroque flute produced a flattening effect on the pitches of the notes, and therefore allowed the tone holes to be bored closer together than would be possible on a cylindrical instrument.⁸⁴

⁸² Richard Shepherd Rockstro, *A Treatise on the Construction, the History and the Practice of the Flute: Including a Sketch of the Elements of Acoustics and Critical Notices of 60 Celebrated Flute Players* [1889], 3rd edition (London: Musica Rara, 1967), 222.

⁸³ Theobald Boehm, *The Flute and Flute Playing in Acoustical, Technical and Artistic Aspects* [1871], translated by Dayton C. Miller (1922; Reprint, New York: Dover Publications, 1964), 3.

⁸⁴ Nancy Toff, *The Development of the Modern Flute* (1979; re-edition, Urbana and Chicago: University of Illinois Press, 1985), 17. Toff credits Hotteterre with tapering the bore of the flute.

The reader is directed to Taffanel and Fleury, Fig. 616 (p. 1489) for a diagram of the cylindrical-bore flute, and Fig. 617 (p. 1492) for a diagram of the conical-bore flute. Michael Seyfrit, *Musical Instruments in the Dayton C. Miller Collection at the Library of Congress: A Catalogue*

By the early eighteenth century, flutists and manufacturers had bored an extra hole covered by a closed-key (previously mentioned) in the simple six-holed flute.⁸⁵ This new key was operated by the fifth finger of the right hand and was used to produce D[#] in the first and second octaves.⁸⁶ Quantz added a second key to the flute in 1726 to produce E^b.⁸⁷ Like the D[#] key, the E^b key was taken by

(Washington, D.C.: Library of Congress, 1982) contains x-ray photographs clearly showing the tapering interior bore of flutes constructed by Johann Joachim Quantz and E.J. Albert (p. xx-xxi).

⁸⁵ Johann Joachim Quantz, *On Playing the Flute*, translated by Edward R. Reilly from *Versuch einer Anweisung de Flöte traversiere zu spielen...*, 1752 (New York: Schirmer, 1966), 30. Quantz is unable to fix a definite date, but hypothesizes that the new key originated in France not more than a century earlier. He notes that the first flutist to perform on the improved flute was Philibert, followed by la Barre, Hotteterre, Buffardin, and Blavet. Some scholars have credited Hotteterre with the D[#] key. The new key is unequivocally present by the early eighteenth century. See Jaques Hotteterre, *dit le Romain, Principes de la flûte traversiere, ou flûte d'Allemagne; de la flûte à bec, ou flûte douce; et du haut-bois, divisez par traitez* (Amsterdam: Estienne Roger, [1707]), 12.

⁸⁶ The fundamental scale of the early transverse flute is D major. With all six holes stopped, the flute produces D, one tone higher than "middle C." By opening each of the six holes in succession from the bottom, the flute produces E, F[#], G, A, B and C[#]. Any notes foreign to D major are produced by means of complicated cross-fingerings, often resulting in poorly tuned and veiled notes. All chromatic tones were possible with this method except for D[#], which required the difficult task of opening only half of a hole. The second octave is produced by overblowing the first. Any third octave notes are produced by modifying the fingerings of the first and second octave.

⁸⁷ Quantz, 31. D[#] and E^b were, of course, two distinct notes in the untempered tuning system of the eighteenth century.

the fifth finger of the right hand. This type of flute is known alternately as the one-keyed flute (despite the possible presence of two keys), German flute, or baroque flute.

Builders of the baroque flute also implemented a variety of devices to assist in accommodating the instrument to the widely varying tuning pitches (A390-A455) used in Europe during the eighteenth century. The most common device was a movable stopper fitted into the top of the head joint which could shorten or lengthen the overall length of the flute. Also, the pitch of some of the notes on the instrument could be affected by pulling out the joints between the four pieces of the flute. Since this act could affect some pitches more than others, some manufacturers began to construct flutes with a number of interchangeable middle joints of varying lengths, which could raise or lower all of the pitches of the flute more uniformly.⁸⁸

As the flute began to take on more prominence in the orchestras of the late eighteenth century, it became painfully obvious that the instrument was in need of some device to improve its intonation in general, and to correct the veiled quality of the notes foreign to D major in particular. The next logical step was the addition of more

⁸⁸ Ibid., 31-32.

closed keys covering holes bored at the chromatically "correct" placement for F, G[#], B^b, and C.

Closed keys covering tone holes for F, G[#], and B^b were fitted to the flute during the last quarter of the eighteenth century. The first patent taken out for these keys was one by Englishman Richard Potter (1726-1806) in 1785. Evidence in Andrew Ashe's *Dictionary of Musicians* (1827) suggests that the keys were manufactured by Potter as early as 1774.⁸⁹ This flute came to be known under the rather obvious name of the four-keyed flute.

Shortly following the adoption of these three keys, the Italian flutist Florio (d. 1795) attempted to reintroduce two earlier open keys designed to produce a low C[#] and C ("middle" C).⁹⁰ These two open keys were set so as to cover two holes bored below the D[#] hole into an extension of the tube. Flutists again rekindled the argument that these keys were detrimental to the characteristic sound of the flute.⁹¹ However, despite objections of numerous

⁸⁹ Rockstro, 244. The names of Joseph Tacet (n.d.) of England and Peter Nicholas Petersen (1761-1830) of Bremen have appeared at various times in connection with this invention. However, Rockstro convincingly argues against both men as the inventor of the new keys (p. 243).

⁹⁰ These two keys had first been employed circa 1725 by an unknown flutist, but were considered to damage the sound of the flute, and as a result were rejected by most flutists (Quantz, 34).

⁹¹ Taffanel and Fleury, 1493.

flutists, many players adopted the flute fitted with all of the supplementary keys just mentioned. This flute was known by the uninspired name of six-keyed flute.

A tone hole for C in the higher octave was finally introduced about 1780. At first the hole was covered by an open key which was held shut constantly by the left thumb. This key is attributed to Peter Nicholas Petersen (N.D.). Later the hole was fitted with a closed key which was only opened as necessary by the left thumb. The latter key has been attributed to J.J.H. Ribcock (fl. 1782).⁹² Flutes were commonly constructed with the four new keys for F, G[#], B^b, and C in the second octave, plus the older D[#] key, but not with the low C[#] and C keys. Such a flute was known as the five-keyed flute.⁹³

The final major alteration to the key mechanisms of the flute was the inclusion of the so-called long-F key. The recently invented F key (short-F) offered great improvement to the intonation and tone colour of the F, but the key created a technical problem in that the right middle finger was forced to slide between the F key and the adjacent hole in passages involving consecutive appearances

⁹² Rockstro, 245. Rockstro notes that the attribution of the key to Petersen is made by Fétis. Rockstro further notes that the true origin of the key is in doubt.

⁹³ The reader is directed to Taffanel and Fleury, Fig. 619 (p. 1494) for a diagram of this instrument.

of F with D and E^b. The flutist Johann George Tromlitz (1730-1805) invented the long F key in 1786 to eliminate the majority of slides necessitated by passages involving F with the other problem notes.⁹⁴ This closed key is taken by the left fifth finger, and covers a duplicate tone hole for F. While it was possible for flutes at this time to carry any combination of the above-mentioned keys, the most common flute was one which was fitted with all of the keys noted thus far. This flute came to be known as the eight-keyed flute, "Tulou Flute," or the "Meyer-system," as it was known later in the nineteenth century.⁹⁵

Throughout the whole of the nineteenth century, many other alterations, keys, and devices were applied to this flute in the name of "improvement." However, few of the later improvements had more than regional impact on flute construction and use.

The eight-keyed flute did not meet with the approval of all flutists. Some flutists felt that "improvement" had gone too far; some, not far enough.

⁹⁴ Taffanel and Fleury, 1494.

⁹⁵ Peter H. Bloom has noted that in common usage the name eight-key flute can be "...inclusive of all standard 'simple system' conical traversi from those with six keys to those...with an aggregation of additional levers numbering fourteen or more" ("Observations on the Advantageous Use of the 'Eight-keyed' Flute," *The Flutist's Quarterly*, vol. 11, no. 1 (Fall 1985), 19).

The reader is directed to Taffanel and Fleury, Fig. 622 (p. 1495) for a diagram and tablature of this instrument.

During the late eighteenth and early nineteenth centuries in France, many virtuosi preferred either the unaltered baroque flute, or a flute with a minimum number of keys for their own use, even though they may have advocated a more modern instrument for use by their students.⁹⁶ The strong regional differences which existed, particularly regarding the formation of the taper and bore, pitted French and German flutists against English flutists.⁹⁷ The English flutists Charles Nicholson (1795-1837) and his father, also Charles (n.d.), experimented with enlarging the embouchure and tone holes (a return to the early principles of Mersenne) in a

⁹⁶ In the late years of the eighteenth century, it is known that Devienne preferred the baroque flute, but acknowledged the usefulness of the new keys and so advocated their use by his students (Taffanel and Fleury, 1493). Similarly in the middle part of the nineteenth century, Tulou himself played a five-key flute, but advocated the use of a twelve-key flute for his students (Lee Ian Lattimore, "Les Morceaux de Concours de Flûte du Conservatoire de Paris: A Structural Comparison of Selected Works of Jean-Louis Tulou and Joseph-Henri Altès...", DMA Dissertation: North Texas State University, 1987, 5 [henceforth cited as "Les Morceaux de Concours"]). To clarify a potential point of confusion, neither the five-key flute nor the twelve-key flute was the flute known as the "Tulou Flute." The name "Tulou Flute" is an alternate name given to the eight-keyed flute (Taffanel and Fleury, 1493) discussed above.

⁹⁷ Amy Sue Hamilton, "The Relationship of Flute Construction to the Symphonic Role of the Flute and Orchestral Performance Practice in the Nineteenth Century" (D.M.A. Dissertation, Northwestern University, 1984), 63, 253. Hamilton notes that the French bore was quite small, allowing the upper octave to speak freely, but causing the lower octave to be stuffy. The English bore was in general quite large, resulting in a harsh, brassy sound.

successful attempt at creating a larger, stronger sound for the flute.⁹⁸

Despite the many alterations, the flute was rapidly losing ground in its fight to remain an adequate instrument in view of the increasing technical and orchestral demands made of it. The obstacles which the eight-keyed flute presented to the performer are boldly outlined by Victor Coche in the first nine pages of his *Examen critique*, including nearly impossible passages in the orchestral literature. The twentieth-century author Nancy Toff sums up these obstacles, concluding:

The wooden German flute clearly could not fulfill the requirements of the nineteenth century. Its intonation was uncertain; its tone, though mellow and even beautiful in chamber music, was relatively weak, better designed for tonal blending than for a solo role within the orchestra; and its dynamic capacity was not sufficient to compete with the improved brass section of the Romantic orchestra.⁹⁹

A crisis of epic proportions loomed on the horizon during the early decades of the nineteenth century. Jacques Barzun had noted the following:

⁹⁸ Rockstro, 279, 288. The improvement of the sound and power of Nicholson's flute was favorably noted by Carl Maria von Weber. However, many flutists found a Nicholson-style flute impossible to play because of the difficulties in intonation and in covering the large holes in fast passages requiring forked fingerings. Nicholson's "improvements" were not appreciated on the continent.

⁹⁹ Toff, 45-46.

With few exceptions, the instruments we know were invented or refashioned in the early part of the eighteenth century, were gradually introduced in the latter part, and were perfected in manufacture and use during the first half of the nineteenth [century].¹⁰⁰

Following this pattern of development, the flute was out-paced in its development by the other instruments by nearly one-half century. The flute in the early nineteenth century, even in its improved form, was clearly in danger of becoming a dinosaur by virtue of its limited capacities. The stage was set for a total reconstruction of the transverse flute.

Boehm's Work¹⁰¹

In 1831 the German flutist and goldsmith Theobald Boehm was on tour in England where he heard the celebrated Charles Nicholson play.¹⁰² Boehm was amazed by Nicholson's voluminous sound and immediately determined to develop a flute which could easily replicate it. The primary obstacle to the construction of such a flute was that the tone holes would have to be bored extra large. The average flutist

¹⁰⁰ Barzun, 77.

¹⁰¹ Diagrams illustrating Boehm's work on his various model flutes are most accessible to the reader through Boehm's monograph, *The Flute and Flute Playing* [1922]. The reader is directed to that source where diagrams of the various models of Boehm flutes or the mechanisms employed on such instruments may be helpful in illuminating this text.

¹⁰² Toff, 46.

would have difficulty in covering the tone holes and would find it difficult to play in tune. Boehm's first task was to place the tone holes in their acoustically correct position and then to contrive some sort of key work which would allow the flutist to open and close the large tone holes easily.¹⁰³ Boehm produced his first reconstructed transverse flute, "The Patent Flute," at a London workshop in 1831.¹⁰⁴

Boehm's 1831 flute did not differ substantially from the eight-keyed flute.¹⁰⁵ On his 1831 flute, Boehm repositioned the A-hole to its acoustically correct position, in this case further down the flute, and fitted the hole with an open-standing key to close the hole. In this way Boehm retained the old fingerings for the left-hand notes. Similarly, Boehm repositioned the F[#] hole to its acoustically correct position and fitted it with an open key attached to a double-hinged ring key which was set over the F hole. This ingenious mechanism allowed the F[#] hole to be closed by means of correspondence by the right fourth finger while still allowing the F hole to stand open. In addition, activation of the ring key around the F hole would also

¹⁰³ Ibid., 49.

¹⁰⁴ Ibid., 53. Boehm's 1831 flute is known as the "Patent Flute," despite the fact that it was never actually patented.

¹⁰⁵ Ibid., 53-55.

close the open key covering the F[#] hole. Through this rather complicated, but successful device, Boehm eliminated the need for the fingers of the right hand to slide between keys in executing passages involving F natural, a major defect of the eight-keyed flute. However, Boehm also forced a significant change in the fingering system of the right hand, and in doing so, moved the flute away from the scale of D major as its fundamental scale.

Boehm's work on his 1831 flute was not totally original; his design incorporated a number of devices invented earlier by himself and fellow flute makers, particularly in the construction of the keywork. In 1808, a flutist by the last name of Nolan (n.d.) had invented a ring-key mechanism which allowed one finger to open one key and close another simultaneously.¹⁰⁶ In 1824, one Dr. Pottgeiser (n.d.) had invented a key mechanism known as the "ring and crescent." This "ring and crescent" was the direct forerunner of Boehm's open F[#] key activated by an adjoining ring key.¹⁰⁷ Another early invention which made Boehm's 1831 keywork possible was the French invention of swinging the keys on small pillars of silver which were fastened into the wood of the flute by small screws. Previously, keys were usually swung on a pin fitted into two

¹⁰⁶ Taffanel and Fleury, 1495. See also, Hamilton, 226.

¹⁰⁷ Rockstro, 293.

knobs of wood carved from the body of the flute.¹⁰⁸ The silver pillar supports were first used by the Parisian flute manufacturer Claude Laurent (fl. 1806-1844) in his construction of glass flutes during the early decades of the nineteenth century.¹⁰⁹ Boehm himself had adopted the pillar supports in his construction of eight-keyed flutes during the late 1820s,¹¹⁰ because he noted that the silver supports allowed less play in the key and therefore more accuracy of key motion than did the wood supports.¹¹¹

A much publicized controversy known as the Boehm-Gordon Controversy has suggested that Boehm borrowed the idea for his acoustically correct tone hole placement from a contemporary inventor by the name of Capt. Gordon of the Swiss Guard (n.d.). Comparison of Boehm's flute and Gordon's flute (1831) shows a number of similarities in tone hole placement and positioning of keys over the tone

¹⁰⁸ Examples of these contrasting systems of supporting the key hinges may be found in Seyfrit's catalogue of the Dayton C. Miller Collection (cited earlier). The most direct comparison may be made by examining Plates 166, the wooden-knob support, and 167, the silver-pillar support (p. 168-169).

¹⁰⁹ Dayton C. Miller, "Flutes of Glass," *The Flutist Magazine*, vol. 6 (July, 1925), 153.

¹¹⁰ Rockstro, 322. Boehm had established his own shop for the manufacture of flutes in 1828 (Boehm, 7).

¹¹¹ Hamilton, 223.

holes.¹¹² It is also known that Gordon had sought out Boehm's advice and assistance while Gordon was constructing his first flute.¹¹³ The controversy surrounding the true origin of the modern flute was fought in the musical circles of England and France through the end of the nineteenth century, with a number of prominent flutists becoming overly involved, especially Victor Coche, Assistant Professor of Flute at the Paris Conservatoire. It is not the purpose of this paper to enter into the arguments of the Boehm-Gordon Controversy.¹¹⁴ However, it must be said that even if Capt. Gordon had given birth to the ideas behind the modern flute, it still required a man with the experience and expertise which Boehm possessed to perfect, manufacture, and market the new instrument with sufficient prowess to bring it into the public domain.

Still, Boehm was not content with his 1831 instrument. Writing much later, Boehm expressed his thoughts on his 1831 flute, saying:

¹¹² For easy comparison of these instruments the reader is directed to Toff, Figs. 29 to 32, Gordon's flutes of 1831 and 1833 (p. 50-51), and Figs. 33 and 34, Boehm's 1831 flute (p. 54).

¹¹³ Rockstro, 319.

¹¹⁴ Any reader wishing to explore further the arguments surrounding the Boehm-Gordon Controversy is advised to consult Rockstro, also Christopher Welch (*History of the Boehm Flute*, 3rd edition [N.p.: N.p., 1896]) for additional primary source documentation of the controversy.

Notwithstanding all my success as an artist, the defects of my instrument remained perceptible, and finally I decided, in 1832, to construct my ring-keyed flute, upon which I played in London and Paris in the following year, where its advantages were at once recognized by the greatest artists and by l'Académie des sciences.¹¹⁵

The fundamental differences between Boehm's 1831 and 1832 flutes are primarily those involving tone hole placement and size, and the ring-key system.¹¹⁶

For his 1832 flute, Boehm calculated the placement of tone holes by a combination of theoretical acoustics and empirical data.¹¹⁷ Boehm used a series of individual tubes cut to the correct length to produce each chromatic tone. He then transferred the measurements of the individual tubes to a single tube to give the correct placement of the tone holes. However, once the single tube was constructed, Boehm found that the pitches were flat because the tone holes were not bored as large as the interior bore of the flute itself, and because the holes, being round, did not vent the tube at

¹¹⁵ Boehm, 8.

¹¹⁶ Toff, 55.

¹¹⁷ Ibid. A number of authors give clear descriptions of Boehm's process of determining the dimensions and other specifics of his flutes, notably Boehm, Taffanel/Fleury, and Toff. However, Boehm himself wrote the description of his process without giving any dates. The Taffanel/Fleury article, clearly drawn from Boehm's writings, is of little help in dating events. The section of Toff's monograph dealing with Boehm's process is supported by evidence derived from her own observations of a number of Boehm's flutes. Therefore, where contradictory evidence may be present, Toff's dates will be used.

the same precise perpendicular to the interior bore as did the individual tubes. Boehm thus moved the tone holes closer to the embouchure hole to counteract the flattening effect. Once this adjustment was accomplished, Boehm found that the first two octaves were precisely in tune, but the third octave was not. He then compromised once again by moving certain tone holes closer to the embouchure in order to allow proper venting of the third octave notes.

Boehm's open-key system¹¹⁸ was perhaps the most significant improvement brought about on his 1832 flute. Boehm considered that in order for a tone hole to be properly vented, it was necessary for all of the tone holes below the vented tone hole to stand open so as not to veil the quality of the note. In order to accomplish this, Boehm set about devising a system of ring-keys which would stand open when not in use (this differs significantly from the key system of the old flutes). He achieved such a system on his 1832 flute.¹¹⁹

¹¹⁸ Ibid., 56-59.

¹¹⁹ Toff, Taffanel and Fleury, and Boehm all describe this system in detail; therefore, a complete description need not be repeated here. However, it should be noted that Boehm's key system did incorporate one closed key, that for the D[#] taken by the fifth finger of the right hand. This key was not really in violation of Boehm's open-key theory because this key is held open constantly. The constant pressure of the little finger on that key further serves to hold the instrument steady. This fact was perhaps an overriding consideration for Boehm in the development of his key system.

Boehm constructed his 1832 flutes from grenadilla wood, a South American hardwood, also known as cocus wood. Boehm chose this material over boxwood and ebony, the woods usually used in wind instrument manufacture, because grenadilla is less susceptible to expansion and contraction because of atmospheric conditions, and therefore provides more consistency and stability for the action of the key systems.¹²⁰

Boehm performed on his new instrument at Munich in 1832 and 1833, at Paris in 1833, and at London in 1833 and 1834.¹²¹ He received the warmest reception for his innovations in Paris. The 1832 Boehm-flute was known in Paris from 1833, but the first known purchase of the instrument by a Parisian flutist was by Pierre Camus (b. 1796) in 1837.¹²² Boehm had hoped that Camus would assist in introducing the instrument to Paris. Camus attempted, but failed to reach a manufacturing agreement with Auguste Buffet (d. 1885), but subsequently successfully arranged for Clair Godefroy (fl. 1814-1867) to manufacture Boehm's flute.¹²³

¹²⁰ Toff, 60.

¹²¹ Ibid., 60-61.

¹²² Welch, 49.

¹²³ Ibid., 49-50.

While in Paris during the year 1837, Boehm showed his flute to the great acoustician Felix Savart (1791-1841). Savart was immediately taken by Boehm's flute, and submitted it to the Institut de France for judgement by a joint commission of the Académie des sciences and the Académie des beaux-arts.¹²⁴ Judgement was unfortunately delayed.

In the same year, Victor Coche (1806-1881) adopted Boehm's instrument. Coche, self-professed "to be actuated by a desire to watch over the rights, and to study the interest of others,"¹²⁵ informed Boehm that Camus and Godefroy had stolen the inventor's instrument. Despite Boehm's protest that Camus, indeed, had not taken the rights to his instrument illegally, Coche decided to set things right and began to market a modified version of Boehm's instrument through Buffet.¹²⁶

The modifications made by Buffet and Coche were significant. Early on, Buffet, objecting to Boehm's placement of axles on both sides of the tone hole, devised a key system of sleeves and clutches which retained Boehm's

¹²⁴ Ibid., 50-51. The act of submitting new inventions to the Institut de France for approval seems to have been common practice during the post-Revolution years.

¹²⁵ Ibid., 52.

¹²⁶ Ibid., 54. A diagram of Coche's modified Boehm-flute [1838] is given as Fig. 623 in Taffanel and Fleury (p. 1496). For comparison the reader may refer to Fig. 626 of the same work to access a diagram of Boehm's 1832 flute (p. 1498).

fingering system, but moved all of the axles to one side of the tone holes. He also replaced Boehm's flat springs with needle springs which provided more assured action of the keys. Coche further modified the flute by reinstating the old closed-G[#] key, also by adding a mechanism which supposedly eased the cross-fingering to B^b, and by adding a second trill key for the C[#] to D[#] trill.¹²⁷

Meanwhile, for nearly a year the Institut de France had made no efforts to prepare a report on Camus' flute. Declaring that the public would have to decide between the merits of his flute and Camus' flute, Coche defiantly prepared a report on his flute which relieved the Institut of doing any of its own examination on either of the two flutes presented, and upon which the Institut had to do nothing but confer its support.¹²⁸ Camus wrote a number of letters in protest, but Coche's report was quickly accepted.¹²⁹

At about the same time, the young flutist Louis Dorus (1812-1896) had likewise adopted the instrument.¹³⁰ Dorus himself made one major but ingenious modification to Boehm's flute: he contrived a mechanism for the G[#] key

¹²⁷ Toff, 62-64.

¹²⁸ Welch, 62.

¹²⁹ Ibid., 63.

¹³⁰ Ibid., 51.

which preserved the old fingering for the note without compromising Boehm's acoustical principles.¹³¹ The mechanism became known as the "Dorus G#." Despite the fact that the device was brilliantly conceived, it was rendered nearly impractical because the double springs made its action too heavy for the fifth finger of the left hand to operate quickly.¹³² Coche's closed G# key - despite numerous acoustical problems - soon eclipsed Dorus's invention.

By the end of the 1830s, the principal flutist of the Opéra and of the Opéra-italienne, as well as the Assistant Professor of Flute at the Conservatoire were performing to great acclaim on modified versions of Boehm's flute. Still, the Boehm-flute did not become the flute of choice in Paris because Jean-Louis Tulou (1786-1875), the principal Professor of Flute at the Conservatoire, refused to acknowledge its merits. The Boehm-flute would not be fully accepted in Paris until after Dorus took over the flute class at the Conservatoire in 1860. A number of prominent English flutists took up the Boehm-flute in the late 1830s and early 1840s. German flutists would not accept Boehm's instrument. In 1841 Boehm arranged for his

¹³¹ This mechanism is illustrated in Taffanel and Fleury, Fig. 627 (p. 1499).

¹³² Rockstro, 359-360.

flute to be manufactured in London by Rudall & Rose and in Paris by Clair Godefroy.¹³³

Despite the reception of his 1832 flute, Boehm was convinced that the perfect design for the flute had not yet been achieved. Boehm explained the fundamental problem with the 1832 flute, saying:

As regards the sounding and the quality of the higher tones, there was yet much to be desired, but further improvements could be secured only by a complete change in the bore of the flute tube.¹³⁴

After working with the acoustician Dr. Carl von Schafhäütl (N.D.) from 1846 to 1847, Boehm began to experiment on the bore of the flute in order to find the dimensions which best suited his goal of allowing the largest amount of air inside the flute that was practical.¹³⁵ Boehm began with a dilemma which he had often pondered, namely "why the flute alone should be played at the wide end, while all other wind instruments of conical proportions are played at the narrower end...."¹³⁶ By experimenting with brass tubes of varying dimensions, Boehm finally determined that the bore

¹³³ Toff, 65.

¹³⁴ Boehm, 8.

¹³⁵ Toff, 67.

¹³⁶ Boehm, 10.

of the flute should be cylindrical, except for the head joint which he fashioned in a quasi-parabolic form.¹³⁷

Pursuing his desire to establish dimensions which allowed the greatest possible amount of air into the flute, Boehm set to work on the shape of the embouchure hole. The embouchure hole of flutes to date had been circular or elliptical in shape. His final decision was to enlarge the embouchure hole and shape it as a rectangle with rounded corners, as this shape provided a broad wall for the flutist to blow against.¹³⁸

Boehm next re-addressed the position and size of the tone holes. He first constructed an experimental brass tube which consisted of small detachable tubes and tuning slides so that he could correctly calculate the position of the holes.¹³⁹ He later built a tube with movable holes so that he could confirm his figures.¹⁴⁰ In calculating the

¹³⁷ Ibid., 15-16. Boehm's final dimensions varied from his original theory, in part to assist in the production of the third octave notes (p. 19) but also to compensate for the fact that the cork stopper at the top of the head could not be moved at will for each note, and therefore was required to be set at a compromise position (p. 20). The parabolic head joint is shown with its dimensions as Fig. 8 (p. 18).

¹³⁸ Ibid., 21-24.

¹³⁹ Ibid., 25.

¹⁴⁰ Ibid., 30. Boehm relied on carefully calculated figures to determine the best theoretical placement of the the tone holes. Once they had been determined, Boehm used these figures to produce a mathematic/graphic representation of the dimensions of a tube. This representation is known as the *schema*, which he used to calculate changes in the

position of the tone holes, Boehm began with the idea of boring the holes as large as possible given the dimensions and properties of the tube, although gradually increasing their diameter toward the bottom of the flute. He finally decided, out of practicality, that most of the tone holes should be the same diameter and be placed as close as possible to their acoustically correct position, while still permitting easy production of the third octave.¹⁴¹ As a further amelioration of the third octave, Boehm decided to adjust the position of the three tone holes closest to the embouchure, and to bore them quite small in relation to the others so that these holes could be used as vent holes for certain third octave notes.¹⁴² Boehm fitted the large tone holes with large open-standing plateau keys.¹⁴³

Boehm's final major development of 1847 was his decision that silver was a superior material for the

position of tone holes as the fundamental tuning of "A" changed. Boehm's theoretical process and *schema* are thoroughly presented in his treatise (30-52).

¹⁴¹ Ibid., 26-27. Boehm noted that the diameter of the remaining large tone holes would be 13.5 mm on metal flutes and 13 mm on wood flutes, the smaller holes of the wood flute being necessitated by the difficulty of boring large holes into a wood tube. In actual practice the size of the holes vary on Boehm's first model flute and from manufacturer to manufacturer. A number of these variations are explored in the editor's notes (27-28).

¹⁴² Ibid., 30.

¹⁴³ Ibid., 12.

manufacture of flutes. In an editorial note to Boehm's treatise, Dayton C. Miller states that:

Undoubtedly the material of which a wind instrument is made sometimes affects the tone quality, but the manner in which this influence is exerted has not been explained....¹⁴⁴

Boehm justified his choice of silver primarily because a silver flute is lighter in weight and drawn thinner than a wood flute. These properties of the silver tube would allow the sounding body of the instrument to be set into vibratory motion more quickly than on a wood tube, which would theoretically result in easier production of the flute tone, and less effort in producing a strong tone.¹⁴⁵ Boehm further noted:

The silver flute is preferable for playing in very large rooms because of its great ability for tone modulation, and for the unsurpassed brilliancy and sonorousness of its tone. But on account of its unusually easy tone production, very often it is overblown, causing the tone to become hard and

¹⁴⁴ Ibid., 53. Research conducted by Mahillon and reported by Constant Pierre (*La Fracture Instrumentale à l'exposition universelle de 1889; Notes d'un musicien sur les instruments à nouveaux et perfectionnés* [Paris: Librairie de l'art Indépendant, 1890], 163-173 [henceforth cited as *La Fracture instrumentale*]) concerning the substitution of metal for wood in the manufacture of wind instruments suggests that there was no basis for the prevailing theory that the sound of a wind instrument is affected by the material used in its manufacture; however, even if this study in acoustics is still valid in the late twentieth century, there is little chance of convincing flutists of this fact, as most performers and manufacturers feel themselves to be keenly "aware" of the effect of various construction materials on the sound of flutes.

¹⁴⁵ Ibid.

shrill; hence its advantages are fully realized only through a very good embouchure and diligent tone-practice. For this reason wooden flutes on my system are also made, which are better adapted to the embouchure of most flute players; and the wood flutes possess a full and pleasant quality of tone, which is valued especially in Germany.¹⁴⁶

Throughout his career Boehm made flutes from coin silver, as well as grenadilla (or cocus) wood, sometimes employing a combination of both materials for the various parts of the flute.

Boehm's 1847 cylindrical flute was adopted by numerous flutists throughout Europe, but not without a number of modifications. The manufacturers Rudall & Rose and Godefroy adopted the Buffet clutch-system which moved all of the axles to one side of the tone holes.¹⁴⁷ In 1849, the Italian flutist Briccialdi devised the B^b thumb key, which in most fingering combinations effectively eliminated the cross fingering for B^b which Boehm's system necessitated.¹⁴⁸ In France, Louis Lot (Godefroy's son-in-law, who inherited the patent rights for manufacture of the Boehm-flute), on the advice of Dorus, perforated the five plateau keys operated directly by the fingers.¹⁴⁹ Despite Boehm's objections, this was done to provide the performer

¹⁴⁶ Ibid., 54-55.

¹⁴⁷ Rockstro, 375.

¹⁴⁸ Ibid., 377.

¹⁴⁹ Taffanel and Fleury, 1503.

with more resources for lightly adjusting any remaining defects in the intonation of the instrument.¹⁵⁰ A mechanism for the G[#] key, which was essentially a compromise between that of Dorus and that of Coche, providing a duplicate G[#] hole covered by a closed key for G[#], was introduced by an unknown inventor. Late in the nineteenth century, the manufacturer Djalma Julliot (fl. 1889-1903) devised what is now known as the split-E mechanism, which improves the response of the third octave E, a note which was rendered especially difficult by the adoption of the closed G[#] key.¹⁵¹

A number of flutists, particularly in England, attempted to arrive at models of the flute which brought together the sound and intonation benefits of the Boehm-flute while maintaining the fingering system of the eight-keyed flute. Redesigned flutes were patented by R. Carte, Cornelius Ward, John Clinton, and Abel Siccama, to name just a few. These redesigned flutes had small circles of followers. However the multiplicity of models of the flute in England simply confused musicians and delayed the adoption of Boehm's flute until the late nineteenth century.

¹⁵⁰ Toff, 72. Toff credits this as a return to the perforated keys of Nolan and Pottgeiser.

¹⁵¹ Taffanel and Fleury, 1506-1507.

The Boehm-flute had won a gold medal at the 1855 General German Industrial Exhibition at Munich. Nevertheless, Boehm's contemporaries there were reluctant to adopt the instrument, primarily because its use was discouraged by conductors.¹⁵² Even as late as the 1920s many German flutists were still performing on a wooden, conical bore flute, often on the eight-key system; however, Boehm's keywork with open G[#] had been accepted in many larger cities.¹⁵³

Other countries adopted the Boehm-flute at various times. Speaking from the perspective of the early twentieth century, Fleury notes that flutists in Russia, Austria, Hungary, and Switzerland were still using primarily the eight-keyed flute, that Italians were using wood flutes (presumably on Boehm's system), and that there was no standard instrument used in North America.¹⁵⁴

France alone enthusiastically accepted first the 1832 (often with the 1838 Coche/Buffet modifications) and then 1847 silver Boehm-flute. Following the flurry of publicity devoted to the Boehm-flute as a result of the

¹⁵² Toff, 76.

¹⁵³ Taffanel and Fleury, 1506.

¹⁵⁴ Taffanel and Fleury, 1506. Elaborating on Fleury's point, Toff notes that the silver Boehm-flute did very well in North America and was manufactured in the United States as early as 1847 (p. 76).

enterprises sponsored by Camus, Coche, and Dorus, the new instrument steadily continued to conquer Paris. Welch relates:

By this time (1837) a conversion, which ultimately proved a tower of strength to the Boehm cause, had been made in the person of a young genius, destined to rise to the position of an artist of the first rank. This was Dorus, whose magnificent playing established the supremacy of the Boehm flute in France; it being more than sufficient to form a counterpoise to the opposition of Tulou, who had brought the whole weight of his great influence to bear against the new system.¹⁵⁵

Still, the transition to the Boehm-flute in France was not without some difficulty. Hamilton highlights the major stumbling block for flutists trained on the old flute in adopting the Boehm-flute:

...[W]ind players resisted changes in fingering systems for various reasons. Aside from the obvious inconvenience in learning a new fingering system, the very suggestion of the need for a new fingering system implied a deficiency in performance involving the old system. Therefore, to a musician who spent his entire life learning to conceal the defects of the old system, the suggestion that a change was needed implied that the musician was not coping with these deficiencies. Many musicians were not eager to admit the advantages inherent in an improved instrument.

The Boehm-flute still had a formidable adversary in the person of Jean-Louis Tulou, Professor of the first flute class at the Conservatoire from 1829 to 1860. The Boehm-flute was officially adopted by the Conservatoire in

¹⁵⁵ Welch, 51.

1838;¹⁵⁶ however, Victor Coche quite possibly lost his position as Assistant Professor at the Conservatoire in 1841 because of his devotion to the Boehm-flute. Tulou submitted eight-keyed flutes of his own making to the musical instrument division of numerous universal exhibitions (which were held frequently throughout Europe to highlight the latest in culture and technology), winning bronze medals in 1833 through 1839, silver medals in 1844 to 1849, honourable mention in 1851, and first class honors in 1855.¹⁵⁷

However, the Boehm-flute was holding its own both in Paris and at the universal exhibitions. When the Boehm-flute won the gold medal at the Great Exhibition at London in 1851, Berlioz, himself a flutist, sat on the judging committee and was so taken by Boehm's invention that he declared that the eight-keyed flute was "only fit to be played at a fair."¹⁵⁸ The Boehm-flute took gold medals at both Munich and Paris in 1855.¹⁵⁹ Victor Coche submitted a flute of his own making which won a silver medal at the 1867 Paris Exposition.¹⁶⁰ By the 1878 International Exposition

¹⁵⁶ Toff, 76.

¹⁵⁷ Constant Pierre and Victor Désiré, *Les factures d'instruments de musique les luthiers et la facture instrumentale précis historique* (Paris: Ed. Sagot, 1893), 298.

¹⁵⁸ Barzun, vol. 2, 33.

¹⁵⁹ Toff, 76.

¹⁶⁰ Barzun, vol. 2, 33.

in Paris, French-made Boehm-flutes were clearly outclassing the old-style conical flutes.¹⁶¹

Clearly, by the end of the 1860s the Boehm-flute had taken its place as the preferred instrument of Parisian flutists. Dorus became principal Professor of the flute class at the Conservatoire in 1860; his advocacy of the cylindrical Boehm-flute virtually guaranteed the new flute's acceptance throughout France.¹⁶² Boehm himself was prompted to credit Dorus for the acceptance of his instrument by the Parisian flute community. He wrote to W. S. Broadwood in the spring of 1866, saying:

Dorus, who played always on wood, plays since 1855, silver flutes; and as he does it, his colleagues and pupils do the same...¹⁶³

Method books for the Boehm-flute were issued by Parisian authors and publishers with increasing frequency after 1838. The last known method book published for eight-keyed flute in Paris was that by Tulou, the *Petite méthode élémentaire*

¹⁶¹ Gustave Chouquet, *Rapport sur les instruments de musique et les éditions musicale. Exposition universelle internationale de 1878 à Paris, Group II-Class 13* (Paris: Imprimerie Nationale, 1880), 54-56. Five cylindrical flutes won gold or silver medals; two conical flutes won a bronze medal and an honorable mention.

¹⁶² Hamilton, 392.

¹⁶³ Reprinted from Rudall and Carte, *An Essay on the Construction of Flutes* (London) in *The Flutist: A Monthly Magazine Devoted to the Interests of the Flute and Flute Players*, ed. and pub. by Emil Medicus, vol. 9 (1928), 183.

issued in 1875. The last of the great supporters of the eight-keyed flute died in the 1860s and 1870s: Eugene Walkiers and Jules Demersseman in 1866, Louis Drouët in 1873, and finally Jean-Louis Tulou in 1875. Practitioners of the cylindrical Boehm-flute held the most prominent positions with the great orchestras of Paris from 1845 onward: Louis Dorus and Henri Altès throughout the 1840s and 1850s, Henry Altès and Paul Taffanel from the 1860s. Altès has said:

The improvements attempted during the last thirty years for the reconstruction of the flute have finally resulted in the *Cylindrical Flute, BOEHM system*.

The adoption of this instrument by all the flautists [sic] of Europe seems to have arrested for a long time this march of progress sought after by the makers. Therefore it is now possible to lay down a basis of instruction indicating the resources which constitute the superiority of this new system.¹⁶⁴

In point of fact, after Boehm's flute of 1847, the evolution of the flute, which began most actively in the late eighteenth century, did not stop but slowed to an occasional modification here and there. The modern orchestral flute played throughout the world today is essentially the same instrument adopted by France in the late 1840s, with only slight alterations to compensate for

¹⁶⁴ Henry Altès, *Complete Method for the Flute* (Paris: Schoenaers-Millereau, [1906]), introduction.

changing international pitch.¹⁶⁵ No significant remodelling of the Boehm-system flute has been adopted more than locally in almost 150 years.

The advent of the Boehm-flute brought a number of possibilities for fundamental changes to the performance practice of the flute. The large tone holes and cylindrical bore brought increased power to the tone, and even improved intonation in all dynamic ranges.¹⁶⁶ The position of the tone holes and the open-key system fitted to close the holes provided flexibility and fluency of technique in all keys. The light-weight silver tube allowed for quicker response in both tone production and articulation. Perhaps most important, the silver flute raised the possibility of new tonal effects¹⁶⁷ and tone colours.¹⁶⁸ These are the qualities of the Boehm-flute which French flutists would come to perfect and exploit through the nineteenth and into the twentieth century.

¹⁶⁵ The instrument which we now consider the modern flute is shown in Taffanel and Fleury, Fig. 631, an instrument by Louis Lot 1925 (p. 1504).

¹⁶⁶ Hamilton, 392-393.

¹⁶⁷ Toff, 72.

¹⁶⁸ Hamilton, 483.

Chapter 3

Musical Life in Paris

We have already traced the historical development of the Paris Conservatoire and of the flute itself. In order to complete the picture, this chapter will briefly explore the three facets of musical life in Paris from 1838 to 1927 which have exerted the greatest influence on student and professional flute performance: the professional music scene of Paris, the French national tendencies in composition, and the standard symphonic, chamber, and solo repertoire. As is common practice in conservatories and university music departments today, it may be assumed that students of the flute at the Paris Conservatoire would be trained in the traditions of the professional community surrounding them. It will therefore be necessary to highlight in broad terms the musical climate and experiences of Paris throughout the nearly one hundred years being investigated in this study.

The Music Profession in Paris

Paris is without question the embodiment of the term "cultural centre." Musically speaking, Paris has it all: opera companies, orchestral associations, chamber

music societies, ballet troupes, institutions for both elementary and higher musical education, museums, and research libraries. Performers and composers from France and abroad have flocked to Paris for the opportunities, stimulation, and nurturing offered by her artistic climate. The years 1838 through 1927 have witnessed first-hand the post-Revolution coming-of-age for this great city.

During the nineteenth and early twentieth centuries, professional musicians active in Paris earned their livings primarily through performing and teaching. For a wind instrumentalist, the pinnacle of achievement was holding the principal chair in both the Opéra orchestra and the Société des concerts du Conservatoire, as well as the position of Professor of the first class at the Conservatoire. However, this privilege was gained only by the elite masters. For the less accomplished or less fortunate, many lesser opportunities were available.

Throughout this time, Paris supported numerous orchestras, large and small. Most orchestras were sponsored by theatres for the purpose of providing music for productions, primarily operas. The oldest and most prestigious orchestra was the large one at the Opéra, which provided a reasonably reliable source of income for its musicians. A number of other theatres supported orchestras in the early decades of the nineteenth century, among which

were the Opéra-comique (also known as the Théâtre Italien and Théâtre de Monsieur), Odéon (including the Opéra-bouffe), Théâtre Français, Vaudeville, Variétés, Gaité, and Ambigue-comique.¹⁶⁹ Like the Opéra, the first two theatres were official, state-supported music theatres, and therefore housed larger, better paying orchestras than did the other theatres.¹⁷⁰ The Théâtre lyrique (Opéra-national) was founded in 1851, and for the next two decades supported a substantial orchestra.¹⁷¹ Many less prestigious theatres and music halls had accompanying and incidental orchestras which paid musicians by the month or by the service.¹⁷²

Prior to the Revolution, the only orchestra in Paris which performed a regular concert series of instrumental music was the Concert spirituel, founded in

¹⁶⁹ Charlton and Trevitt, *The New Grove Dictionary of Music and Musicians*, 6th edition, s.v. "Paris, VI, 3," *New Grove*, 211.

¹⁷⁰ In 1909, members of the Opéra orchestra received 1700 to 3600 francs annually; an appointment to the orchestra was guaranteed for life. The Opéra-comique paid slightly less well: 1350 to 3000 francs on a three year renewable contract. Other theatres paid musicians monthly. See Louis Fleury, "De la situation économique des musiciens d'orchestre en France," *Haydn-Zentenarfeier, III. Kongress der Internationalen Musikgesellschaft, Wien, 25. bis 29. Mai 1909* (Vienna: Artaria, 1909; Leipzig: Breitkopf and Härtel, 1909), 520 (henceforth cited as "Situation économique").

¹⁷¹ Charlton and Trevitt, 214.

¹⁷² Fleury, "Situation économique," 518.

1725.¹⁷³ However, when royal privilege was revoked in 1791, the orchestra was disbanded. During the ensuing years of the Revolution, military music dominated the musical scene of Paris. The prominence and importance of instrumental music for military and propaganda purposes ultimately led to the founding of the Paris Conservatoire. Orchestral music did not stage a return in regular series format until the Salle Feydeau, the first true concert hall in Paris, was opened in 1811, at which time that theatre's orchestra began to give regular concerts.

The Conservatoire has had a long history of instrumental music concerts. From 1797 the Conservatoire gave annual concerts featuring the recent year's prize winners. In 1800 that institution set forth plans to institute a series of five to twelve instrumental concerts showcasing approximately sixty of the young Conservatoire talents;¹⁷⁴ the concert series was first given in 1803.¹⁷⁵ In 1828, the Société des concerts du Conservatoire, an orchestra of 165 current and former instrumental and vocal students, gave its first concert under the able direction of François Habeneck.¹⁷⁶ The Société des concerts soon became

¹⁷³ Charlton and Trevitt, 215.

¹⁷⁴ Ibid, 216.

¹⁷⁵ Dubois, 3448.

¹⁷⁶ Gustave Samazeuilh, *Musiciens de mon temps: Chroniques et souvenirs* (Paris: Marcel Daubin, 1947), 367.

the driving force behind instrumental music performance in Paris during the nineteenth and early twentieth centuries.¹⁷⁷

The advent of the conductor as a fixture in orchestral life led to an increase in the number of orchestras dedicated solely to instrumental music under the leadership of prominent impresario-conductors.¹⁷⁸ The three most visible and respected of these orchestras were the Concerts populaires de musique classique, founded in 1861 by Jules-Etienne Padeloup (later known as the Concerts Padeloup), the Concerts Colonne, which gave its first concert in 1873 under Judas Colonne, and the Société des nouveaux concerts, later known as the Concerts Lamoureux, which gave its debut performance in October of 1881 under the leadership of Charles Lamoureux.¹⁷⁹ Unlike the

¹⁷⁷ The Société des concerts remained an active orchestra until it was reorganized as the Orchestre de Paris in 1967. (*The New Grove Dictionary of Music and Musicians*, 6th edition, s.v. "Paris, VII, 3," 222.)

¹⁷⁸ Increasingly, the conductor came to be the personality behind an orchestra, deciding on repertoire, soloists and personnel, and directing policy. (Charlton and Trevitt, *The New Grove Dictionary of Music and Musicians*, 6th edition, s.v. "Paris, VI, 4," 216).

¹⁷⁹ Jules Combarieu, *Histoire de la musique*, vol. 3, Des Origines au debut du XX^e siècle (Paris: Armand Colin, 1950), 527-535. One other short-lived but important orchestra was the Société Nationale de Musique, dedicated to performance of contemporary orchestral and chamber music. This orchestra gave the first performance of Debussy's *Prélude à l'après-midi d'un faune* [1894]. Other active orchestras during the last decades of the nineteenth century

relatively small orchestra of the Société des concerts which used forty to fifty orchestral musicians, these orchestras were typically large, employing as many as one hundred musicians (approximately seventy strings, thirty winds, brass, percussion, and harps).¹⁸⁰

The early 1900s brought monumental changes in the lives and livelihoods of Parisian musicians.¹⁸¹ The number of prominent concert societies had dropped to three (the Société des concerts, the Concerts Colonne, and the Concerts Chevillard, formerly the Concerts Lamoureux).¹⁸² Still numerous smaller concert orchestras and music hall orchestras provided employment opportunities for professional and semi-professional musicians. In addition

include the Société philharmonique, the Concerts modernes (from 1874), and the Concerts spirituel de la Sorbonne (1889-1914) [*The New Grove Dictionary of Music and Musicians*, 6th edition, s.v. "Paris, VII, 1," 220].

¹⁸⁰ A. Dandelot, *La Société des concerts du Conservatoire de 1828 à 1897: Grands concerts symphoniques de Paris* (Paris: G. Havard Fils, 1898), 121-122 (henceforth cited as *Grands Concerts*). In 1864 the Concerts populaires had the following personnel: 20 each of first and second violins; 12 each of violas, cellos, and basses; 3 flutes; 2 oboes, clarinets, and bassoons; 4 horns, 2 trumpets, 3 trombones, 1 ophecleid, 1 timpanist, 1 triangle and 4 harps for a total of 101 musicians. Forty-four of these musicians had captured a first prize from the Conservatoire [Antoine Elwart, *Histoire des Concerts populaires de musique classique* (Paris: Librairie Castel, 1864), 25-27].

¹⁸¹ Fleury, "Situation économique," 518, 522.

¹⁸² The Concerts Padeloup was not revived until 1920. See "Paris, VII, 1," *New Grove*, vol. 14, 220.

to the professional concert orchestras, dance bands and music halls employed hundreds of musicians on a part time basis. As a result of the technological boom at the turn of the century, the invention and development of the phonographic recording and moving pictures provided regular jobs for more musicians than had ever been possible in the past. Spurred on by the events surrounding the 1900 Paris Exposition, the musicians of Paris banded together to form the first modern union of musicians in May of 1904, an inevitable by-product of the increasing number of employment opportunities for professional musicians and the equally inevitable abuses and irregularities which attend a large network of employers.

Chamber music for winds was not a dominant force on the public scene of Paris until late in the nineteenth century. In his article "Chamber Music for Wind Instruments," Louis Fleury bemoaned the virtual extinction of wind chamber music, including wind concerti, from the concert stage over the first three-quarters of the nineteenth century.¹⁸³ What Fleury calls "the exclusive tyranny of the string quartet" was brought to an end with the foundation of the Société d'instruments à vent by Paul

¹⁸³ Louis Fleury, "Chamber Music for Wind Instruments," *The Chesterian*, new series, nos. 36 and 37 (January and February 1924), 111-116, 144-148 (henceforth cited as "Chamber Music").

Taffanel in 1876. From that year to the group's disbandment in 1893, the Société d'instruments performed the wind chamber works of contemporary French composers, including numerous premières, and successfully popularized the genre for concert goers of Paris.

The freedoms gained by the various social classes of Paris led many families to "the high romantic art" of gathering artists in their salons.¹⁸⁴ Following Napoleon's grant of amnesty for the exiled upper class in the first years of the nineteenth century, the prominent musicians of Paris were once again courted by private patrons for both salon performances and instruction.¹⁸⁵ Through the nineteenth and early twentieth centuries, private salons became increasingly more important for musicians, not so much for financial opportunity, but for exchange between musicians, artists, writers, and intellectuals.¹⁸⁶ Soirées held in upper-class homes offered an "informal" meeting

¹⁸⁴ Claude Laforet (pseud.), Flavien Bonnet-Roy, *La Vie au temps romantique [Salons, Théâtres et Concerts]* (Paris: J. Peyronnet, 1929), 172.

¹⁸⁵ Charlton and Trevitt, 209.

¹⁸⁶ Elaine Brody, "Music and Art," "Music and Literature," In *Paris: The Musical Kaleidoscope 1870-1925* (New York: George Braziller, 1987), 112-168. In these articles Brody explores the phenomenal growth of exchange between musicians, artists, and writers, as well as the vital role wealthy patrons played in sponsoring and supporting the soirées which made this melding of the arts possible. Claude Dorgeuille notes that this practice declined in popularity after World War I (*The French Flute School*, 9).

place for prominent artists and their students, as well as providing a venue for numerous première performances of works by local composers.

French Tendencies in Composition

Throughout the nearly one hundred years spanned by this study, Parisian audiences were privileged to hear a vast array of concert and operatic repertoire. While that which is often considered the French style in composition remained constant, audiences demanded an ever-changing repertoire for their listening enjoyment. At a time when the German romantic style with its expansive line and intense chromaticism was sweeping through most of Europe, Paris followed her own star. Despite the preference of German romanticism on orchestral programmes and Italian tendencies at the Opéra, Parisian composers largely retained in their compositions the essential French qualities which seem to typify the music of France in any epoch.¹⁸⁷ Lavignac further identifies his native music in the nineteenth century by isolating

...all the qualities inherent in the French style: clarity, simplicity, freedom, spirit and good humour. The harmony is meticulous and very pure,

¹⁸⁷ Dika Newlin has written that it is possible to trace French Romanticism through the French interpretation of Beethoven (*Bruckner, Mahler, Schönberg* [1947; New York: W.W. Norton and Co., 1978], 157).

and the instrumentation is interesting; the ensemble is always elegant and appropriate.¹⁸⁸

Specifically French tendencies toward Romanticism were unquestionably ushered in and focused by the Opéra, and in particular the librettists writing for the operatic stage. Spectacle had been the standard of the operatic stage during the Napoleonic era. By the late 1820s, Rossini's works had been produced on a number of occasions at the Opéra; thus began the redirection of opera away from the spectacular. Auber's *La muette de Portici* [1828] introduced the librettos of Eugene Scribe to Paris. Scribe, drawing on his experiences with popular theatre, constructed his librettos to be as vivid and realistic as possible in characterization and depiction of locale. In the hands of Meyerbeer, Scribe's librettos were brought to life through large dramatic musical structures and imaginative, pictorial orchestration, traits which have come to typify French grand

¹⁸⁸ Albert Lavignac, *La Musique et les musiciens* (Paris: Delagrave, 1896), 526 (henceforth cited as *La Musique*): "...toutes les qualités inhérentes au style français: clarté, simplicité, franchise, esprit et bonne humeur. L'harmonie est très soignée, très pure, et l'instrumentation intéressante; l'ensemble est toujours élégant et bien en situation."

From the time of Lully and Rameau instrumental colour was an essential part of composition in France. One half century later Gluck is said to have "...enriched the orchestra with new timbres and effects." Throughout his monograph, Lavignac freely uses various phrases commenting on "interesting instrumentation" [*l'instrumentation intéressante*] to describe the compositions of the greatest French composers.

opera.¹⁸⁹ Wagner was finally produced at Paris only in 1861. Despite the fact that this first production of *Tannhäuser* deviated from the established French opera format, particularly by its lack of the requisite ballet at the opening of Act II, was closed after three performances, and did not receive critical acclaim, it nevertheless initiated Parisian audiences with the spirit German romanticism in its most complete form.¹⁹⁰ Over time the appeal of Wagner in Paris as elsewhere became a tremendous force in music. From the moment of that first production, composers of France, regardless of the specialty of their compositional genre, found themselves divided into one of two camps, Wagnerians or non-Wagnerians.¹⁹¹

Through the middle decades of the nineteenth century, the musical focus of Paris began to move away from opera toward performance of instrumental forms.¹⁹² Burlingame Hill considers that the shift from opera to orchestra increased the knowledge and discrimination of Parisian audiences, and also offered more opportunity to

¹⁸⁹ Dennis Libby, *The New Grove Dictionary of Music and Musicians*, 6th edition, s.v. "Opera, III, 3," 581.

¹⁹⁰ Brody, 38.

¹⁹¹ *Ibid.*, 21-59.

¹⁹² Edward Burlingame Hill, *Modern French Music* (Boston: Houghton Mifflin Co., 1924), 7. This trend was evident throughout the musical circles of Paris except at the Paris Conservatoire (p. 12).

native composers. He further identifies the progression of French music as follows:

...if we examine French music as a whole from shortly before the Franco-Russian War to the present time, it is possible to establish lines of esthetic cleavage pointing to the gradual abandonment of excessive dependence upon foreign models, the accompanying development of originality in musical style and thought indicating, not merely a definite progress, but a different type of musical art. In reality French music became "modern" in direct proportion to its reflections of national traits, and its history is summed up in the unfolding of successive stages of independent expression.¹⁹³

One of these stages of independent expression is highlighted by the interaction between members of the various artistic communities mentioned previously. Such an interaction may be credited with contributing to the movement of music and composers away from undue influence of and reliance on foreign models. Naturalism, socialism, symbolism, and impressionism each had its effect on various Parisian composers from Bruneau and Charpentier to Debussy, Ravel, Dukas, and Roussel.¹⁹⁴

Nationalism became an important factor in musical composition and musical performance following the Franco-Prussian War. The result was a redirection of the French musical perspective inward to the golden age of its own history, the high baroque. Subsequently, the musical

¹⁹³ Ibid., 4.

¹⁹⁴ Ibid., 6.

repertoire was enriched by the reawakening of interest in the performance of music by Lully, Rameau, Couperin, and Daquin, as well as earlier music, such as that of the trouvères. Later in the 1890s and early twentieth century, the rediscovery of the works of the early masters continued with a re-emergence of the performance of works by Bach, Handel, and Mozart.

Standard Repertoire

Trends in the choice of music for performance parallel those noted in the previous section outlining French tendencies in composition: traditional French values in music as well as romanticism and Wagnerianism were fostered; instrumental music began to rival opera; and there was a strong tie between all art forms brought about by the sharing of ideas and philosophies amongst contemporary artists of all genres. In response to the performing atmosphere of Paris, composers wrote for the flute as an orchestral instrument, as a solo instrument, and, in the later part of the century, as a chamber instrument. At the same time, numerous older compositions, primarily those by foreign composers, constituted a large part of the performance repertoire of the day. As a student at the Conservatoire, a young flutist would be trained in the

standard repertoire for the flute in addition to studies from the method treatises in use.

The standard repertoire performed in Paris must be identified so that correlations may be easily drawn between findings of the research into the method treatises and the performance practice of instrumental music. The project of identifying the standard symphonic, chamber, and solo repertoire is eased by the number of available compilations of Conservatoire records and concert programs prepared by scholars of the last two centuries. Repertoire lists included by the professors of flute in their treatises are also invaluable in completing this task.

As the nineteenth century moved through its third decade, the formation of the Société des concerts once again brought orchestral music to the concert stage of Paris in series format. The stage was dominated by the works of foreign composers, particularly those by Beethoven.¹⁹⁵ In the twenty years that François Habeneck [1828-1849] led the Société des concerts, audiences were treated to the complete

¹⁹⁵ Programmes from the fourteen years leading up to the Revolution show that during this time the Concert spirituel flooded the concert stage with a vast array of repertoire. Upon examination of the concert programs from 1777 to 1790 and the resulting statistics concerning numbers of performances of individual works given, it becomes clear that foreign composers, with Haydn heralded as king, dominated the concert stages of Paris prior to the Revolution. See Constant Pierre, *Histoire du Concert spirituel, 1725-1790* (Paris: Heugel for the Société Française de Musicologie, 1975).

symphonies by Beethoven, overtures by Wagner, and numerous works by Mozart, Weber, Gluck, and Mendelssohn, among others.¹⁹⁶

The subsequent tenures of Narcisse Girard [1849-1860] and Alexandre Tilmant [1860-1872] did little to turn the tide against the domination of foreign composers.¹⁹⁷ Girard did successfully produce programs including fragments of Berlioz' *Damnation de Faust* and works by such French composers as Cornélie Falcon, Pauline Viardot, and Miolan Carvalho, but his greatest devotion was to Haydn, Handel, and Beethoven. Similarly, during various concert seasons Tilmant performed the works of Berlioz, Saint-Saëns, and Gounod; nevertheless Schumann, Wagner, Franck, and, of course, Beethoven were given on the most auspicious occasions.

Deldevez' compilation of concert programmes from 1859 to 1885 confirms France's predilection for composers from outside her borders.¹⁹⁸ During these 26 years, the Société des concerts gave 497 performances of symphonies. Beethoven's nine symphonies were performed a total of 287 times, seventeen Haydn symphonies received 66 performances,¹⁹⁶ Samazeuilh, 367-368.

¹⁹⁷ Ibid., 368-369.

¹⁹⁸ Edouard Deldevez, *La Société des Concerts 1860 à 1885* [Conservatoire national de musique] (Paris: Firmin-Didot, 1887), 225-236.

and four symphonies each by Mozart, Schumann, and Mendelssohn were given thirty-six, eighteen, and sixty performances respectively. Ten symphonies by various French composers were heard only thirty times in total!

From the figures compiled from Deldevez, it is possible to affirm that, in addition to the symphonies listed above, professional musicians would most often be performing the following works: Beethoven - *Leonore* and *Coriolan* overtures, *Piano Concerto in E^b*, *Violin Concerto*, *Ruins of Athens*, ballet music from *Prometheus*, and the *Septet*; Weber - *Freischütz*, *Oberon*, and *Euryanthe* overtures, as well as fragments from his operas; Berlioz - *Roman Carnival Overture* and *l'Enfance du Christ* complete; Mendelssohn - overtures to *Fingal's Cave* and *Ruy Blas*, *Violin Concerto*, *Psalm cxxviii*, *Elijah*, orchestral suite from *Midsummer Night's Dream*, *Chanteur des bois*; Bach - *Double Motet*, and *Suite in b minor*; Leisring - *O Filii*; Gounod - *Ps. Près du fleuve étranger*; Haydn - *The Seasons* and *The Creation*; Handel - *Israel in Egypt*, *Messiah*, and *Judas Maccabeus*; Cavaliere - *Oratorio*; Meyerbeer - *Adieu aux jeunes mariés* and *Pater noster*; Schumann - *Manfred*; Gluck - excerpts from the ballets and operas; Rossini and Mozart - excerpts from the operas; miscellaneous French composers - fragments from opera and vocal works.¹⁹⁹

¹⁹⁹ Concert programs for the Société des jeunes artistes du Conservatoire, the student orchestra of the Conservatoire,

While the works presented here reflect the most frequently performed works during the twenty-six year period 1859 to 1885, a look at individual programs shows that by 1872 a clear shift in the ratio of French to foreign composers begins to be recognizable.²⁰⁰ With the tenure of Edouard Deldevez [1872-1885], compositions by Berlioz, Massenet, Lalo, Bizet, Saint-Saëns, and Vieuxtemps began to take centre stage. This trend toward the performance of French works continued under Jules Garçin [1885-1893].

When Paul Taffanel assumed the podium in 1893, he brought with him a great love of the older classics and French compositions from the whole of the nineteenth century.²⁰¹ In addition to performing the works of Berlioz, Ropartz, Lefebvre, Chausson, Dubois, Fauré, Chabrier, d'Indy, Pierné, Huë, and his own personal favorite Saint-Saëns, Taffanel regularly programmed Bach, Palestrina, Mozart, Haydn, Beethoven, Rameau, Handel, Liszt, and Verdi.²⁰² At this time concert programs show a new and

from 1861 to 1963 show a parallel trend in the repertoire of that group. See Antoine Elwart, *Histoire des Concerts populaires de musique classique* (Paris: Librairie Castel, 1864), 79-85.

²⁰⁰ Samazeuilh, 369-370.

²⁰¹ Flutists often credit Taffanel's love of the classics to his unusually fine musicianship. However, this trait may also be seen as a result of nationalistic sentiments pervading the Parisian music scene.

²⁰² Dandelot, *Grand Concerts*, 141-158.

sudden influx of compositions by the Russian composers Cui, Moussorgsky, Rimsky-Korsakov, Glinka, and Borodin.²⁰³

From Taffanel's tenure onward, the Société des concerts under André Messager [1908-1918] and Philippe Gaubert [1918-1938] regularly presented eclectic programmes drawing from the wide spectrum of the western orchestral tradition.²⁰⁴ With Gaubert's arrival, a panoply of old and new compositions by foreign and national composers, with a particular emphasis on the works of young French composers became standard fare for the Société des concerts.²⁰⁵

Given the extreme number of possible compositions which could be drawn from the symphonic repertoire to

²⁰³ Gustave Robert, *La Musique de Paris 1894-1900*, 5 vols. (Paris: Librairie Fischbacher, 1895-1901), vol. 3, 207-220; vol. 4, 272-287.

²⁰⁴ An interesting list appears in vol. 1 (1901) of *La Revue musicale*, pp. 110-112 [Reprint. Scarsdale, NY: Annemarie Schnase, 1965] of a vote taken by fourteen of the foremost French composers at the turn of the century concerning their views on the greatest French composers of all time. The general vote was taken on 4 December 1899, the chamber music vote on 18 January 1900 at the instigation of M. Georges Leygues, Ministre de l'Instruction publique for the purpose of producing a comprehensive music history of France. The general list of composers was headed by Rameau, Berlioz, Delibes, Lalo, Bizet, Ch. Lefebvre, Messager (14 votes), Gluck, A. Thomas, F. David, Gounod, Hillemecher (13), Clement Jennequin, Lully, X. Leroux (12), Franck, Guiraud, Godard, Chabrier, Charpentier (11), Erlanger, H. Duparc (10), Grétry, Hérold, Wormser, Huè (9), Auber, Coquard, Holmès, Duvernoy (8). In the minority vote were Boieldieu, Maréchal, Puget, Lambert (7), Chausson (6), Chapuis, Debussy (5), Lesueur, Reber, Boellmann (3), Gouvy, de la Nux (2), G. Ropartz, Salvayre, and Pessard (1).

²⁰⁵ Dandelot, *Grands Concerts*, 196-210.

constitute the standard repertoire of the late nineteenth and early twentieth centuries for study by young flutists, lists of repertoire presented in flute method books are helpful in narrowing down the possibilities. Both Philippe Gaubert and Louis Fleury include substantial sections on the use of the flute in orchestral writing in their works drawn from Paul Taffanel's notes.²⁰⁶ There is significant overlapping between the two authors in their lists of important orchestral excerpts. The compositions which are drawn to the attention of early twentieth-century flute students by both authors are: Gluck - Minuet from *Orpheus*; Beethoven - *Leonore Overture*, no. 3 and *Symphony no. 3 in E^b Major*, "Eroica"; Rossini - *William Tell Overture*; Mendelssohn - Scherzo to *A Midsummer Night's Dream*; Wagner - *Siegfried*, "The Forest Murmurs"; Schumann - *Symphony no. 1*, "Spring"; Meyerbeer - *Les Huguenots*, act 2; Berlioz - *Damnation of Faust*; Thomas - *Mignon*; Bizet - *L'Arlesienne* and *Carmen*, Entr'acte to act 3; Saint-Saëns - *Ascanio*; Debussy - *Prélude à "L'Après-midi d'un faune"*; Rimsky-Korsakov - *Scheherazade* and *Capriccio Espagnol*; and Ravel - *Daphnis et Chloë*. This list, though relatively comprehensive, does not include a number of works known to have been performed Paris during the early decades of the

²⁰⁶ Paul Taffanel and Philippe Gaubert, *Méthode Complète de flûte* (Paris: Leduc, 1923, 1956), 203-227. See also Taffanel and Fleury, 1507-1511.

twentieth century which include demanding and exposed flute writing, and therefore must surely have been incorporated in curriculum studies. In addition to the foregoing list, the following may be considered as important to flutists: Fauré - *Pelléas et Mélisande*; Stravinsky - *Firebird* and *Song of the Nightingale*, amongst others; Richard Strauss - tone poems and *Symphonie Domestica*; and Prokofiev - *Symphony no. 1 in C "Classical"*. It should be noted that this list differs significantly in both its inclusion of modern French and Russian works, and its comparative de-emphasis of German works, from the one offered earlier representing the mid-nineteenth century repertoire.

The dismal state of chamber music throughout the time period of this study has already been discussed earlier in this chapter. Prior to the late nineteenth century, the chamber music repertoire including the flute was sparse at best. Outside of the four flute quartets by Mozart, several flute quartets by Gossec, the wind quintets by Reicha, and small mixed trios by Beethoven, Haydn, and Weber, the flute chamber repertoire was barren. When Paul Taffanel founded the *Société de musique de chambre pour instruments à vent* in 1879, the situation for flutists in the chamber setting changed dramatically for the better.²⁰⁷ Throughout the Société's fourteen year existence, many chamber compositions

²⁰⁷ Fleury, "Chamber Music," 114.

including parts for the flute were commissioned by Taffanel and premièred by the Société. A complete list of all works performed by the Société appears in Dorgeuille's monograph, *The French Flute School 1850-1950*.²⁰⁸ A representative sampling of these works is presented here: Brahms - *Serenade*, op. 16; Gounod - *Petite Symphonie*; Lalo - *Aubade*; Reinecke - *Octet*, op. 216; Rubenstein - *Octet*, op. 9 and *Quintet*, op. 55; Saint-Saëns - *Carnaval des Animaux*; Strauss, R. - *Serenade*, op. 7; and Taffanel - *Romance and Salterelle*. A number of works not performed by that group because of their later dates of composition merit the close attention of flutists, and are therefore likely to have been included during this time in the studies of young flutists. The finest of these works include: Debussy - *Sonata no. 2 for flûte, alto and harpe*; Ibert - *Quintet*; and Ravel - *Introduction and Allegro*.

Solo repertoire for the flute has never been in short supply, and the best means by which it may be narrowed down to a list of representative and relevant compositions for the flute is to examine the works required by the Conservatoire for its year-end examinations.²⁰⁹ These

²⁰⁸ Dorgeuille, 17-21.

²⁰⁹ It should be pointed out that the Conservatoire on the whole has throughout its history ignored German, Italian, and English traditions (Barzun, vol. 1, 142). This fact may to a certain extent skew the results of considering only the Paris Conservatoire method books in compiling lists of compositions.

examination pieces [*morceaux de concours*], whether older compositions or newly composed commissions, would have been selected each year to reflect, expose, and demand the accomplishment of the ideals of flute performance. The best source list for this purpose is Dorgeuille's compilation of required flute compositions for the annual concours.²¹⁰ From this list it is easy to see the change in instructional emphasis and musical taste from one professor to the next.

Under Tulou, Coche, Dorus, and Altès, the virtuoso compositions of flutist-composers were the preferred compositions for examination, in particular, Tulou's thirteen *Concertos* and eleven *Solos*, as well as the ten *Solos* by Altès. Tulou's solos featured predominantly slurred passagework. Use of staccato is rare except on rapid reiteration of a single pitch or on some scale passages. Key signatures were almost exclusively limited to those no more than two accidentals removed from D major. The florid passagework which functioned as the primary compositional technique of these works was designed to provide adequate basis for separating the well-accomplished flutist from the mere amateur.²¹¹ Rapid articulation, stronger emphasis on lyricism, and greater use of more

²¹⁰ Dorgeuille, 69-76.

²¹¹ Lattimore, "Les *Morceaux de concours*," 10, 14.

remote keys began to gain prominence in the solos by Altès.²¹²

Taffanel, Hennabains, Lafleurance, and Gaubert preferred the compositions by contemporary French composers or the works of the old masters. These compositions, particularly those written for the annual Conservatoire competition, were composed for the sole purpose of demonstrating the flute in its fullest technical capacities.²¹³ Most notable among these are: Andersen - *Morceaux de Concert*; Fauré - *Fantaisie*; Chaminade - *Concertino*; Perilhou - *Ballade*; Taffanel - *Andante Pastoral et Scherzettino*; Mouquet - *Egologue*; Huë - *Fantaisie*; Mozart - *Concerto in D major* with Cadenzas by P. Taffanel; Enesco - *Cantabile et Presto*; Gaubert - *Nocturne et Allegro Scherzando*; and Grovlez - *Romance et Scherzo*.

In addition to the list of concours pieces found in Dorgeuille, Fleury includes an excellent list at the end of "La Flûte" which is intended to comprise the flutist's library.²¹⁴ The few additional works to be noted from that

²¹² Ibid., 30-32.

²¹³ Lynne MacMorran Cooksey, "The Flute in the Solo and Chamber Music of Albert Roussel (1869-1937), A Lecture Recital, Together with Three Recitals of Selected Works by J.S. Bach, I. Dahl, G. Fauré, H. Genzmer, P. Hindemith, Jolivet, Schubert, and Others" (DMA Dissertation, North Texas State University, 1980), 19.

²¹⁴ Taffanel and Fleury, 1525.

list are several recommended study materials and études:
Boehm's comprehensive 24 *Caprices*, and the extremely
demanding *Études*, op. 60 and 63 by Andersen.

Chapter 4

Introduction to the Treatises

Throughout the history of the Paris Conservatoire, performers and pedagogues have felt the urge to put down their thoughts and theories in writing. As is the case with both Conservatoire and local Parisian flutists, many have offered their individual treatises and compositions in response to a specific event, whether crisis, need, or opportunity. The result of these intermittent flurries of creative activity is a pattern of distinguishable episodes of codification which do more than merely mark significant points in the history of the flute, they illuminate for succeeding generations of readers and scholars the details of challenges conquered or brushed aside.

As pertains directly to the Paris Conservatoire flute school, three chronological periods of codification may be noted. Each of these periods may be defined by a significant increase in pedagogical, compositional, and critical writing for the flute, followed by a period of relative inactivity. Each chronological period of activity may be attributed largely to a specific catalytic event.

These periods are as follows:²¹⁵ 1795-1820 (the origin of the Paris Conservatoire), 1838-1850 (the invention of the Boehm-flute), 1880-1935 (the adoption of the Boehm-flute as the primary professional instrument in France and abroad) [see Appendix 3]. The third period is marked by the appearance of individual collections of studies and small treatises and also by the appearance of large-scale, comprehensive method books, both in original and re-issue/updated formats. The method books and compositions of the third period remain the most widely respected and used pedagogical literature in the flute repertoire.

A discussion and analysis of three of the most comprehensive treatises from the second and third

²¹⁵ A list of method books and étude collections compiled from the following sources serve to support these inclusive dates. Appendix 3 presents a chronological listing of the method books published in Paris between 1790 and 1930.

Pierreuse, Bernard, *Flûte Litterature: catalogue des oeuvres éditées et inédites Général* ([Paris]: Société des Éditions Jobert, Éditions Musicales Transatlantiques, 1982), 57-71.

Vester, Frans, *Flute Repertoire Catalogue: 10,000 Titles* (London: Musica Rara, 1967), 345-363.

Handbuch der musikalischen Literatur ... oder allgemeines systematisch geordnetes Verzeichniss gedruckter Musikalien, auch musikalischer Schriftung und Abbildungen mit Anzeige der Verleger und Preise, edited by Carl Friederich Whistling, 1828 (Leipzig: C.F. Whistling, 1828; Hildesheim and New York: Georg Olms Verlag, 1975), edited by Adolph Hofmeister, 1829-1838 (Leipzig: Fr. Hofmeister, 1834 and 1839; Hildesheim and New York: Georg Olms Verlag, 1975), under the title *Hofmeisters Jahresverzeichniss* vols. 1-6, 1852-1857 (Leipzig: Friedrich Hofmeister, n.d.; New York: Johnson Reprint Corporation, 1968), various editors 1818-1827, 1839-1851, 1858-1900 (text-fiche).

codification periods, those by Victor Coche, Henri Altés, and Paul Taffanel (in conjunction with Philippe Gaubert and Louis Fleury), will reveal the state of flute performance practice and pedagogy in Paris during the nineteenth and early twentieth centuries, i.e., the period during which the professors of flute strove to exploit the capabilities and cope with the problems of the newly introduced silver Boehm-system flute. Contained in these treatises are numerous clues to shifting values upheld by the Conservatoire flutists in an attempt to reconcile the qualities of the modern flute to the expectations of older music and the demands of more contemporary composition.

Two additional treatises were originally intended to be an integral part of this study. Both treatises are re-editions of the *Nouvelle Méthode pour la flûte* (1795) by François Devienne. The first of these re-editions appears under the bibliographic entry of Louis Dorus (pseudonym) *L'Etude de la nouvelle flûte, Méthode progressive arrangée d'après Devienne* (Paris: Schonenberger, 1845),²¹⁶ the other

²¹⁶ A great deal of mystery has typically surrounded the Dorus *Méthode*. Patricia Ahmad gives 1850 as the publication date of this treatise ("The Flute Professors of the Paris Conservatoire from Devienne to Taffanel, 1795-1908" [M.A. Thesis, North Texas State, 1980], 74). Ahmad's dating of this source is often quoted by scholars. However several dates regarding Dorus in Ms. Ahmad's thesis seem to be in error, and this is true of this one as well. The Bibliothèque Nationale in Paris has sent confirmation that it holds a copy of the method *L'Etude de la nouvelle flûte. Méthode progressive arrangée d'après Devienne* (Paris:

as the *Célèbre méthode complète de flûte systèmes Boehm et ordinaire par Devienne, nouvelle édition revue et augmentée par Philippe Gaubert* (Paris: Leduc, 1909). Unfortunately, the Dorus treatise has not been made available to me.

Information sent by the Bibliothèque nationale suggests that while the title appears in their catalogue, only a few pages are actually held in their collection.²¹⁷ After carefully examining the Gaubert treatise, I have determined that Gaubert included at least as much material original to the various Dorus treatises as that original to the Devienne.²¹⁸ Knowing that the Devienne treatise underwent numerous nineteenth century re-writes and re-editions, I have concluded that scholarly treatment of these sources would

Schonenberger, 1845) by Vincent Joseph Van Steerkiste under the pseudonym of Louis Dorus.

²¹⁷ A request for a copy of the existing pages through photo-duplication from that institution has not been fulfilled for unspecified reasons.

²¹⁸ Dorus produced a number of treatises for the various flutes available in Paris in the mid-nineteenth century based on Devienne's *Méthode*. I have had the opportunity to examine a copy of Devienne's *Méthode complète de flûte. Nouvelle édition augmentée...3 sonates, 2 flûtes par Tulou, 36 airs d'opéras par Berbiguier et suivie de tablatures pour la patte d'Ut par L. Dorus* (Paris: Schonenberger, [c. 1860-61]) edited and augmented by Dorus for the eight-key flute. By comparing this work to Devienne's original, it has been possible to determine which portions of the text are original to Devienne, and to Dorus, as well as to Tulou and Berbiguier, whose works are used in the treatise. Further comparison of this work to Gaubert's shows that the latter composer used a great portion of Dorus' additions to the Devienne treatise for his 1909 edition for Boehm-flute.

best be served by a separate and future study of the Devienne *Méthode* and the subsequent nineteenth-century re-editions.²¹⁹

The treatise by Victor Coche, *Méthode pour servir à l'enseignement de la nouvelle flûte. Inventée par Gordon, modifiée par Boehm et perfectionnée par V. Coche* (Paris: Chez auteur, [1839]), was the second method book for Boehm-flute published in Paris.²²⁰ Coche's *Method* is strongly linked to his *Examen critique* (see chapter 2). It is important to note that the modified Boehm-flute for which Coche wrote his *Méthode* is the instrument which was adopted by the Institut de France and the Paris Conservatoire in 1838. In this *Méthode*, Coche lays down the foundations of technique on the Boehm-flute, while still retaining a strong

²¹⁹ Other prominent and well-respected treatises composed by Paris Conservatoire Professors of Flute and their students include: Antoine Hugot and J.G. Wunderlich *Méthode de Flûte, 1801*; Pierre Hippolyte Camus, *Méthode pour la nouvelle flûte Boehm* (1838); François Devienne, *Nouvelle Méthode pour la flûte* (1795); Marcel Moyse, numerous small editions of studies and études published from 1921 into the 1970s; Jean Louis Tulou, *Méthode de flûte*, op. 100 (1835), and *Petite méthode élémentaire pour la Flûte*, op. 108 (1840); and Benoit Tranquille Berbiguier, *Nouvelle Méthode de la flûte* (1818).

²²⁰ A small treatise by Pierre Hippolyte Camus was submitted to the Bibliothèque nationale less than one month prior to Coche's submission of his treatise. However, since Camus' treatise comprises a mere 63 pages, and since Camus never held a professorial position at the Conservatoire, his treatise is not eligible for this study.

relation to the prevalent style of flute performance practice.²²¹

The date of composition of the *Altès Méthode complète de flûte*, op. 31, 3 vols. (Paris: Millereau, [c. 1880]) has been shrouded in confusion throughout this century. Pierreuse gives the date of *Altès' Méthode* as 1906, and the publisher as Gallet. This is the date most staunchly supported by scholars as the date of first publication. Thus, Caratgé, editor of the 1956 re-edition of the *Altès Méthode* for Leduc, is quoted as having said unequivocally that the 1906 Gallet publication is the earliest Parisian publication.²²² However, following a line of clues in the 1906 treatise itself, as well as biographical sources which pointed to an earlier publication, I determined that the treatise's first publication probably occurred during *Altès'* tenure at the Conservatoire (1869-1893) or possibly shortly after his death in 1896.²²³ Confirmation of this suspicion was

²²¹ The *Méthode* has been out of publication for over a century. I have a microfilm copy of the first edition held at the Bibliothèque nationale.

²²² Wanda Sue Swilley, "A Comprehensive Performance Project in Flute Literature with an Essay on Flute Embouchure in the United States from c. 1925-1977," DMA dissertation, University of Iowa, 1978, 22-23.

²²³ Franz Pazdîrek, in the *Universal-Handbuch der Musikk-literatur* (Vienna: N.p., 1904-1910; reprint, Hilversum: Frits Knuf, 1967), lists the *Grande Méthode de flûte* by *Altès*, published by Glaëluwe, n.d. Albert Lavignac lists the *Altès Méthode* among his recommended treatises for

granted by the Bibliothèque nationale in Paris, which has forwarded to me a microfilm copy of the treatise dated c. 1880. Altès is remembered by his students as being a "very systematic" teacher which is reflected in the detail of his treatise.²²⁴

Taffanel's *Méthode complète de flûte* (Paris: Leduc, 1923, 1958) was written after Taffanel's death (1908) by his student Gaubert and based on extensive notes which Taffanel had compiled over his lifetime for a proposed treatise on the flute.²²⁵ Many of the exercises in the treatise are said to have been composed by Taffanel during his years as a teacher at the Conservatoire. These materials, including daily exercises and studies were kept in a large, open cabinet so that the students could borrow them as their practice required. Taffanel entrusted these materials to Gaubert shortly before his death. Later editors of the *Méthode* credit Gaubert with writing many new

the flute in *La Musique et les musiciens* (Paris: Delagrave, 1896), 113. Similarly Wanda Sue Swilley accounts for a quotation by the French flutist Barrère attesting to performing from the *Méthode* as early as 1889. The most recent past-Professor of the flute class at the Conservatoire, Michel Debost, who uses that *Méthode* in his teaching, tells me that he had always assumed that the treatise was written around 1870 or 1880 (private conversation, Washington, D.C., August 1991).

²²⁴ Lola M. Allison, "George Barrère," *The Flutist* (February 1921), 318.

²²⁵ Paul Taffanel and Philippe Gaubert, *Méthode complète de flûte* (Paris: Leduc, 1923, 1958), introduction.

exercises for the treatise, but there is great doubt as to the accuracy of this statement.²²⁶

Similar to the Taffanel-Gaubert "collaboration", the so-called "great article, 'La Flûte'" was written by Louis Fleury following Taffanel's death at the request of Albert Lavignac, and was based on the same notes by Taffanel which Gaubert used.²²⁷ Fleury relates that he was approached by Lavignac in 1909 to write the article.²²⁸ As of 1925 he was still at work on "La Flûte," as an appeal through North American flute periodicals for names of French flutists living abroad for inclusion in the article testifies.²²⁹ While this article does not in and of itself constitute a treatise on playing the flute, it does contain pedagogical instruction, as well as a wealth of supplemental information not included in Gaubert's treatise. There is no indication that the two works drawn from Taffanel's notes should be taken together as one composite work, yet I believe that the two works must be viewed as inseparable

²²⁶ Penelope Anne Peterson Fischer, *Philippe Gaubert (1879-1941): His Life and Contributions as Flutist, Editor, Teacher, Conductor, and Composer* (DMA Dissertation, University of Maryland), 115-118.

²²⁷ Taffanel and Fleury, 1483-1526.

²²⁸ Louis Fleury, "Souvenirs d'un flûtiste," *Le Monde Musicale*, vol. 35, nos. 19 and 20 (October 1924), 330.

²²⁹ Louis Fleury, "The Flute in Paris," *The Flutist* (August 1925), 183.

since they are drawn from one set of notes compiled by Taffanel for one treatise. Taffanel is credited with tailoring his teaching methods to the needs of the individual student, and for indulging in teaching practices which were contradictory to Conservatoire routine if he thought it necessary to bring out the best in his students. He took great pride in each of his students, and considered each a musical son.²³⁰

The work of Estelle Ruth Jorgensen has been invaluable in my development of a methodology by which the three treatises may be studied.²³¹ Jorgenson has proposed five elements of music: pitch, rhythm, timbre, dynamic, and form. Each of these elements is easily adapted to the characteristics of flute performance. The fact that she has combined melody and harmony under the element pitch is appropriate particularly to flute performance, since during the time period under discussion, the flute was considered to be a melodic instrument, that is incapable of producing more than one pitch simultaneously. The flute was responsible for harmony only in so far as its melodic line fitted with other ensemble melodies or harmonies. One additional element not identified by Jorgenson is the

²³⁰ Allison, 319.

²³¹ Estelle Ruth Jorgensen, *A Critical Analysis of Selected Aspects of Music Education* (Calgary, Alberta: The University of Calgary Department of Educational Administration, 1977), 15.

element of musical style (gained through taste, experience, and intellectual understanding). Presumably this is not an oversight on Jorgenson's part, but merely a factor she did not consider to be inherent to music proper. Nonetheless, learning musical style, phrasing, musicality, and historic truth in performance practice, in short the whole idea of tying the individual musical elements together into an enlightened performance, is an integral part of the education of a student. This sixth element will be added to the list for the purposes of evaluating the method treatises. Each of the three principal method treatises will be studied and evaluated based on the type of instruction and exercises devoted to the various component parts of each of six elements of music proposed above.

Falling under each broad element are typical skills and capabilities fully under the control of the flutist. In many cases these skills and capabilities are particular to the flute. The following is a list indicative of the kinds of skills and exercises relative to each element on which the method treatises should be found to offer varying degrees of instruction.

- Pitch -- Intonation, general technique and pitch accuracy, dexterity and digital virtuosity, use of various key signatures, alternate fingerings, individual digit technique, range extension exercises.

Rhythm -- Rhythmic accuracy, pulse, metre, elementary phrasing, breathing technique/breath length,²³² technical and tonal competency and comfort in all ranges and keys.²³³

Timbre -- Tone development, colour variety, intonation, extended timbres (harmonics, etc.), articulation,²³⁴ legato, embouchure, tonal flexibility.

²³² One of the greatest detriments to flute technique with respect to rhythm is breathing and blowing technique. Because of its construction (extremely little mouthpiece resistance), the flute requires a tremendous amount of air, typically expelled very fast. This leaves the unexperienced flutist gasping for breath at inopportune places within a composition (a problem few other instruments have). The net result is at best creating holes in the texture, but more likely, bringing the rhythm to a halt in order to take enough breath, entering late and then speeding the rhythm at the end of a phrase in order to "make it" to the end before the breath runs out.

²³³ While this again may sound as if it were outside the range of rhythm, like breathing and blowing technique, technical and tonal competence and comfort may indeed affect the rhythm. Typically the flutist is required to "fly" up to or "whiz" down to notes at the extremities of its range. Fingerings are more complicated, and note reading is hampered by leger lines at both extremities of the range. In a similar manner, the Boehm-flute is built roughly on a C major scale; as the key moves further and further from C major the number of cross fingerings required for typical note patterns increases. Awkwardness on any of these fronts results in groping, which in turn results in improper rhythm.

²³⁴ For the purposes of this paper articulation will be considered a component of timbre. Even though the choice of articulations employed by the flutist is ultimately determined by the required style of a composition, the method of developing articulation in a flutist is closely related to the study of sound production, hence timbre.

Dynamic -- Soft to loud flexibility, projection quality, register control, tonal "gimmicks" allowing the impression of dynamic change.²³⁵

Form -- phrasing, variation ability and versatility, instruction in music theory.

Musical style -- phrasing, direction, line, ornamentation, composite performance technique, instruction in history of music and the flute.

Each of the three treatises which will be investigated as the basis for this study claims to be "complete;" therefore, each should be expected to discuss all of the elements above to some extent. However, it is not expected that any of the three treatises will address all the elements equally. In fact, should any of the three treatises be found to give equal weight to all of the musical elements, it would not provide much information as to which facets of flute performance were considered important at the time of its composition. This fact would effectively diminish the usefulness of any treatise to this study of flute performance practice.

In discussing performance practice implications revealed by the three treatises, it will be useful to examine the content of each from three points of view.

²³⁵ Such tonal "gimmicks" usually are a result of manipulating the sounding strength of upper partials relative to the sounding strength of the fundamental (intensity). These "gimmicks" are largely a result of embouchure use and are somewhat distinct from tonal development.

First, an overview will be presented, including a careful look at the point of origin for student instruction, pacing of presentation, and both notable inclusions and exclusions of information. Second, an analysis of the context of the treatise as pertains to the six components of music will be conducted. Third and finally, a close examination will be devoted to the several topics given special attention by each author in his treatise.

In the concluding chapter, the methods will then be compared and contrasted based on the type of instruction offered, assumed starting and completion level of the student (including perceived experience with the Boehm-flute), and each professor's degree of emphasis of various facets of the educational process.

Chapter 5

Méthode à l'enseignement by Victor Coche

The new Boehm-flute was accepted by the Académie des sciences in late March 1838. By the end of the next summer, two method books for this new flute had been registered at the library of the Conservatoire de musique. The first, a small treatise of sixty-three pages by Pierre Hippolyte Camus,²³⁶ was accepted by the Bibliothèque on 26 June 1839; the second was Victor Coche's monumental 238 page *Méthode pour servir à l'enseignement de la nouvelle flûte*,²³⁷ accepted 26 August 1839. With this treatise, Coche, who was one of the most volatile and controversial members of the Parisian flute community, scored a brilliant triumph: his is a thorough-going treatment of the complexities of the mechanism, technique, study, practice, and performance of the Boehm-flute.

²³⁶ Pierre Hippolyte Camus, *Méthode pour la nouvelle flûte-Boehm, dédiée à M^r Theobald Boehm, [_____] Musique de Roi de Bavière et inventeur de cet instrument par Camus, 1^{re} Flûte de Théâtre Royal Italien (Cet ouvrage comprend aussi l'usage de la clef de sol# inventée par M^r Dorus)* (Paris: J. Meissonnier, [1838]).

²³⁷ The origins of the *Méthode à l'enseignement* are outlined in chapter 2.

The *Coche Méthode à l'enseignement* has never to date been the subject of scholarly study; in fact, the treatise rarely merits a reference in the writings of all but the most thorough authors. The reason for this obscurity cannot be conclusively explained; however, a number of circumstances may have been factors in causing this unjustified position for the treatise. Coche was never Professor of the first class at the Conservatoire. His superior, Jean-Louis Tulou, was an unrelenting advocate of the old-system flute until his death in 1875. By all indications the *Méthode à l'enseignement* was only published privately by the author himself (no reference to the treatise has yet been found in a major publisher's catalogue). Furthermore, the treatise never seems to have been reprinted. Any one of these factors individually could have prevented the treatise from gaining a position of high importance in the flute community of Paris. All of them taken together could easily have sounded the death knell of the *Méthode à l'enseignement*.

Nevertheless, the fact remains that the *Méthode à l'enseignement* was the first major treatise published for the purpose of instructing players of the Boehm-flute. If for no other reason this treatise should be studied for its content. Once study has commenced, the merits of the treatise quickly become apparent, particularly in the realm

of nineteenth-century performance practice. It is for these two reasons that the *Méthode à l'enseignement* takes such a prominent position in this study.

Contents of the Treatise

The *Méthode à l'enseignement* is neatly but informally and somewhat spontaneously laid out: each topic is presented as required to meet the needs of the student and teacher. No overall plan of organization, such as formal division into chapters, lessons, or parts, is employed.

Coche opens his treatise with an invocation to M^r Cherubini, then director of the Paris Conservatoire, in which he enumerates Cherubini's accomplishments in typical terms of "respect and admiration." Following this invocation, Coche continues with twenty-two pages of discussion, first about the Boehm-flute, and then about basic music theory.

Because Coche pioneered the hard fought battle to win acceptance for his model of the Boehm-flute²³⁸ by the Académie des sciences, there is no wonder that he includes at the front of his treatise a substantial portion of the

²³⁸ Coche's model of the conically bored silver flute did differ in a number of respects from Boehm's flute; however, for convenience sake, the title of Boehm-flute will still be used to designate this model. See chapter 2 for further details.

document which he submitted to that body for approval, the *Examen critique* [1838].²³⁹ The first item to appear in the treatise is the written response to his report issued by the Académie and signed by Cherubini, Paer, Auber, Halévy, Carafa, and Berton, which Coche includes at the conclusion of his *Examen critique*. This response from the Académie acknowledges the history of construction of the flute, the impossibility of constructing the flute based solely on acoustic principles, the difficulties of tuning the flute, Boehm's principles in devising the structure of the new flute along with Buffet and Coche's modifications, and Coche's own glowing resumé. The Académie concludes by accepting both Coche's report. When Coche reprints this letter into his treatise, he incorporates, into the text of the Académie's letter, a statement from the Académie accepting his treatise as well. Interestingly, at the date of the Académie's acceptance of Coche's flute, the *Méthode* was not yet complete, and in fact, no mention of the method was made in the original document from the Académie. Coche obviously feels that there is no harm in claiming that his *Méthode* had also been accepted by the Académie.

Coche continues his propagandizing by including the whole of his *Examen critique* as submitted to the

²³⁹ This document has been previously discussed in chapter 2.

Académie.²⁴⁰ The ensuing pages discuss the imperfections and performance difficulties borne by the old flute which led many inventors and flutists to experiment with the construction of an improved flute, the improvements and modifications initiated by Boehm and which were subsequently brought to "perfection" by Coche, and the appropriate conclusions. By including these materials directly in his treatise, Coche successfully argues for the virtues of the new Boehm-system flute, an important step in the process of convincing performers to take up this model instead of the old-system flute.

With the student thus convinced that he has chosen the best model of the flute for his musical enterprises, Coche then initiates a study of music theory.²⁴¹ He begins his instruction with the following:

The study of music is divided into two parts: the theoretic and the practical. Theoretic music teaches the diverse relation and combination of

²⁴⁰ The text of pp. 4-12 of the *Méthode à l'enseignement* is nearly identical to the text of pp. 3-19 of the *Examen critique*. Only three sentences of the interior text, and the last paragraphs of the conclusion (these reflecting changes made to the flute between the time of the *Examen* and time of the *Méthode*) differ between the two sources.

²⁴¹ The use of masculine and feminine pronouns is often a touchy subject in a paper such as this. However, it must be confessed that during the nineteenth century, women were virtually forbidden from playing the flute for many social reasons. The chance that a woman of Coche's time would actually take up the instrument is slim at best. Therefore, masculine pronouns may be used comfortably in the context of nineteenth-century flute students.

sounds, and it explains the causes of impressions which the sounds once combined produce on us. Practical music puts the majority of the means of music theory into use.²⁴²

This said, Coche elaborates on the theory of musical sounds, noting that a musical sound is distinguished by pitch, duration, force, and timbre. He offers his definition of music and speaks briefly of unisons and chords, melody and harmony, and high and low pitches. Then with the following comment, he initiates a more practical study:

There are signs which represent to the eyes, the sounds, their intonation, their duration and the silences which intermingle in combinations: the assembly of signs is called musical notation.²⁴³

Following this carefully conceived introductory statement, he commences his patient presentation of rhythmic note values, the placement of notes on the staff, the composition of an octave and a major scale, accidental notation, intervals by number, intervals by quality, and the inversion of intervals. Roughly following a pattern of alternating the elements of rhythm and pitch, Coche continues with metre, accidentals, modes, and abbreviations of rhythmic

²⁴² Coche, *Méthode à l'enseignement*, 13: "L'étude de la musique se divise en deux parties: la théoretie, et la pratique. La musique théorique enseigne la connaissance des divers rapports et des combinaisons des sons, et elle explique les causes des impressions que ces sons ainsi combinés produisent sur nous la musique pratique met en usage la plupart des moyens de la musique théorique."

²⁴³ Ibid., 13: "Il y a des signes qui représentent aux yeux, les sons, leur intonation leur durée et les silences qui se mêlent à leurs combinaisons: la réunion de ces signes s'appelle la notation de la musique."

patterns. He concludes his preliminary discourse with signs for repeats and dynamics, verbal abbreviations, and Italian terminology.

With a verbal explanation of the basics behind him, Coche introduces the instrument to his students with a simple description of the flute's design, the fingering and key system, as well as information on the assembly of the flute and the position of the hands and body in holding the flute. In describing the manner of producing a sound on the flute, Coche presents perhaps the clearest written description of the physical requirements for producing an embouchure ever noted. While it would be possible for a student to produce a good embouchure merely from his description, the embouchure should be fool-proof when configured in conjunction with a demonstration by a master.

Coche then commences practical study of the flute by dealing with two octaves of a C major scale, the easiest scale to finger on the Boehm-flute,²⁴⁴ introducing first the lowest octave and then the slightly more taxing middle octave. With this introductory scale as a point of reference, he presents six pages of studies based on the notes and scale of C major. The first page is devoted to

²⁴⁴ Unlike the old-system flute which was built on the diatonic scale of D major, the Boehm flute is constructed on a chromatic scale figure, resulting in C major as the one scale employing the fewest cross-fingerings.

the study of the slur, the dot-staccato, and the wedge-staccato. The next two pages present practical applications of the simpler note values in the basic time signatures. He concludes with patterns on increasingly larger intervals, taking the student up to the highest "A" on the flute.

Coche now introduces an interesting section entitled "Instrumental Solfège." While the types of studies represented are not new or unique, the concept of instrumental solfège is. The philosophy behind instrumental solfège is to allow the student to become familiar with reading musical notation by emphasizing pitch in various key signatures, rhythms, and metres. Each solfège study is a self-contained unit incorporating the major scale, arpeggio, and dominant-seventh chord, followed by two or more melodic studies. The melodic studies are conceived in such a way as to be accompanied by a second flute, cello, or piano.

Following his directions for the instrumental solfège, Coche diverts briefly by providing a one page discussion of breathing and tone production. In this small section, he emphasizes that proper sound production is the product of proper regulation and use of the breath. He briefly introduces such concepts as phrasing, dynamics, and tone colour, suggesting that these are elements of flute playing which must ultimately come under the strict control of the flutist. He then presents an exercise derived from

M^r Baillot for long tones [*sons droits*] in which the tone of a single note is sustained at a uniform intensity, *forte* or *piano*, throughout its entire duration. This exercise is to be applied to the major scales of each instrumental solfège exercise.

Over the next thirty-one pages, Coche gives his fifteen solfège exercises, one for each major key signature up to seven sharps and seven flats. These studies are progressive in their presentation of rhythm, pitch, and articulation, but are very quickly paced, rapidly assuming a high level of difficulty. The duets are all in repeated binary form, modulating to the dominant at the first repeat, and returning to the tonic key at the end. Throughout the exercises the difficulties as a result of pitch are carried in the teacher's part, while the rhythmic difficulties are mostly contained in the student's part. No dynamics are presented, and only a limited number of modulations are initiated from the student part, leaving the teacher's part to carry the dynamic and harmonic interest of each study. The rhythm of the teacher's part throughout provides gentle and uncomplicated assurance of the beat; however, the student's part often has greater complexities such as syncopation and other off-beat patterns. The two parts together often result in a high degree of rhythmic complexity, including binary against ternary subdivisions of

the beat. Even though the studies eventually acquaint the student with the entire range of the flute scale, the vast majority of the pitches presented in the student's part fall in the relatively moderate range of the upper half of the middle octave and the lower half of the upper octave, this being the range most likely to be encountered in musical performance. Overall these studies stand as a testament to the speed with which a student was expected to gain proficiency on the new instrument. This would have been far easier to accomplish if the student had already been familiar with the flute and music reading and therefore, had merely been using these studies to become acquainted with the Boehm-flute. From the progression of materials presented, it is clear that Coche expected that by the end of the instrumental solfège his students would be familiar with the mechanics of the flute and of musical notation.

Following the solfège studies, Coche gives four tablatures of specialized fingering to assist in the production of difficult tonal or technical passages. The first tablature gives all the possible fingerings for each chromatic tone. The primary fingerings given are the same as those in use today up to A^3 , similar but slightly different from $A^{\#3}$ to C^{b4} , and considerably different from $C^{\#4}$ to E^{b4} .²⁴⁵ On the old-system flute, alternate

²⁴⁵ The superscript numbers shown here represent the octave of the flute's range in which the note is produced. For

fingerings often amounted to nothing more than differing combinations of fingers while the fingers retain their normal positions. With this tablature, Coche suggests a number of useful fingerings which require the finger to come to rest on a different part of its key, covering either the hole in the centre of the key, or bringing down only the ring by itself. In some cases Coche has even suggested that in order to obviate the cross-fingerings in certain note patterns, a finger can be manoeuvred into such a position as to bring down not only its key, but the adjacent key as well.

The second tablature includes fingerings, which differ from the primary fingerings, for all major and minor trills. Many trill fingerings include the preferable notes of termination, including simplified fingerings for the terminating note where possible. Coche designates certain trill fingerings for use in soft or loud passages, on long or short trills, and as a part of certain passage work. In most cases Coche adds verbal phrases beneath each trill fingering such as "very in-tune, but very difficult," "good and easy," and even "very easy with the key I have added." His trills do involve a number of keys which do not appear

example C¹ corresponds to "middle C" and is the lowest C produced by the flute. C² would sound one octave higher, C³ one octave more, finally ending with C⁴, the highest C produced by the flute.

on our current flutes. One is an F[#] trill key which is placed in the same position as our current B^b lever; its action is possibly similar to our C[#] trill key. The second is Coche's duplicate G[#] lever. The third is a key never shown on Coche's diagrams of the flute, but which seems from his description to be involved with the production of A-natural, and is probably affiliated with his G[#] mechanism.

The third tablature gives fingerings for the *notes sensibles*, fingerings which tighten and smooth the half-step interval in a tonic-leading tone-tonic note progression. Not all notes are available through this technique, only those with "difficult cross-fingerings." Coche further indicates that in slow movements the performer should "advance the lips and roll out as necessary," thus raising the pitch of the leading tone noticeably.

The fourth and final tablature gives fingerings for turns. Each turn shown employs either whole or half-step motion upward, but always only half-step motion down. Only those fingerings which would differ from the norm are given. As with the trill tablature, indications are given for the flutist's best choice of fingering in certain dynamics and tempos, especially as regards the third octave turns.

Once Coche has laid out the tablatures of all the necessary fingerings, he moves on to a sixty-page section

devoted to the timbral and stylistic skills and effects necessary for the flutist. A number of oddly related skills fall under this section. His first series of studies covers specialized articulations, many of them relating strongly to string bowing technique. In the midst of this series of articulation studies, he includes one page concerning the manner of breathing to be employed by the wind musician, half and whole breaths, and the proper places to use each. Following this digression, a second series of studies covers the various ornaments and ornamental notation present in music. A pair of rhythmic studies is inserted into this series of ornaments, one for syncopation, the other for triplets. He then includes a brief section on the use of *note sensible* fingerings referring to tablature 2, and on changing fingerings while on the same note for intonation and colour, referring indirectly to Tablature 1 [chromatique]. At this point Coche presents three pages of verbal instruction discussing the "elements of a good performer and later the means of obtaining them."²⁴⁶ Following this, he returns to the study of articulation, addressing not the specialized styles of articulation presented earlier, but rather the possible patterns of slurring and tonguing. He then offers two pages devoted to

²⁴⁶ Coche, *Méthode à l'enseignement*, 116: "...qualités d'un bon exécutant nous expliquerons ensuite par quels moyens on peut les obtenir."

lists of supplementary music, primarily drawing on French sources but also including a number of German composers. Finally, he concludes this section with verbal instruction entitled "General execution of taste, accent, musical phrase, nuance and expression."

The Coche treatise draws near to its close with three smallish sections, reviewing and completing the processes begun prior to this point in the treatise. The first of these sections includes ten virtuosic, single movement character pieces. Each piece employs strongly contrasting themes and modulations. While there is little in common formally between these pieces, they are *in toto* similar in form to the parlour pieces and divertissements for solo flute with accompaniment coming into vogue during the middle part of the nineteenth century.

The second section is comprised of three pages dealing with the production of harmonics on the flute, and their use in easing the technical and colouristic demands of certain passages. Coche suggests that this technique is new to the Boehm-flute. Acoustically, of course, the old flute is capable of producing harmonics; however, it is likely that because the Boehm-flute is constructed much more truly to acoustic principles than the old-system flute, it is more capable of offering harmonics as a useful tool in the interpretation of music.

The third section covers the technique of improvising a prelude or and embellishment on a fermata.²⁴⁷ After a lengthy verbal description of what does and does not comprise a good prelude, Coche presents "not models, but indications and demonstrations of what is possible on the new flute in this capacity."²⁴⁸ Each exercise is made up of a highly virtuosic prelude and a rather technically limited and interestingly barren etude, one set for each of most major and relative minor key pairs.

In the final presentations of his treatise, Coche gives a number of offerings establishing future working patterns for the flutist. First, there is a section of fourteen daily exercises, complete with the invocation that they must be performed by heart. Second, he provides a set of thirty small finger exercises in D major employing diverse articulations and indicates that these studies

²⁴⁷ The section which Coche includes on preludes and fermatas differs substantially from that included by Quantz in his more well-known treatise. Coche illustrates his point mostly through example, whereas Quantz includes lengthy verbal instruction and only limited musical examples. Any reader interested in the historical changes in precluding which transpired between the time of Quantz and Coche should refer to Betty Bang Mather and David Lasocki, *The Art of Preluding 1700-1830 for Flutists, Oboists, Clarinetists and Other Performers* (New York: McGinnis and Marx Music Publishers, 1984).

²⁴⁸ Coche, *Méthode à l'enseignement*, 190: "...sans vouloir indiquer les suivantes comme des modèles on les donne ici comme des essais qui montreront les ressources de la nouvelle flûte dans cette occasion."

should be transposed to all keys. His final inclusion is a number of reflections on music drawn from the works of M^r Baillot and M^r Dauprat.

The whole of the treatise takes the student from the earliest stages of work with the flute through to a relatively high virtuosic standard.

Six Elements of Music

Six elements of music were outlined in chapter 4, inclusive of the skills and components falling under the direction of each element which are fully under the control of the flutist, as opposed to being imposed by the composer. It would be expected that most, if not all, of these skills and components should be addressed in every treatise to some degree. The relative amount of stress placed on each skill or component by an author should reflect that author's wish to emphasize or de-emphasize each skill and component, and at the same time speak to the external forces at work in shaping his view of the requirements of musical education. These large elements are, again, as follows: pitch, rhythm, timbre, dynamic, form, and musical style. Coche's contributions to each large element through his treatise may now be catalogued, and the performance practice implications of each be discussed.

Pitch -- General technique and pitch accuracy, dexterity and digital virtuosity, use of various key signatures, alternate fingerings, intonation, individual digit technique, range extension exercises.

Coche places substantial emphasis on most of the various components of the element of pitch. The first four components listed above consume his attention throughout the treatise. Intonation is indirectly addressed at a number of points in the body of his work. The final two components - individual digit technique and range extension - only receive cursory treatment.

The component of general technique and pitch accuracy is dealt with throughout the treatise. The total package of general technique and pitch accuracy is addressed primarily through the series of instrumental solfège exercises. The student receives a basic introduction to note reading in the opening theoretical sections of the treatise. One assumes that the student is not expected to memorize all of the notes and their positions from this initial presentation. However, once the theoretical groundwork is laid, the student is presented with each note and its fingering individually, thus bridging the gap from theoretical to practical. Further clarity may be established by dividing this component into its sub-components.

It is clear from the outset that Coche considers scales, arpeggios and chords to be the basis of the general

technique of the instrument. In his instructions for the instrumental solfège section, he notes that students should follow each scale with the arpeggio and dominant-seventh chord "to exercise...almost all the musical combinations."²⁴⁹ Considering that the majority of works composed at or prior to this time, including those for the flute, had strongly harmonic implications, the above statement is accurate; this harmonic emphasis raises the importance of the tonic major and minor scales, arpeggios, as well as closely related chords such as the dominant-seventh. In purely virtuosic flute music this is even more the case since the virtuosic elements of such compositions rarely incorporate figures not covered by one of these musical cells.²⁵⁰ The only way in which Coche perhaps does not provide the flutist with all of the material necessary to develop complete control in this technical area is that his scale, arpeggio, and chord studies usually work the range from tonic to tonic over two octaves, or from tonic to dominant over two and one-half octaves. By limiting the

²⁴⁹ Ibid., 35: "...sur lesquelles il convient de s'exercer beaucoup puisqu'on les retrouve dans presque toutes les combinaisons musicales."

²⁵⁰ The use of scale and arpeggio figures in virtuoso flute compositions of the mid-nineteenth century is one of the major topics covered in Lee Lattimore's *Les Morceaux de Concours*. Lattimore's findings will be incorporated into this and the following two chapters.

range, Coche leaves nearly one full octave of the flute's range unpractised in each key signature and on each element.

Coche addresses pitch accuracy throughout the whole of the practical sections of his treatise, but again primarily in the instrumental solfège section. By carefully introducing only one or two new notes for each set of several exercises, he allows the student to build on past knowledge without overwhelming the student's capacity to incorporate these new notes into his technique. He has composed each of the solfège exercises progressively with increasingly complicated combinations of pitches within the tonic and dominant keys. Because Coche limits himself to these two keys, he does not require the student to pick out random notes, but rather allows the student to build his pitch accuracy within the confines of a specifically limited set of pitches.

The component of dexterity and digital virtuosity is similarly developed throughout the treatise since Coche adopts a relatively progressive format of technique. However, with the exception of the inclusion of numerous alternate fingerings to ease difficult technique (to be discussed later), he delays emphasizing the study of extreme dexterity and digital virtuosity until the latest stages of his treatise. It is only in the daily exercises and subsequent small finger-pattern exercises that he presents

studies directed toward the development of these techniques. In total, he only devotes twenty-three pages to virtuosic studies and, in fact, never reaches the point of extreme virtuosity demanded by the contemporary composition of his time.

The use of various key signatures is prevalent throughout the method. Coche first outlines the fifteen common key signatures (signatures carrying up to seven sharps or flats, plus C major), and the related major and minor scales in the theoretical portion of the treatise. Turning to the same formula used in introducing the notes and their positions on the staff, he then employs each of the fifteen key signatures in a practical manner through the instrumental solfèges. Many of the key signatures return later in the treatise. However, it should be noted that Coche significantly downplays the minor keys in relation to the major keys. The fact that all fifteen key signatures are used in the treatise points to a unique contribution made by Coche. All other methods for the flute known to this author work with only thirteen key signatures, usually combining the keys of six sharps and six flats into one study. By including fifteen key signatures, Coche highlights the ability of the new flute to modulate effectively to any key while still preserving good relative intonation.

Alternate fingerings hold an important position in Coche's treatise. As described earlier, there are four tablatures documenting alternate fingerings for many notes, as well as a small section later on in the treatise on the use of harmonic fingerings in the upper registers. These fingerings would, of course, be unique to the new flute, and it is quite appropriate that Coche would present such a thorough sampling of the possibilities in the first substantial method for the Boehm-flute. The necessity of incorporating these fingerings into the treatise, however, demonstrates a deeper need: to have many resources in performing the highly virtuosic and intricate passagework common to the flute literature of Coche's time. In the pages of the treatise following the alternate fingering tablatures, he includes numerical indications where reference to one of these tablatures would ease the difficulties of the passage at hand.

Coche never directly addresses the problem of intonation, but does approach the topic by two rather circuitous routes. He first discusses intonation in his prefatory materials concerning the liabilities of the old-system flute and the merits of the Boehm-flute. Throughout this section, he dwells on the improvements made by means of the Boehm-flute to ease the control of intonation. At the time of Coche's writing, these difficulties were a major

hurdle to the flutist. Previously only the finest flutists were ever able to conquer the difficult intonation of the old-system flute. With the advent of the Boehm-flute and its relatively accurate intonation, the stakes were changed, allowing all who picked up the instrument to be fairly certain that with proper sound production, the instrument would respond with nearly true intonation.

Coche's second method of suggesting the study of good intonation was by composing each exercise and study throughout the first 85% (approximately) of the treatise as a solo accompanied by a part for a second flute, cello, or piano. As a result, as long as the student were working with his teacher or fellow musician, he could not get away from the need to preserve good intonation.

Individual digit technique is only addressed in the small section of finger exercises (pp. 229-233). In this section Coche presents one- and two-bar exercises to work only the finger changes required by just a few notes at a time. He concentrates on the few remaining cross fingerings left on the Boehm-flute, and the patterns which necessitate a substantial movement of the fingers between notes. These small studies do not strengthen individual fingers and quicken their precision as do the studies of later authors.

Range extension exercises do not strongly figure in Coche's conceptualization. Each note of the flute is presented in the initial chromatic tablature ranging from C^1 (middle C) to E^{b4} three octaves and a minor third higher. The fingerings for the notes from C^1 to C^{b3} are introduced in the instrumental solfège; however, the highest notes do not receive any special practice. While the full range of the flute is used throughout the treatise, the bulk of the material presented is concentrated in the centre two octaves of the flute's range. The proportions of his range emphasis are similarly reflected in the contemporary flute literature.

Rhythm -- Rhythmic Accuracy, elementary phrasing, pulse, metre, technical and tonal competency and comfort in all ranges and keys, breathing technique/breath length.

Coche devotes a great amount of space to the development of rhythm. Each of the components above are treated in detail, except the final one, breathing technique/breath length. As already noted, Coche intended that the treatise would be studied in conjunction with a master of the flute. Breathing technique and breath length are not only difficult to present in words, but would be best left to the care of an instructor to insure that the student developed the requisite skills properly. It is not unlikely, therefore, that this component was left out of the

treatise in order to avoid conflict between written instruction and the demonstrations of a master teacher.

The study of rhythmic accuracy takes a primary place in the *Méthode à l'enseignement*. As he does with pitch reading, Coche introduces rhythmic notation and metre in the opening theoretical sections of the treatise, subsequently putting these to use in practical application. In his instrumental solfège, he introduces rhythms in progressive order, but does not hesitate to present them at their introduction in extremely complex combinations. A student must feel comfortable with his rhythmic capabilities and be inclined toward easy acceptance and understanding of rhythms to succeed at these studies. As shown earlier, the accompaniment part of the studies contributes to the high degree of rhythmic complexity. The instrumental solfège contains most of the rhythmic combinations found throughout the body of the treatise. Following the instrumental solfège, rhythms do not continue to increase in complexity at the rate exhibited in the solfège studies. Only the re-introduction of syncopation (p. 108)²⁵¹ and the introduction of triplets (p. 112) adds to the rhythms found in the solfège studies.

²⁵¹ Extended syncopation passages first appeared in the eighth solfège study (p. 41).

Elementary phrasing is present on a number of levels throughout the *Méthode à l'enseignement*. In each of the solfège studies, Coche indicates the proper places for breathing by inserting a comma above the musical text at the point of the breath. These indications are not given in the teacher's part. It must therefore be assumed that they are given to the student to ensure that the rhythm of the work will not be disrupted by breathing at inappropriate places. A more sophisticated although still elementary manner of phrasing is discussed further on in the treatise (p. 85). Here he describes the "complete breath" and the "half breath," indicating that each must be done in accordance with the musical phrase. He lays out the rules governing proper and improper places to breathe, as well the use of the complete and the half breath. However, even after this discussion, he continues to indicate breathing places in the student parts of the musical text, showing the complete breath with a double comma, and the half breath with the single comma. Clearly, Coche has assumed that proper phrasing is best learned from experience and not verbal instruction. His practice of indicating breaths continues to the end of his treatise.

The assertion of pulse is not given great prominence, but, like the pitch component of intonation, is suggested in a number ways in the treatise. In the

theoretical discourse at the opening, Coche describes the basic mechanics and structure of the metronome, its use in keeping a steady beat, and demonstrates how metronome markings are given at the head of a composition. As a part of the practical application of this study, most pieces and studies are given metronome markings in addition to their Italian terminology, suggesting that the metronome should be an integral part of the practice of the student. Despite the rhythmic complexities resulting from the presence of the accompaniment part in many studies, the accompaniment nevertheless helps the student establish and maintain a steady pulse.

Metre perhaps gains a somewhat higher profile in Coche's work. Again in the theoretical instructions at the beginning, Coche devotes a substantial portion to metre under the heading "Division of time into bars." Here he stresses that a bar is "... a duration of convention which one takes for unity."²⁵² By this comment, he implies that metre is a convenience for the performer, and not a function of musical meaning *per se*. In the continuation, Coche designates the whole note and the dotted-half note as the standards for measuring, giving the basis for duple and triple time. He discusses the conductor's beat pattern, and

²⁵² Coche, *Méthode à l'enseignement*, 15: "On appelle mesure une durée de convention que l'on prend pour unité."

up-beats, as well as the use of the fermata as a device for elongating the time of the bar. In listing the time signatures and how to read them, he includes 4/4, 2/2, 3/4, 2/4, 3/8, 3/2 as simple time signatures (those signatures in which the basic pulse is divisible by two), and 6/8, 9/8, 12/8, and 6/4 as compound time signatures (those signatures in which the basic pulse is divisible by three).²⁵³ He continues to use each of these metres throughout his treatise.

The final rhythmic element, technical and tonal competency, and comfort in all ranges and keys, has already been demonstrated to have received high priority. Since gaining this competence is the primary goal of the instrumental solfège studies, insofar as it affects rhythmic stability, it may be presumed that the extensive solfège section has achieved this goal.

Timbre -- Tone development, extended timbres,
articulation, colour variety, intonation, legato,
embouchure and tonal flexibility.

The element of timbre is not heavily weighted within the *Méthode à l'enseignement*. Instruction in elements of timbre is presented in irregular segments.

²⁵³ It should be hypothesized that Coche's inclusion of 3/8 as a simple metre, that is each of the fundamental eighth-note beats as divisible by two, means that at this time 3/8 was considered to suggest a moderate tempo, and not a faster, gigue-like tempo as is commonly performed today.

Throughout the treatise, we find that Coche has chosen to deal with rather surprising facets of this complex issue. One would expect that tone development would take a central place in any discussion of timbral elements; however, he works with various issues of tone development over the course of his treatise without ever entering into a detailed discussion of the requirements for gaining this skill. Articulation and extended timbres occupy the highest position of all the components of timbre in terms of space and interest devoted to each by the author. The remaining components are only touched upon lightly in the treatise.

With respect to the amount of space which Coche devotes to technical matters of flute playing, tone development is significantly down-played. In fairness to Coche, it is clear from the way he contrived his treatise that he intended the student work consistently with a teacher. As tone development is a very difficult topic adequately to cover in writing, he may well have assumed that this vital aspect of flute playing would be attended to by the instructor. Coche does not totally eliminate all work with tone development from his treatise, but presents it sporadically and rather idealistically.

It has already been shown above that Coche's instructions for producing a first sound on the flute are remarkable in their clarity. A few pages later, at the

start of his instrumental solfège, he speaks at length of the best qualities of the breath. Here he offers that "knowing how to produce a good sound is *half of being a good instrumentalist*,"²⁵⁴ but he gives no concrete instruction for obtaining a good sound save that he introduces the study of long tones. Long tone studies are to be subsequently applied to the scale exercises of the instrumental solfège. After p. 36 of his treatise, Coche does not return to the topic of tone development.

The most fascinating example of timbre as relates to the flute arises in connection with Coche's strong emphasis on articulations. Through skillful use of attack and release, Coche puts the wide range of timbre available to the string player through bowing technique into the hands of the flutist. This topic will be discussed at length further on in the chapter. Coche also provides an interesting example of extended timbres by his inclusion of the section on harmonics. While his numerous inclusions of alternate fingerings do not in themselves constitute extended timbres, he specifies that some of these fingerings can be employed to produce special effects of colour.

Instruction in colour variety and intonation as they pertain to timbre is given by Coche primarily by means

²⁵⁴ Coche, *Méthode à l'enseignement*, 36: "Savoir produire de beaux sons c'est posséder la moitié du talent d'un bon instrumentaliste" (Altès' italics).

of special fingerings. At the time that he introduces long tones, he also mentions a number of colours which the flutist must ultimately have at his disposal. However, the bulk of the colour and intonation variety is contained in the four tablatures of the treatise, where he includes fingerings to be used in certain timbral situations. Also his special section on harmonic fingerings is given partly with the intent that these fingerings could be used for either intonation or colour.

In a similar manner, the study of a pure legato, as well as embouchure and tonal flexibility are almost categorically ignored by Coche. Late twentieth-century pedagogical practice dictates that the perfection of each of these elements would theoretically be best accomplished by the study of large intervals, played legato or separated. He does include some interval study, but only in the earliest stages of the practical portions of the treatise. It cannot be assumed that these interval studies were intended as anything more than fingering and basic tone production exercises. Most of the virtuosic passages in the studies and finally in the daily exercises are in conjunct motion. Exclusive use of conjunct motion simply will not allow the development of the extraordinary flexibility required to perform many of the orchestral passages then being written for the flute, for example the solo passages

of Rossini's overture to *William Tell*. The closest Coche comes to developing this flexibility in his students is by his recommendation of the eighteen studies from the *Méthode*, op. 99, by Berbiguier, which emphasize flexibility. Either Coche was accomplished at this flexibility himself and naturally assumed that his students would be likewise, he found it a difficult topic to teach, or he simply was not cognizant of the profound need for this technique in the performance of orchestral repertoire. In any case, this is one point on which Coche has failed to offer adequate instruction to his readers.

Dynamic -- Soft to loud flexibility, tonal "gimmicks"
allowing the impression of dynamic change,
projection quality, register control.

Even more than most components of timbre, Coche regards the study of dynamics as of minimal importance. He includes descriptions of the various dynamic levels and does employ dynamics in many of the studies. However, he does not devote any substantial amount of discussion to their perfection, nor does he employ extreme dynamics in close succession except in the characteristic pieces. Early in the treatise he offers the passing comment that "one must [be able] at will [to] sustain the sound with equality, making it sound *weakly or moderately, inflating it,*

diminishing it, modifying it in various ways."²⁵⁵ Following this comment little more is offered on the components of soft to loud flexibility, projection quality of the sound, or register control. A brief study is given toward the middle of the treatise on the *sons filés*, after which time Coche requests the practical application of dynamics in the studies.

Mention must be made yet again of Coche's inclusion of harmonics and special fingerings, this time in the context of their use in providing the illusion of dynamic inflexion. He has clearly included these in his treatise in part to ease the task of projecting dynamic changes. In this instance, the case of harmonics must be particularly noted, as he specifically mentions their value in producing an echo effect.

While it is known that great dynamic contrast was an integral part of nineteenth-century orchestral technique, the reason why Coche chose not to include substantial studies on dynamics cannot be positively determined. It is, however, possible, because the treatise was written so soon after the introduction of the Boehm-flute, that Coche himself had not yet realized the true dynamic capability of this instrument. Unlike the Boehm-flute, which allowed

²⁵⁵ Ibid., 36: "...il faut, à volonté, soutenir le son avec égalité le faire entendre faiblement; le menager; l'enfler; le diminuer; le modifier de diverse manières."

performers a tremendous dynamic range particularly in the forte ranges, the old-system flute had a severely limited dynamic range; it was hardly able to produce more than a *mezzo-forte* on our modern scale and, even in its full dynamic capacity, was not capable of playing on equal footing with the other instruments of the orchestra. As a result, it is reasonable to hypothesize that the prevailing instincts of the flutist just taking up the Boehm-flute still directed him to produce as much sound as possible in order to compete with the volume of the nineteenth-century orchestra. Even though a performer would immediately be able to produce a greater volume of sound in the Boehm-flute, it could have easily taken a number of years for performers to realize that this new instrument was more than capable of holding its own in terms of volume within the orchestra. Only when this realization was made would techniques for modifying the dynamics of the flute be pioneered.

Form -- Instruction in music theory, phrasing, variation ability and versatility.

Form is a difficult element to impart to a student through a treatise such as the *Méthode à l'enseignement*. However, Coche manages to provide a small body of information on each component of this complex element through the teachings of his treatise.

Much has already been said with respect to Coche's opening theoretical instructions. However, how these instructions give the student a sense of form has not been explored. A number of theoretical elements presented by Coche begin to build the student's vocabulary and arouse awareness of how the small musical elements of notes and rhythms fit together to make the whole: intervals and their inversions, metre, the "power of tonic," intervallic patterns for major and minor scales, and formal signs such as repeats, D.C., and D.S. No deeper discussion of the elements of form are presented in the treatise.

Coche does not trouble himself with more than the most elementary matters of form in his treatise. His discussions of the complete and half breath focus on the smallest elements of form, those of the phrase and the period. Later, in his several pages devoted to "General Execution," Coche states that:

...the first principle of all execution rests upon analysis. When one can distinguish essential notes from graces, members of phrases from whole phrases, and phrases from periods, one must bring out the good notes and breathe accordingly.²⁵⁶

²⁵⁶ Ibid., 140: "...les premiers principes de toute exécution reposent sur l'analyse. Quand on sait distinguer les notes essentielles des notes de grâce, les membres de phrase, de la phrase entière, les phrases des périodes, on fait sentir les bonnes notes, et pour cela l'on respire à propos."

As noted in the earlier discussions of phrasing, it must be assumed that Coche intended this subtle element of form to be learned through experience and not through direct verbal instruction.

The capacity to highlight parts of the musical structure through contrast and clear formal articulation, what has here been termed the variation ability (or the ability to highlight musical structure through variation of performance technique) and versatility, is not discussed in the treatise. However, the characteristic pieces found toward the end of the treatise demand just such an ability on the part of the student. Even though Coche does not expressly state the need for structural articulation and contrast, it is clear that he acknowledges its necessity and provides ten fine works upon which the student can test and develop his skills.

Musical style -- phrasing, direction, line, composite performance technique, ornamentation, instruction in the history of music and the flute.

Unlike his practice in the case of the two preceding musical elements, Coche has a great deal to offer the student on almost every one of the components of style listed above. If we may take phrasing, direction, and line as being so closely related as to be nearly inseparable, we then see where Coche has scattered numerous hints and

suggestions about these components of style throughout the practical sections of his treatise and how he hopes they should be carried out. Near the centre of the treatise, Coche includes three pages entitled "General Observations," the last page of which deals with these three components. In this passage, he speaks about uniting the individual skills which the student has thus far gained into a composite whole governed by

...balance, a beautiful sound, measure, style, spirit, delicacy, [and] proper accentuation; all things which will necessitate study and detailed analysis before arriving at an application.²⁵⁷

This passage is followed just a few pages later by two pages devoted to "General Execution of Taste, Accent, Musical Phrase, Nuance, and Expression." Here Coche equates reading music properly to reading verbal passages properly, noting that when one reads with taste, one then pronounces words distinctly, makes sense of the accents, punctuation and phrases, breathes only after achieving a proposition or a consequence, and at all times avoids uniformity and monotone.²⁵⁸ The remainder of this two-page passage takes each of these criteria, relates them to music, and elaborates on how they may be realized by the performer.

²⁵⁷ Ibid., 118: "...l'aplomb, un beau son, de la mesure, du style, du goût, de la délicatesse, des accentuations convenables, toutes choses qu'on aura dû étudier et analyser en détail, avant d'arriver à l'application."

²⁵⁸ Ibid., 140.

At the same time Coche brings into play composite performance technique, the fourth component of the style element.

Ornamentation receives an emphasis second only to articulation among all the special techniques covered in the treatise. Because of the strong performance practice implications carried by this topic, ornamentation will be thoroughly considered in the next section of this chapter.

While Coche gives no instruction in the history of music, he places a great emphasis on the history of the flute. As discussed at the head of this chapter, he saw fit to include his complete *Examen critique* in his treatise. While his initial motivation for this action may well be self-promotion, this action ultimately results in leaving the document for the perusal of the student prior to taking up the instrument. Coche returns to mention the merits of the Boehm-flute later in the body of his treatise. First, in describing the flutist's embouchure and the physical characteristics which promote good tone on the flute, he does not miss the opportunity to note that improper conformation will not work on an old flute, but will be brilliant and pure on the new flute.²⁵⁹ Coche next speaks of the new versus old flute in his later "General Observations." The topic of the new, improved Boehm-flute

²⁵⁹ Ibid., 28.

makes a final appearance at the heading of Coche's list of recommended composers and works, where he simply notes that the new flute is the superior interpretive instrument of the masters.²⁶⁰ Since the motivation behind writing this particular treatise is clearly promotion of the construction, modification, and adoption of the Boehm-flute, the high position which the history of the flute attains in Coche's work is not surprising.

By examining the whole of the *Méthode à l'enseignement* while looking specifically for the relative amounts of emphasis which Coche places on each of the six identified musical elements, it is possible to see that as a whole the treatise is comprehensive. The *Méthode* essentially leaves out only a few of the minor components of larger elements. However, what is perhaps more revealing is the overwhelming emphasis which Coche places on the study of rhythm and the acquisition of a fluid technique, especially as the latter pertains specifically to the Boehm-flute. This fact, taken along with Coche's de-emphasis of dynamic study, intense tone development, extreme virtuosity, and his strong teachings in stylistic elements and in colourful timbral possibilities, demonstrates unequivocally that the treatise was composed with the amateur flutist and not the professionally oriented Conservatoire student in mind. The

²⁶⁰ Ibid., 138.

strong performance practice implications within this work will be more clearly revealed in the final section of this chapter.

Areas of Special Emphasis

The overall layout of the *Méthode à l'enseignement* may not on the surface appear to be particularly out of the ordinary for a large method book. However, Coche includes a number of small sections not usually found even in the large treatises. In addition, he places an unusually strong emphasis on a number of facets of flute performance. This strong emphasis may be noted in contrasting the relative amount of space devoted to the topic by him with that granted the subject by other contemporary composers.

Coche's intermittent general observations are among the small, unique sections present in this particular treatise. Once Coche has begun his direct instruction in the practical section of his treatise, he occasionally, with unclear motivation, interrupts the instruction to wax rhapsodic on a topic of his choice. The first of these digressions, concerning breathing, follows his instructions for the instrumental solfège. While part of this page would be valuable to a student at this point in his studies, most of it tends to fall more into the category of non-productive philosophizing. Bearing in mind that at this stage of his

studies a student is likely to be most concerned with arriving at a point at which he no longer gets dizzy when blowing even the most simple passage, it is easy to surmise that the following statement is very likely to fall on deaf ears:

[The spirit of the wind artist] consists of having at his disposal a great volume of air which he compresses properly to maintain - even at *pianissimo* -- a full sound and a clear resonance. Such are the elements of good phrasing.²⁶¹

Further examples of such digression may be found in the "General Observations" (pp. 116-118) with respect to the art of practising. In this section, he begins to wander off the track, speaking of the flute, its key system, and how that key system is being adapted to all wind instruments. Even this section as a whole is oddly placed in the midst of practical exercises, and not really at the culmination or initiation of a section. The final example is a medley of quotations by fellow musicians entitled "Reflections of Experience" presented on the final pages of the treatise.

Rather unique to Coche's treatise is his inclusion of quotes and exercises by other authors. His favorite author would seem to be M^r Baillot, whose words or material appear throughout the text of the *Méthode à l'enseignement*

²⁶¹ Ibid., 36: "Elle consiste à avoir à sa disposition un grand volume d'air que l'on comprime à propos pour conserver, même dans *pianissimo*, un son plein, une vibration toujours distincte. Tels sont les éléments de l'art de phraser."

on not less than three separate occasions. Coche also includes fragments from the writings of Cherubini and Dauprat. The contributions of others are especially notable in that other treatises for the flute from this same period do not include such contributions. Obviously, he has a great admiration for the works of others and sees the value of exploring the whole of the musical world for the finest examples to offer his students.

Much has already been said concerning Coche's instrumental solfège and the techniques to be acquired by its study. The reason that the solfège has been identified for inclusion and discussion here is that Coche introduced this section with the single-minded purpose of allowing the student to learn and become comfortable with reading pitch and rhythmic notation. Of course, the practical outcome of this process is that the student will also, theoretically, learn to reproduce the notations in sound accurately. Most other flute method books require the student to incorporate dynamics and complicated articulations from the outset of his studies, but not so with that of Coche. Therefore the instrumental solfège serves a unique purpose in the scheme of flute tutors, emphasizing that amidst the presumed decadence of nineteenth-century flute performance, attention to the details of realizing notation is still paramount in the mind of instructors.

In addition, Coche is also the only known author of a flute treatise composed during the same period to include a section in his method book discussing the art of improvisation.²⁶² Following verbal instructions as to what constitutes good and bad improvisation, he presents small exercises in each of the key signatures demonstrating the kinds of improvisation which may be made on a fermata or as a prelude. At the same time, he notes that it is easy to discern a performer's talent from the improvisations which he delivers. His inclusion of this section in the *Méthode à l'enseignement* testifies to the important place which improvisation still held for the performer in the mid-nineteenth century.

The perspectives from which Coche approaches the composition of the *Méthode* are interesting: first, the scientific point of view, which he adopts for much of the work, and second, his direction of the treatise as much, if not more, toward the amateur than to the serious student. Each of these perspectives regarding this treatise is unique to the *Méthode à l'enseignement*.

Throughout the treatise Coche brings out the relationship of music to the physical sciences, particularly acoustics. The most substantial contribution on this front

²⁶² Quantz, of course, offers instruction in improvisation in his treatise of eighty-five years earlier.

is found in the excerpts from the *Examen critique* which are included at the front of the treatise. Science comes to the surface again in Coche's prefatory remarks to the theoretical section of the treatise in a discussion of sound. Each subsequent appearance of material concerning the new flute highlights the contributions of science to the improvements carried out on the flute. Acoustic laws make their final appearance in the treatise at the point of Coche's preliminary discussion on the production of harmonics on the flute.

Coche is intensely interested in promoting clarity in musical notation; nowhere in the treatise is this shown more clearly than in his concern for the manner of writing ornament notation. He has a substantial passage discussing his preference for writing ornaments out in small notes rather than as symbols. He offers the reason that this will simplify the reading of ornaments for students, who would likely skip over any symbol - which he did not understand - in favour of the large written notes. A serious student would presumably accept the presence of symbolic notation of ornaments as part of the music, learn their meanings, and execute them faithfully. Such faithfulness to the text would not be as likely in the case of amateur musicians.

Many of the elements thus far discussed in this chapter offer some perspective on the performance practice

of the middle of the nineteenth century. However, two major facets of flute performance as elaborated by Coche remain to be highlighted for their illumination of performance practice: ornamentation and articulation.

All of Coche's discussions of ornamentation are concentrated in a ten-page section toward the middle of the treatise (pp. 98-111). Here Coche presents the mordent, the trill, the three and four-note turn, and grace notes [*appoggiatura* and *port-de-voix*], as well as free ornamentation. For each ornament he gives a brief explanation of its execution, a small example, and finally a duet incorporating the ornament to be practised. Throughout his section on ornaments, Coche continues to express his opinion that ornaments would be better represented in small notation rather than by symbols. Most of the realizations of the ornaments which he teaches employ small notation. Therefore, even though they are the last ornaments to be presented by Coche, his intent as to the performance of the *appoggiatura* and the *port-de-voix* should be examined first because the correct interpretation of these ornaments bears strong implications for the interpretation of the remaining ornaments. Coche clearly demonstrates that both the *appoggiatura* and the *port-de-voix* take their time from the note which they precede. The *appoggiatura* is a non-chord tone supplied by the composer for the intensification of the

melodic line. With Coche, the *appoggiatura* usually receives half the value of the principal note when that note is divisible by two, or one-third the value of the principal note when that note is divisible by three. When in doubt the *appoggiatura* should receive the value indicated by its notation; the principal note then receives the remaining time of its notated value.

Ex. 1 - Appoggiaturas -
 Notation (above), Realization (below), (p. 106)

The image displays two staves of musical notation in G major (one sharp) and common time (C). The top staff, labeled 'Notation', shows a sequence of five measures. The first measure contains a half note G4. The second measure contains a quarter note G4 with a 'z' above it, followed by a quarter note A4. The third measure contains a quarter note G4 with a 'z' above it, followed by a quarter note B4. The fourth measure contains a quarter note G4 with a 'z' above it, followed by an eighth note A4 and an eighth note B4. The fifth measure contains a quarter note G4 with a 'z' above it, followed by an eighth note A4 and an eighth note B4. The bottom staff, labeled 'Realization', shows the same sequence of notes. The appoggiaturas are realized as triplets of eighth notes: G4-A4-B4 in the second measure, G4-A4-B4 in the third measure, and G4-A4-B4 in the fourth and fifth measures. The principal notes are marked with a '3' above them, indicating they are to be played as triplets of eighth notes.

The *port-de-voix* is a chord tone usually a third away from the principal note; it may be either prepared or unprepared. The unprepared *port-de-voix* should be performed quickly, but stressed on the beat of the principal note.

Ex. 2 - Unprepared ports-de-voix
 Notation (above), Realization (below)
 Adapted from Coche (p. 106)²⁶³

The image shows two staves of musical notation. The top staff is a treble clef with a common time signature (C). It contains a sequence of notes: a quarter note G4, a quarter note A4, a quarter note B4, a quarter note C5, a quarter note B4, a quarter note A4, and a quarter note G4. Each note has a slur above it. The bottom staff is also a treble clef with a common time signature (C). It contains a sequence of notes: a quarter note G4, a quarter note A4, a quarter note B4, a quarter note C5, a quarter note B4, a quarter note A4, and a quarter note G4. Each note has a slur above it, and there are small vertical lines below each note, possibly indicating breath or voicing.

The prepared *port-de-voix* should be rhythmically treated as if it were an *appoggiatura*, in which case it should receive its notated value or the required proportion of the principal note, leaving the remaining time to be taken by the principal note.

Ex. 3 - Prepared ports-de-voix
 Notation (above), realization (below)
 Adapted from Coche (p. 106)

The image shows two staves of musical notation. The top staff is a treble clef with a common time signature (C). It contains a sequence of notes: a quarter note G4, a quarter note A4, a quarter note B4, a quarter note C5, a quarter note B4, a quarter note A4, and a quarter note G4. Each note has a slur above it. The bottom staff is also a treble clef with a common time signature (C). It contains a sequence of notes: a quarter note G4, a quarter note A4, a quarter note B4, a quarter note C5, a quarter note B4, a quarter note A4, and a quarter note G4. Each note has a slur above it, and there are small vertical lines below each note, possibly indicating breath or voicing.

²⁶³ The term "adapted" is used in the case of musical examples to point out fragments which have been excerpted from the original treatise, but which have been modified in length.

Great confusion arises as a result of the supplementary duet supplied for the practice of *appoggiaturas*. No *appoggiaturas* or *ports-de-voix* are given in small notation anywhere in the exercise! Many figures written in large notation do resemble both ornaments, but Coche's precise intent for this study is unclear. Perhaps he is attempting to emphasize the manner of stylistic performance of figures approximating the *appoggiatura* and *port-de-voix* while preserving strict control of the rhythmic values.

The first ornament presented by Coche is the mordent, which he terms the trill fragment. He notes that the mordent resembles the *appoggiatura* in that the performer applies equal weight to the first note of the ornament as to the principal note, thereby achieving surety of attack and delicacy of termination. He gives two abbreviations for the mordent: W given over most longer note values, and *tr* given over most shorter note values.²⁶⁴ The ornament is intended to be initiated from the principal note.

²⁶⁴ It is possible that articulation is another variable in determining the correct symbol to be used. Throughout the examples and exercises, the W is always used in staccato passages, while the *tr* sign is used in legato passages. This usage, however, may be coincidence, and in no way seems to affect the interpretation of the ornament.

Ex. 4 - Abbreviations for the Mordent
Adapted from Coche (p. 98)



The examples given by Coche clearly show that the sign m is to be performed fairly quickly and on the beat. It is notable also that Coche uses the presence of the mordent to sharpen the rhythm of the dotted figure to which the mordent is applied.

Ex. 5 - Coche's interpretation of the symbol m
Adapted from Coche (p. 98)

Coche represents the realization of the tr sign with a series of grace notes. Since he places all of his grace notes on the beat, the interpretation of the tr indication for the mordent is clear. The tempo of the

passage containing the ornament determines the number of alternations which make up the mordent.

Ex. 6 - Coche's interpretation of the mordent symbol *tr*
Adapted from Coche (p. 98)

The image shows two staves of musical notation in 3/4 time. The top staff is marked 'Andante' and the bottom staff is marked 'Presto'. Both staves show a sequence of notes with mordent ornaments (tr) and hairpins (h) indicating dynamics. The notation includes slurs and dynamic markings like 'f' and 'p'.

The next ornament given by Coche is the trill. His first remarks concerning this ornament state that "one must consider the preparation, the alternation of notes [battement], and the termination."²⁶⁵ The realization of this ornament is not substantially different from the way in which a modern performer would be likely to play it. Coche does state that the beating should not begin too hastily, and one should dwell on either the ultimate or penultimate note of the trill - this despite his even rhythmic realization of the trill in his examples. However, the one departure which Coche makes from modern performance practice

²⁶⁵ Coche, *Méthode à l'enseignement*, 100: "Dans le trille il faut considérer la préparation, le battement et la terminaison."

of nineteenth-century trills is his provision of a variety of possible preparations and terminations. In all, he gives twelve examples of the possible combinations. In general it may be noticed that he favours the preparation of trills from the upper note (Coche gives no indication that the direction of the *appoggiatura* is to be governed by the approach of the line), and similarly prefers that the terminating figure should approach the resolution from above. Nevertheless, the variety of combinations of trill preparation and termination which he demonstrates opens almost limitless possibilities for the performer.

Ex. 7 - Twelve realizations for the symbol tr given by Coche. Adapted from Coche (p. 100)

The image displays twelve musical staves, each representing a different realization of a trill ornament (tr) in G major. The notation is as follows:

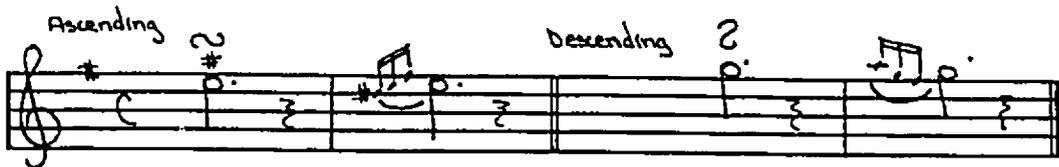
- Staff 1:** Shows the symbol 'tr' above a note on a staff with a treble clef and a key signature of one sharp (F#). A circled '2' is written below the staff.
- Staff 2:** Realization 1, circled '1'. Shows a trill starting on G4, with a circled '3' above the notes.
- Staff 3:** Realization 2, circled '2'. Shows a trill starting on G4, with a circled '3' above the notes.
- Staff 4:** Realization 3, circled '3'. Shows a trill starting on G4, with a circled '3' above the notes.
- Staff 5:** Realization 4, circled '4'. Shows a trill starting on G4, with a circled '3' above the notes.
- Staff 6:** Realization 5, circled '5'. Shows a trill starting on G4, with a circled '5' above the notes.
- Staff 7:** Realization 6, circled '6'. Shows a trill starting on G4, with a circled '6' above the notes.
- Staff 8:** Realization 7, circled '7'. Shows a trill starting on G4, with a circled '3' above the notes.
- Staff 9:** Realization 8, circled '8'. Shows a trill starting on G4, with a circled '3' above the notes.
- Staff 10:** Realization 9, circled '9'. Shows a trill starting on G4, with a circled '3' above the notes.
- Staff 11:** Realization 10, circled '10'. Shows a trill starting on G4, with a circled '3' above the notes.
- Staff 12:** Realization 11, circled '11'. Shows a trill starting on G4, with a circled '5' above the notes.
- Staff 13:** Realization 12, circled '12'. Shows a trill starting on G4, with a circled '5' above the notes.

Coche then considers the three- and four-note turn. This is the ornament about which he so strongly

asserts that small note notation would be infinitely clearer to the performer than symbolic notation. His point is clear. The use of small notation unequivocally establishes the three pitches which make up the turn, thus erasing any confusion which might arise through the use of symbolic notation. Furthermore, the uniformity of rhythmic placement provided by consistent use of small notation would eliminate any uncertainty of rhythmic interpretation.

The three-note turn may be shown alternately with the sign ∞ placed directly over the principal note, or as three grace notes written before the principal note; the latter resembles the Haydn ornament, or the *Doppelschlag* in appearance.

Ex. 8 - Notation of the three-note turn
Adapted from Coche (p. 102)



As stated above, Coche clearly prefers the latter notation. Indicated in small notation, the three-note turn may be easily shown as originating from above or below the note. In either case, this ornament should be performed at the

beginning of the principal note, and should be stressed on the time of the principal note.

Ex. 9 - Coche's preferred notation of the three-note turn
 Notation (above), Realization (below)
 Coche (p. 102)

The four-note turn, similarly, may be indicated by a symbol, or with small notes. However, the four-note turn is not intended to be performed at the beginning of the principal note, but rather toward the middle or the end of the principal note value. This being the case, when the ornament is written in small notes rather than with a sign, the grace notes require pre-beat interpretation so that they belong with their principal note; this proceeding is opposite to the stressed placement of the three note grupetto. Clearly, at this point the logic of Coche's system of small note values breaks down, because this notation leaves the placement of each ornament to the best judgement of the performer.

Ex. 10 - Notation of the four-note turn (above)
 Realization (below)
 Adapted from Coche (pp. 103-105)

The image displays two staves of musical notation. The top staff, labeled 'Notation of the four-note turn (above)', shows a sequence of four notes: a quarter note G4, a quarter note A4, a quarter note B4, and a quarter note C5. Each note is marked with a sharp sign (#). A large slur encompasses all four notes, with a small '4' written above the slur, indicating a four-note turn. The bottom staff, labeled 'Realization (below)', shows the same sequence of notes but with a more complex, ornamented realization. The notes are G4, A4, B4, and C5, each marked with a sharp sign. The realization includes various rhythmic patterns, such as eighth and sixteenth notes, and a final flourish on the C5 note. A large slur encompasses the entire realization, with a small '4' written above the slur, indicating a four-note turn.

The final inclusion in Coche's instruction on ornamentation is a complete section on melodic ornaments on a principal note. The section is given without verbal instruction, incorporating fifty-seven examples of possible preparations and terminating patterns on a single note. It must be assumed that these examples demonstrate characteristic free ornamentation placed upon a note, probably a penultimate note as part of an authentic cadential pattern. Coche's intention for this section is unclear. However, it is possible to extrapolate that with this example Coche has demonstrated the continued importance of limited free ornamentation as a stylistic feature of nineteenth-century wind music.

The second important contribution to nineteenth-century performance practice made by Coche is his unflinching

emphasis on the use of various articulations as a means of varying timbre. Articulation on a wind instrument is, at its simplest, the manner in which a given tone is started and terminated: the elements of attack and release. With the influence of dynamics, duration also becomes an element of the articulation of a wind instrument. In modern practice, wind instruments are limited to a small set of technical possibilities for the execution of articulation: the sound is always begun with the pronunciation of a T or K, or their voiced equivalents D and G, by the tongue at the initiation of the air stream; the sound is always terminated by rounding, or tapering the tone immediately before stopping the air stream. This process may be carried out for each individual note, or a number of notes may be connected without interruption by means of a slur. While a number of modifiers may be placed on the articulation - for example, *staccato*, *accent*, *sforzando* or *tenuto* - instruction today is most often concerned with patterns and combinations of the individual and slurred notes.

By contrast, Victor Coche offers comprehensive instruction in the numerous variations of flute articulation in his treatise. We may place the articulations presented in his treatise under four general designations: 1) the basic articulation stroke, and those based on 2) attack, 3) duration, and 4) release.

In his first instructions to the beginning flutist (p. 28), he directs the student to 1) place the flute as described, 2) draw the tongue back to allow the intake of breath, 3) replace the tongue to close the lip aperture, 4) draw the tongue back quickly, allowing the air to escape into the flute, impacting the instrument and producing a sound. He refuses to attach a mono-syllabic designation to the tongue stroke, noting that the action is more like spitting a thread off the end of the tongue. Quickly he cautions the flutist not to over-use this articulation.

Three pages further on in his treatise, Coche begins to introduce a number of common variations to the basic tongue stroke "in order to break the monotony of the first exercises."²⁶⁶ The three variations are as follows: 1) the *pointé simple*, indicated by a dot over the note, to be played with the basic tongue stroke [*coup de langue*] resulting in a separation between notes; 2) the *staccato*, indicated by a wedge over the note, to be played with a basic tongue stroke, followed by a determined break; and finally 3) the *slur* [*coulé*], indicated by a slur over two or more notes, to be played with a basic tongue stroke only on the first note under the slur. Following this basic

²⁶⁶ Ibid., 31: "...pour rompre la monotonie de ces premières exercices."

instruction, he incorporates these three articulations into all of the subsequent study material.

Ex. 11 - Common variations to the basic tongue stroke
1) *note pointée*, 2) *staccato*, 3) *slur*



Once he has introduced and rehearsed the basic elements of music theory and the technique of the flute, he returns to the subject of articulation after a break of approximately fifty pages. In a concentrated section of fourteen pages, he considers the variations of articulation based on each quality of attack, duration, and release.

The attack-based articulations which he covers include the *pointé simple* and the *sforzando* tongue stroke [*attaquer la note avec vigueur*]. The *pointé simple*, originating with a basic tongue stroke and resulting in a slight separation between notes, has already been discussed. However, Coche elaborates upon the technique, indicating that it must be made without dryness, and noting that the stroke provides the slightest accent.

The *sforzando* tongue stroke is initiated with a vigorous stroke of the tongue combined with a burst of air.

Coche defines it as "by a single breath, [it is] heard as a vigorous and clear sound without groping for a weaker sound; it is played *forte* at the first stroke."²⁶⁷ The *sforzando* is always indicated by *Fz* under the note, usually in combination with an accent.

Ex. 12 - *Sforzando* (p. 95)



The duration-based articulations which he introduces in this section include the slur, the dotted slur, the chevron, and the *rinforzando* [*son du fort au faible*]. The act of slurring of two or more notes together [*coulé*] has already been discussed. At this point he further notes that the slur must be executed without any perceptible breaks, and also recognizes that the technique of the instrument offers difficulty in accomplishing this,

²⁶⁷ Ibid., 95: "C'est faire entendre, par une seule émission du souffle, un son vigoureux et franc, sans le tâtonner par un son plus faible; c'est jouer *forte* du premier coup."

but that "it is the nature of the artist to make these inconveniences disappear."²⁶⁸

The dotted slur, as its name suggests, combines the symbols of the slur and the dot. This articulation on the surface seems contradictory, and today is dismissed as a string articulation which has no true meaning for the flutist. However, Coche specifies that the articulation does carry specific meaning; it is produced with the utmost sweetness, while preserving the full duration of the sound. Ex. 13 - Dotted slur (p. 92)



A variation of this articulation is the use of double slurs; this articulation marking is very ambiguous, in part because Coche offers little advice for its interpretation. Sometimes this marking very clearly indicates that the first note of the small slur is to be re-articulated. When this interpretation is first demanded in the *Méthode à l'enseignement*, he includes verbal indications which help to

²⁶⁸ Ibid., 92: "C'est à l'habileté de l'artiste à faire disparaître ces inconvénients."

clarify the intent of the marking.²⁶⁹ At other times the double slurs seem to indicate phrases and sub-phrases more than true articulations. At yet other times, he suggests that the double slurs indicate that the passage is to be played with extreme equality (e.g. studies 7 and 8 on p. 120). The double slur marks may or may not bear the addition of the accent mark or chevron (the direct implications of which will be discussed below).

Ex. 14 - Double slurs indicating re-articulation
(no. 9, p. 120)



The most interesting articulation found in this category is that of the chevron, indicated by a standard or elongated accent mark. He describes the chevron as follows:

That which is called vibration of the voice in the art of singing, is equally practised on instruments. It is the action of producing the first sound with force, and the second much more sweetly....This kind of accent is recognizable in musical notation by the chevron placed above or below the note which one is supposed to vibrate strongly. When the chevron is placed upon a

²⁶⁹ Ibid., 120: "Il faut adoucir le coup de langue, pour faire sentir la difference du coulé de 2 en 2, qui doit être plus séparé."

single note, one must practise the same gradation of intensity as upon the two notes of the preceding example.²⁷⁰

Coche introduces for the first time in instruction treatises (to my knowledge), the notion of vibrating the sound with the breath, a concept assumed today not to have been employed with regularity until the early twentieth century.

Ex. 15 - Chevron on multiple and single notes
 Notation (above), Probable Realization (below)
 Adapted from Coche (p. 82); Coche indicates dynamic markings only

The chevron may also be used to indicate that the first note is to be "placed." This is probably the meaning of the chevron when it is applied in conjunction with other

²⁷⁰ Ibid., 82: " Ce que l'on appelle vibration de la voix, dans l'art du chant, se pratique également sur les instrumens [sic]. C'est l'action de produire le premier son avec force et le second beaucoup plus doucement. Cette sorte d'accent se reconnaît dans l'écriture musicale au chevron > placé ou au dessous de la note qu'on doit faire vibrer fortement....Quand le chevron est placé sur une note seule, on doit pratiquer la même gradation d'intensité que sur les deux notes de l'exemple précédent."

articulations, particularly the double slur markings described above. It should be noted that even in describing this use of the chevron for "placement," Coche does not eliminate the initial requirement of vibrating the note or notes to which the chevron is applied. The frequent appearance of the chevron in the *Méthode à l'enseignement* implies that the use of vibrato at clearly indicated points in the music was part of the performance technique of nineteenth-century flutists.

The final articulation in this category is the *rinforzando*. Indicated *rf*, this articulation demands that the note be struck with energy, and then be diminished over the duration of the note - strong to weak - without jeopardizing or changing the quality and roundness of the sound as in a bell-tone. With respect to the diminution of intensity through the duration of the affected note, the *rf* is similar to the chevron. However, the *rf* lacks the idea of vibrato and is usually applied to notes of shorter duration than is the chevron. A decrescendo marking appearing to be a chevron often accompanies the *rf* symbol; however, it is likely that this mark implies only dynamic gradation and not the use of vibrato as per the above discussion. In fact the symbol *rf* seems to imply the absence of vibrato because it is the gradation of intensity

and not tone quality which is the key to Coche's interpretation of this marking.

Ex. 16 - *Rinforzando*

Notation (above) [Coche, p. 86]

Probable Realization (below)

Under the designation of release-based articulations are the staccato, the *coupé*, and the *jeté*. Like the *pointé simple* and slur, the staccato has already been introduced, but is further elaborated and illuminated by Coche at this time. Here he indicates that notes marked staccato should be shorter than indicated by their notation "as if they have a short rest following them. The amount of dryness or holding of the sound depends on the character and the movement."²⁷¹ In other words, the wedge is to be interpreted in much the same way as the simple dot today.

²⁷¹ Ibid., 91: "Les points alongés obligent à faire les notes plus brèves que ne l'indiquent leurs figures comme s'il y avait un court silence entre chacune d'elles; d'ailleurs le plus ou moins de sécheresse ou de ténuité des sons dépend du caractère et du mouvement."

Ex. 17 - Staccato (Coche, p. 91)
 Notation (above), Realization (below)

The image shows two staves of musical notation. The top staff is the notation, featuring a treble clef and a common time signature (C). It contains a sequence of notes with accents placed over pairs of notes. The bottom staff is the realization, showing the notes with stems and beams, and a final fermata.

The coupé is employed on pairs of notes in dance-type movements and is indicated by an accent placed under the two notes. In this case the first note receives the accent and the second note, often followed by a rest, is clipped short. This technique may be applied to pairs of notes within a beat or across the beat.

Ex. 18 - Sons coupés (Coche, p. 87)

The image shows a single staff of musical notation with a treble clef and a 2/4 time signature. It contains a sequence of notes with accents and a final fermata.

The final articulation discussed in the context of released articulations is the jeté. The jeté is the last

note of a slur, and is marked with a wedge. "In order for the ear to appreciate the silence which always follows the notes jetées, one must stop the note immediately."²⁷²

Ex. 19 - Notes jetées (Coche, p. 94)



Following this concentration of instruction on the variety of articulations available to the flutist and composer, Coche employs some or all of them in each subsequent study, culminating in a series of seventy exercises for the study of articulation some twenty pages later. This progression of seventy studies employs all the special articulations introduced, as well as the numerous combinations of slurs and single articulations possible in various time signatures; combination of slur and single articulations is the kind of articulation work emphasized in instruction today. Many of the exercises present the various articulations in conjunction with the chevron, which results in the occasional need for creative interpretation

²⁷² Ibid., 94: "Pour que l'oreille apprécie le silence qui suit toujours les notes jetées, il faut que ces notes soient quittées immédiatement."

of the chevron. The careful performer can successfully use clues of metrical position, slur, or phrase mark placement to deduce the proper interpretation of this sometimes elusive marking.

At the end of this section, Coche completes the study of articulation with the study of multiple articulations (double and triple tonguing). After contemplating the methods used to produce multiple tonguing throughout the world, he selects the mono-syllables *te* and *que* for the production of this articulation, as they are clean and not guttural. Also as a general aside, it should be pointed out here that because the mono-syllables are produced by tongue strokes confined behind the teeth, unlike the basic tongue stroke which contacts the lips, these mono-syllables lend themselves nicely to the development of the rapidity of movement requisite for multiple articulations.

As a result of his emphasis on the possibilities of articulation on the flute, Coche has devoted twenty-five pages of his treatise to the specific instruction of articulation techniques and has strongly incorporated their practice throughout the two hundred pages of his work. His constant emphasis on exploiting the variety of articulation clearly implies the integral role which articulation in all its forms played in the colour and performance of wind music in the nineteenth century. It appears that articulation in

the performance of wind instruments surely held a place of equal importance to that of articulation on string instruments and in vocal technique. Like the study of articulation in terms of strings and voice, articulation for the flute as presented by Coche governs the quality and character of the whole note and employs practically endless possibilities in the variety of attack, duration, and release of tones. Coche is not alone in his determination to exercise and emphasize this facet of performance. Many nineteenth-century flute treatises promote this notion to varying degree. As the nineteenth century progressed and the twentieth century followed, this necessary facet of nineteenth-century performance was first suppressed and then effectively eliminated from flute performance.

Chapter 6

Méthode pour flûte by Henri Altès

The *Méthode pour flûte* by Henri Altès not only reflects the author's teaching style, but also illuminates the flute performance practice at the time of its writing. Known for his dry and methodical delivery of instruction, Altès has composed an equally methodical and somewhat dry treatise of instruction for the Boehm-flute. The treatise is complete, almost thorough to a fault (as much as that is possible in instrumental instruction) in its inclusion of studies and lessons geared toward the acquisition of virtuoso technique. Despite its relatively rapid pacing, no element introduced in the course of the method is given up before the student has been provided with adequate time and study materials to perfect the requirements of the lesson. Nevertheless, the treatise, while lacking the colourful and spontaneous presentation of Coche, is rich in its diversity of materials and in the beauty, humour, and stylistic variety of musical compositions which make up its plan of instruction.

The *Méthode pour flûte* is still used today as the primary treatise in numerous instructional circles; the

edition chosen by most instructors for this purpose is the 1956 re-edition by Ferdinand Caratgé, published by Leduc.²⁷³ In his edition of the Altès treatise, Caratgé made numerous changes: he deleted or added study materials, and edited the text with a heavy hand.

However, despite the popularity of the *Méthode pour flûte*, the treatise has never been systematically studied for its implications for nineteenth-century performance practice. Even had such a study been made, it would have been inaccurate and misleading at best since the true date of the treatise's composition had been obscured by insufficient and faulty research. Accurate dating of this treatise is of course crucial to any subsequent study of performance practice. The treatise may now conclusively be said to have been written circa 1880. The details of how this conclusion has been reached may be found in chapter 4 of this paper.

With the details of the treatise's composition revealed, the *Méthode pour flûte* may be analyzed for its

²⁷³ Henri Altès, *Méthode pour flûte système Boehm* (Paris: Millereau, [c. 1880]), 263. The recently retired Professor of Flute at the Paris Conservatoire Michel Debost uses the Altès *Méthode pour flûte* as the instructional course for beginning flutists because of the thoroughness and thoughtfulness described above (Private conversation, Washington, D.C., August 1991). Even in western Canada, the treatise has to this time enjoyed a similar success in the service of most experienced teachers. Throughout North America, excerpts from the treatise make up part of the studies for most college/university trained flutists.

content and format, its degree of concentration on each of the six elements of music identified in chapter 4, and its emphasis of topics relating to flute performance. Performance practice implications revealed by the study will be discussed at each step of the process.

Format and Contents

The Altès method is the largest of the three treatises under investigation in this study, comprising 429 pages divided into three Parts.²⁷⁴ For such a lengthy work to be useful to the student, it would have to be held under tight organizational control by the author. In fact, it is the organizational process employed by Altès which is one of the main strengths of the treatise.

The contents of the *Méthode pour flûte* are carefully chosen and arranged. As is found in the Coche treatise, each step of the educational process is presented in logical order. However, unlike Coche's seemingly spontaneous collation of materials, the *Méthode pour flûte* reflects deep thought and careful consideration on the part of the author to ensure that no necessary topic is left unexplored and that material is presented in proper order. As a result of this process, Altès has elected to divide his

²⁷⁴ The major Parts of the treatise are untitled; the contents of each Part will be enumerated below.

treatise into a series of chapters and lessons, each bearing a title summarizing its focus. Altès introduces new theoretical concepts in the chapters and then allows the student to put these concepts into practice through the lessons.

Altès opens his treatise with nine chapters devoted to the rudiments of music. Chapters 1, 3, and 4 instruct the student in the basics of rhythmic notation including note and rest values, metre, and patterns of stressed and weak beats. Chapters 2, 6, 7, and 8 deal with pitch notation, including pitch names, the staff, clef, position of pitches on the staff, accidentals, key signatures, and leger lines. Chapter 5 discusses movement and tempo, as well as the attendant Italian terminology governing speed of movement and tempo. Chapter 9 presents elementary formal devices such as *dal segno*, *da capo*, and simple repeats.

At the conclusion of this initial section, Altès describes the flute and the manner in which the performer should hold himself and the instrument when performing. The stance which Altès advocates encourages the student to cultivate relaxation of the hands, body, and face while playing the flute. His instructions point to a concept of ease in producing a sound on the flute. Altès then begins

the lessons in which he teaches the student how to play the instrument.

The first eight lessons, which follow these opening chapters, introduce the student to the notes of C major, the easiest of the scales on the Boehm-flute, from the lowest note of the flute (C¹ or "middle-C") to E two octaves and a third higher (E³). At the same time, Altès skillfully constructs a series of rhythmic theme-and-variation sets for each lesson; these accustom the student to rudimentary rhythms in the most common time signatures. Each lesson is begun with a series of small exercises, usually involving a C major scale or arpeggio, and sometimes involving tricky fingering patterns. These exercises prepare the student for the demands of the lesson. Like Coche, Altès writes each and every exercise and study as a duet for student and teacher.

During these first lessons, Altès introduces the all-important technique of proper articulation by requesting that the student produce the syllable TU with his tongue as he starts each sound. Both the consonant and the vowel of this monosyllable differ from those advocated by Coche. The selection of "T" to initiate the tongue stroke provides a clean, crisp attack. In addition, the placement of the "T" on or behind the front teeth results in a smaller movement for the tongue than it would have to make if it were

reaching forward to contact the lips as Coche advocates, thus allowing the tongue to be more nimble in its stroke. The choice of the vowel "U" (French pronunciation) positions the lips forward, and the tongue is high and forward in the mouth. Unlike Coche's "E" (French pronunciation) which promotes a deeper, more backward configuration of the mouth, the shallow, forward positioning allowed by the "U" encourages speed of air motion without necessitating excess air use. As a result, the sound produced by the means outlined by Altès would be brilliant and smooth, and at the same time would possess tremendous projection qualities.

Altès concludes Part I of his treatise with three additional chapters interspersed with seven lessons. Chapter 10 discusses melodic intervals in great detail, including number and quality designations (major, minor, diminished, or augmented), inversions of intervals, compound intervals, and the interval pattern which determines the major scale. Chapter 11 continues by analyzing the formation of diatonic scales and the use of key signatures. At this point, Altès offers seven lessons, one for each of the keys G major, D major, F major, B^b major, A major, and E^b major, as well as the chromatic scale. Again, each lesson is presented entirely in duet form. Three to four new notes and their fingerings are presented in each lesson, taking the flutist ultimately up to the highest B^b on the

instrument, thus nearly completing the three octave chromatic range of the flute by the end of Part I. As with the earlier lessons, a number of preparatory lessons are given first before all the elements are brought together in a final melodic duet. Following these lessons, Chapter 12 discusses the differences between the major and minor modes, as well as the construction of minor scales in three forms - natural, harmonic, and melodic. The chapter presents each of the major and relative harmonic minor scales. Part I closes with a fingering chart for the three octave chromatic range of the flute extending from c^1 to c^4 .

While Part I of the treatise concentrates on the rudiments of flute performance, Part II sets out to introduce more advanced elements, those which fulfill colouristic, stylistic, or virtuosic functions. Altès opens this section with four pages of scale and arpeggio studies, covering all the major and minor keys in two series; the first series ascends through the sharp key signatures, and the second descends through the flat key signatures.

The next topic explored by Altès is that of articulation (Chapters 13, 16, and 17). Here Altès designates four varieties of articulation: *détaché*, *louré*, *lié* or *coulé*, and *syncopé*. Altès groups all of the articulations made by a normal stroke of the tongue under the heading *détaché*, and all articulations involving

combinations of tongue strokes and slurs (one articulation marking) under the heading *louré*. He confirms that *lié* is not only used to designate an articulation, but also to extend notes and to produce the *syncopé*.

Altès then embarks on an extended section dealing with *la note sensible* (leading tone), a lengthy lesson (#18) of eleven pages plus a three page introduction. He describes the *note sensible* as the note which "drives up to tonic." These notes must be raised so as to slightly diminish the half-step interval to tonic; in order to facilitate this, Altès gives a chart of alternate fingerings which can assist the performer in accomplishing this task easily (Table B). Not all half-step combinations are given on this chart, presumably because some simply are not available by means of alternate fingerings on the instrument.

With chapter 14, Altès initiates a study of ornaments. Over the next six chapters and lessons, he presents and practises the long grace note [*appoggiatura*], short grace note [*acciaccatura*], trill, passing trill [*brisé*], mordent, and turns of three and four notes. Included in this section is a complete chart of special fingering for the execution of trills (Table C). In the midst of this section Altès takes a rare turn away from the topic at hand to present the compound articulation required

for easily executing dotted-note figures. This divergence can be easily explained by noting that the study of the passing trill is inseparably involved with dotted-note rhythms. This articulation is often referred to today by flutists as the TE-RE articulation (the "R" is of course rolled).

Ex. 1 - TU-DU Articulation on duple and triple rhythms
Adapted from Altès (p. 160)

The image shows two musical staves. The first staff is labeled 'Duple rhythm' and has a 2/4 time signature. It contains four measures of music: the first measure has a dotted quarter note followed by an eighth note; the second measure has a dotted quarter note followed by an eighth note; the third measure has a dotted quarter note followed by an eighth note; and the fourth measure has a dotted quarter note followed by an eighth note. Below the staff, the syllables 'TU', 'TUBU', 'TU', and 'DU' are written, with brackets under 'TUBU' and 'DU' indicating they are grouped together. The second staff is labeled 'Triple rhythm' and has a 6/8 time signature. It contains four measures of music: the first measure has a dotted quarter note followed by an eighth note; the second measure has a dotted quarter note followed by an eighth note; the third measure has a dotted quarter note followed by an eighth note; and the fourth measure has a dotted quarter note followed by an eighth note. Below the staff, the syllables 'TU', 'TUBU', 'TU', and 'DU' are written, with brackets under 'TUBU' and 'DU' indicating they are grouped together.

The next seven chapters serve to introduce and to discuss briefly a number of diverse and relatively unrelated topics. Chapter 21 presents, for the first time in the treatise, the dynamic markings with their symbols and terminology; however, Altès does not discuss them at this time. Chapter 22 introduces and defines the Italian character and movement terms (the latter designating tempo, not necessarily affect) frequently used in music. Chapter 23 outlines the notational abbreviations for repeated figures, tremolo, octave duplication, and large groups of notes which exceed the normal boundaries of straight rhythmic notation. Chapter 24 studies the art of

transposition. Chapter 25 considers systematized tuning of instruments and orchestras as the point of departure for the modern musical system. Chapter 26 discusses the properties of chords which are immediately helpful to the performer. Included here are three, four, and five note chords, octave repetition, and elementary chord functions. Finally, Chapter 27 very briefly discusses style, expression, phrasing, and taste.

Beginning with Lesson 26, Altès allows the student to practise a number of the techniques presented in the preceding seven chapters. Lesson 26 itself is a lengthy study devoted to the acquisition of dynamic control. Through a series of exercises, Altès instructs the student in how to move between all dynamic levels throughout the three registers of the flute, all while still preserving correct intonation. At the close of the lesson, he suggests supplementary repertoire which would be useful for study at this point in a student's progress.

Lessons 27 and 28 provide a variety of substantial musical duets which for the first time take students into the more remote key signatures of B major, F[#] major, C[#] major, and D^b major. He also incorporates dynamic markings, numerous articulation designations, and letter indications referring the student to Tables B and C for special fingerings, all of which here appear for the first time in

musical exercises. Lesson 28 further employs all of the notational abbreviations previously introduced. In Lesson 29, the student focuses on transposition up and down by seconds and by thirds. Lesson 30 exposes the student to "ancient music" - as represented by Handel - which demands stylistic interpretation on the part of the student. The final lesson of Part II is a *Sonata for two flutes concertante*, presumably by Altès himself. The three movement work incorporates many of the techniques which have been studied throughout Part II. The final item of Part II is an alphabetized list of Italian terminology.

Part III takes the student into the realm of virtuosity and opens with a brief reminder of the importance of good intonation, and a few "tricks of the trade" to assist in the realization of this technique. Altès includes an eleven page section presenting many alternate fingerings to ease the difficulties of extremely virtuosic passage work. These alternate fingerings are collected into five tables (Tables D, D¹, D², D³, and D⁴). Fingerings are also given for tremolos of major and minor thirds. Small exercises are given throughout the section to aid in the practice of the individual movements presented in the various tablatures found here.

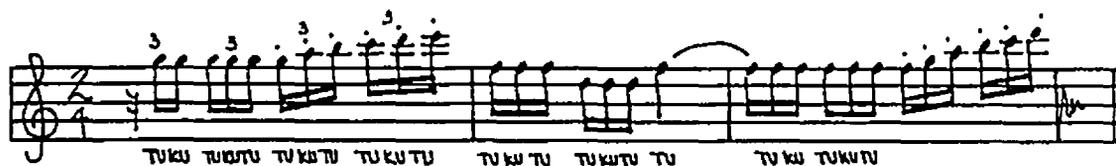
The next fifteen pages present daily exercises which are to provide the groundwork of routine practice.²⁷⁵ Altès calculates that these studies will demand only thirty minutes to complete. These daily exercises incorporate scale and mordent studies. Throughout the daily exercises, the student is referred to studies previously encountered in the treatise or to studies by other composers. The daily exercises are to be concluded with a study of the sustained tones found in Lesson 26 of the treatise.

At this point, Altès finally presents the study of multiple articulations (double and triple tonguing). He permits the use of compound tonguing in the execution of fast passage work. The articulations TU-KU and TU-KU-TU are given to ease the performance of rapidly articulated duple and triple patterns, respectively. The study of these two articulations is preceded by a number of exercises dedicated to single tonguing. The KU syllable is then introduced. Once these exercises have been mastered, Altès instructs the student in how to deal with patterns of double or triple tonguing which momentarily defy the norm.

Ex. 2 - Double tongue on irregular patterns (Altès, p. 282)

²⁷⁵ Altès, *Méthode pour flûte*, 203.

Ex. 3 - Triple tongue on irregular patterns (Altès, 284)



Following this articulation study, Altès includes an elegant essay entitled "The Perfection of Execution."

The final practical section to be found in the *Méthode pour flûte* is that comprising the Complementary Studies. This magnificent section includes 26 extremely virtuosic etudes to test and develop the skills of the virtuoso flutist. Most of the technical elements which have been presented previously in the treatise are combined in this section. At the same time a number of special styles of articulation are studied. Each study includes a title indicating the purpose of the study, and uses reference letters to direct the student to various tables of fingerings when alternate fingering should be employed. The studies are virtuosic not only in the technical elements which each uses, but also in the stamina which these very long studies require, for here the most complicated of techniques has to be maintained and continued.

The final item of the *Méthode pour flûte* is a list of works necessary for the library of the flutist. This library list includes studies, solos, and ensemble pieces.

The Six Musical Elements

Pitch -- general technique and pitch accuracy, dexterity and digital virtuosity, alternate fingerings, intonation, individual digit technique, use of various key signatures, range extension exercises.

Of the seven components of pitch listed above, Altès deals in detail with the first five, while the remaining two are treated much less fully. The acquisition of fluent digital technique is without doubt the primary focus of his treatise, and Altès provides ample studies devoted to this end. Thus the strong weighting of materials falling under the first five components above is no surprise.

Altès begins to develop the general technique and pitch accuracy of the student from the outset of the practical lessons, continuing this development through the end of the Complementary Studies. As noted previously, the theoretical basis for reading pitch notation is set forth by Altès in Chapters 2, 6, 7, and 8. In Lesson 1, Altès initiates the student into the practical study of general technique. Conveniently for the student, Altès does not move out of the key of C major until Lesson 9, forty-three

pages later. With a strong foundation thus gained on the fundamental scale of the Boehm-flute, Altès quickly moves through the key signatures incorporating up to three sharps or flats over the next six lessons (twenty-three pages). In each lesson, Altès takes a moment to rehearse the most difficult finger changes associated with the key signature being studied. The small studies concentrating on only two or three pitches serve to promote accurate and coordinated movements of the fingers even through the most troublesome passages. At this point Altès has almost completed Part I, and it is clear that he expects the student to have gained competence in his fundamental technique. At the close of Part I, Altès finally gives a complete fingering chart for the full range of the flute, along with the instruction that the student should learn these as "base fingerings."

General technique and pitch accuracy are addressed in Parts II and III only through the study of scales and daily exercises. However, it must be noticed that each time Altès returns to these fundamental exercises of the technique, he demands a higher level of competence from the student until finally he implores the student to practise the exercises every day, "even when his execution has attained the highest level of proficiency."²⁷⁶

²⁷⁶ Ibid., 263: "...même quand l'exécution en est arrivée à sa plus grande perfection...."

Dexterity and digital virtuosity figure prominently in Parts II and III of the Altès treatise. Scales and scale-oriented studies assume a prominent position for Altès in the development of virtuosity. He first gives the student all of the major scales at the end of part I, following these with a second series as the opening exercise to Part II. Part III includes a third series of scale studies as a part of the daily exercises. Other contributions which Altès makes to the elements of dexterity and digital virtuosity includes the extreme emphasis which he places on alternate fingerings as a means of easing difficult passages and the monumental compilation of Complementary Studies included in Part III; both of these have been discussed previously in this chapter.

Intonation is a subject to which Altès gives great prominence throughout his treatise, even from the most elementary stages. Like Coche, Altès has chosen to compose all of his studies for two performers. While he does not say so specifically, Altès implies that the second part should be taken by the teacher. The focus on ensemble playing from the very outset of study strongly emphasizes the need for good ensemble work, including good intonation. However, Altès withholds direct instruction on the control of intonation until Part II of the *Méthode pour flûte*. By doing so, Altès does not trouble the student with the fine

details of this complicated and difficult aspect of playing the flute until the student has gained sufficient muscular control of his embouchure to be ensured of a relative amount of success mastering his intonation.

The first instructions devoted to the study of intonation are presented in Lesson 26, along with an introduction to the study of dynamics. Altès poses three physical conditions which affect the justness of intonation on the flute: speed of the air as it is blown into the flute, the pressure of the lips, and the backward or forward position of the jaw. Altès correctly notes that pitch on the flute tends to rise with the increase of air used to execute a crescendo, and conversely, that the pitch falls with the decrease of air necessitated by the performance of a decrescendo. Altès instructs the student to correct these changes in intonation by covering the embouchure hole on the crescendo, and uncovering the same on a decrescendo. He further notes that very light changes in air or lip pressure will maintain good intonation. He fails to note that a well-tuned ear is also necessary to produce the desired result.

At the opening of Part III, Altès includes a short passage on intonation in which he recounts his earlier instructions for maintaining proper intonation. However, at this point he also includes a number of alternate fingerings

which may be used in certain circumstances to correct the intonation of those upper register notes, which if corrected through previously offered methods, would suffer in terms of tone colour.

Alternate fingerings of notes is the final component of pitch which attains high prominence in the *Méthode pour flûte*. These fingerings are thoroughly discussed in the last section of this chapter.

Individual digit technique makes up a large part of the exercises of Lessons 7 through 14. In these lessons, Altès provides study materials which allow the student to become familiar with the technique of the flute. In doing so, he takes the time to present numerous small studies which exercise the fingers through patterns involving a limited number of pitches. The exchange of fingerings between the pitches of these studies always involves the most difficult fingering combination present in the key signature of the lesson. By isolating these problems for the beginning student in these small studies, Altès makes it possible for the student to gain a high degree of comfort and familiarity with the most difficult technical problems of the flute at the beginning of his studies.

Studies involving the use of various key signatures and the development of range extension are significantly down-played throughout the treatise. In the

case of various key signatures, only isolated occurrences of four or more sharps or flats are found. Similarly, most notes available to the flutist are presented in the lesson materials found in the *Méthode pour flûte*. However, at no point in the treatise does Altès include exercises devoted directly to the study of extended ranges of the flute. He particularly avoids extensive development of the uppermost register.

Rhythm -- Rhythmic accuracy, pulse, metre, elementary phrasing, technical/tonal competence and comfort in all ranges and keys, breathing technique/breath length.

Despite the fact that Altès includes strict time and proper rhythm as two of his four requirements for correct playing,²⁷⁷ the musical element of rhythm does not rise to a place of prominence in the *Méthode pour flûte*, except in a limited way through the component of technical/tonal competence and comfort in all ranges and keys. None of the first four components is ignored; however, none is developed beyond the most rudimentary levels. The component of breathing technique and breath length is not considered at any point in the treatise.

Rhythmic accuracy, pulse, and metre are first presented as the topics of chapters 1, 3, 4, and 5. A number of interesting inclusions in these opening chapters

²⁷⁷ Ibid., 203.

point toward both continuation of older traditions and to the coming of new requirements. First, the time signature of $3/8$ still represents a duple metre in the eyes of nineteenth century performers, lending itself to a slower rather than faster interpretation as was found to be the case in the Coche treatise. Second, Altès still takes time to consider the extremely long rest values, showing the student how to count multi-bar rests which do not bear numerical indications of the number of measures over which the performer should remain silent. At the same time, Altès gives the first inclusions of $5/4$ and $7/4$ time signatures in the pedagogical flute literature.

Each of the components of rhythmic accuracy, pulse, and metre are explored in the subsequent lessons of Part I through a number of duets based on rhythmic variation of a simple melody. Most fundamental rhythms and metres are presented to the student in progressive order (longer, less complicated note values before faster, more complicated ones; simple metres before compound) before the conclusion of Part I. A few remaining common rhythmic patterns and metres are subsequently given progressively - but not systematically - over the course of Part II. Like the duet parts supplied by Coche throughout his treatise, those composed by Altès provide a simple and almost metronomic assurance of the beat. However, unlike Coche's duets,

Altès' duets only rarely complicate the rhythmic movement of the student's part, the notable exception being the first of the Complementary Studies which involves a juxtaposition of eighth-note triplet rhythms in the part for Flute I over dotted quarter- and eighth-note rhythms in the part for Flute II in common time.

Elementary phrasing is indicated for the student by means of commas inserted over the musical text in Lesson 1. This practice continues throughout the treatise. However, in the waning stages of Part II, Altès begins to include only a minimum of breath marks, adding them only at places where the best phrasing might be vague to the student. He noticeably includes breath marks in both parts of the *Sonata for Two Flutes* (lesson 31), the only lesson in the treatise for which Altès suggests that the student should learn both duet parts. Given his emphasis on symbolic notation of breathing rather than verbal instruction, it appears that Altès has followed Coche's lead in teaching the student good phrasing by example rather than by instruction.

The acquisition of technical/tonal competence and comfort in all ranges and keys is covered only to a certain extent in the Altès treatise. As noted earlier, the more extreme realms of range and key signature do not take a primary position in the treatise. These skills seem to be

developed more because Altès writes them into the body of his studies and exercises than because he provides specific advice or instruction as to how they should be gained. However, to the extent that they are developed particularly in Part III, the student is certain to have gained sufficient competence in his technical and tonal control to be comfortable rhythmically in most situations presented by nineteenth-century music.

Timbre -- Tone development, intonation, articulation, legato, embouchure and tonal flexibility, colour variety, extended timbres.

Timbre and timbral studies as a whole assume a prominent role within the Altès treatise, but have a significantly reduced role when the latter is compared to the Coche treatise. Altès includes numerous studies dedicated to tone development, intonation (already discussed earlier in this chapter), and articulation. However, he does not devote a large amount of space to the improvement of the legato or of embouchure and tonal flexibility. Similarly, studies developing techniques of colour variety and extended timbres are not to be found in the treatise.

Immediately preceding the Complementary Studies, Altès enumerates quality of sound as one of two components which make up what he calls the "special theory" of the flute (the other being special fingerings).²⁷⁸ Altès indeed

²⁷⁸ Ibid., 286.

makes tone development a major subject throughout the whole of his treatise. As the treatise progresses, it may be noted that Altès assumes that the material in his treatise will have assisted the student in cultivating the best possible sound. In the introductory remarks to the study of nuances (lesson 26), he offers the following:

If one has rigorously applied the principles which I give at the beginning of this work on the position of the embouchure and the production of the sound in the execution of the preceding lessons (pages 18, 20, 39 and 44), one should, by this point, have obtained the following important results: 1) a natural sound and intonation, and 2) a sure embouchure.²⁷⁹

He further cautions that both the natural sound and sure embouchure must be preserved in the study of dynamics.

In the preface to Lesson 1, he instructs the student in how to obtain the best sound and correctly cautions the beginning flutist against improper positions of the hands, body, and embouchure as these interfere with sound production. Quickly in the first lesson Altès points out to the student the degree of similarity of fingerings between middle and low octaves of the flute, so that the student may now concern himself with the quality of the

²⁷⁹ Ibid., 203: "Si l'on a appliqué rigoureusement, dans l'exécution des leçons précédentes, les principes que je donne au début de cet ouvrage sur la position de l'embouchure et sur la production du son (pages 18, 20, 39 et 44) on doit, au point où nous sommes arrivés, avoir obtenu les résultats importants qui suivent: 1°, un son naturel et juste et 2°, une grande sûreté d'embouchure."

sound.²⁸⁰ Hints on how best to produce a good tone in the various registers are present in lesson 5. Beginning in lesson 8, Altès incorporates introductory exercises which necessitate the easy movement between registers of the flute, primarily through study of the octave. His final contributions to the direct study of tone development are given in the form of Complementary Studies 11 and 25. Altès' continued instruction stresses and provides exercises for accomplishing ease in sound production.

The study of articulation as presented by Altès is thorough, but wholly lacking in the strong timbral implications presented by Coche. Altès begins his instruction of articulation in Lesson 1 with the introduction of the basic articulatory mono-syllable TU. From here he proceeds to the study of the dot-staccato and the long slur in Lesson 6. Various patterns employing these simple elements are present throughout the remainder of Part I. In Part II, Altès devotes one chapter and two lessons to the study of more specialized articulations. A number of compound articulations are given to complete the instructional study of articulation (these have been discussed previously).

While the study of stylized timbral articulations like those found in the Coche treatise is not considered

²⁸⁰ Ibid., 21.

from an instructional standpoint by Altès, some of these articulations are required in the course of the Complementary Studies. Among these we find the *martelé* in Study 1, and the *perle* or *sautillé* in Study 2. No direct instruction is given as to how these articulations should be produced, but only a one-sentence description as to how each should sound.

The production of a smooth legato as well as flexible embouchure/tonal control are not directly taught in the method, but are demanded by a number of studies and exercises. Slurred octaves are required in lesson 6, thus forcing the student to rely on his embouchure strength and flexibility to produce smooth registral shifts. Similar patterns are present throughout the treatise on a limited basis, but it is not until the Complementary Studies that Altès requires the student to concentrate on the production of a smooth legato by means of embouchure and tonal flexibility. Study 25 employs slurred leaps ranging from one to two octaves at a time.

Dynamic -- soft to loud flexibility, projection quality, register control, tonal "gimmicks" allowing the impression of dynamic change.

Altès directs the student to pay careful attention to dynamic markings and nuances as one of his four "requirements for correct playing."²⁸¹ Still, instruction

²⁸¹ Ibid., 203.

on dynamics only enters into his treatise on a limited basis, and only in the form of instruction on soft to loud flexibility, and, to a small extent, register control. Projection quality and tonal "gimmicks" allowing the impression of dynamic change are not in any way presented in the treatise. As noted earlier, though, Altès does not present the study of dynamics until after he has ensured that the student is likely to have developed sufficient embouchure strength and control to experience success in this domain; this point is found roughly half way through the treatise. Altès introduces the study of dynamics through long tones to be played with varying dynamic patterns: no change, *forte* to *pianissimo*, *pianissimo* to *fortissimo*, and *pianissimo* to *fortissimo* back to *pianissimo*. Each of these patterns is accompanied by instructions as to how the performer should go about preserving the tone colour and correct intonation. These studies are to be applied to the following pitch pattern (see Ex. 4) in the keys of C major and D^b major. Altès concludes the introduction of these dynamic studies by indicating that B³ and C⁴ have been omitted because these notes can only be performed *forte*.²⁸² These long tone studies subsequently become part of the daily exercises required by Altès.

²⁸² This is no longer considered to be the case.

Ex. 4 - Exercise for learning long tones

Pattern of pitches in C major (above) [205-6]

Three dynamic patterns applied to each pitch [206]



The remainder of the exercises and studies found in the treatise employ regular but not frequent use of dynamic markings. In most cases, large-scale dynamics are used for substantial, single affect sections of a study or composition. Often, strongly lyrical sections incorporate *crescendo-diminuendo* patterns to follow the inflection of the melodic line. Only rarely does Altès require rapid changes in dynamic level, notably in Complementary Studies 2 and 4.

Control of dynamics in extreme registers is emphasized generally as a part of the long tone studies. The only point in the treatise at which control of register and dynamics is demanded is in Complementary Study 11. Here, the final phrase ascends through a G^b major arpeggio

from G^{b1} to G^{b3} in slowing note values marked *perdendosi* to *pianissimo*.²⁸³

Ex. 5 - Complementary Study 11, last two bars, first flute
[Altès, 329]



Form -- phrasing, variation ability and versatility,
instruction in music theory.

The entire matter of form is virtually ignored by Altès. No discussion of phrasing above the most elementary level is present in the treatise. Discussion of variation ability and versatility is similarly absent except insofar as such capacity is required of the student in performing the larger melodic pieces and Complementary Studies. Where this technique is required, it is broadly indicated through changes of articulation and dynamic indications, as well as by Italian terminology. Music theory is discussed only on the most fundamental level.

²⁸³ It should be noted that G^b in the third octave is an extremely unresponsive and difficult note. Almost any other note of the third octave would be easier to perform according to Altès' intentions than the G^b .

Musical Style -- performance technique, composite instruction in the history of music and the flute, ornamentation, phrasing, direction, line, inclusion and study of standard repertoire.

In contrast to the meagre treatment of form, the study of stylistic elements is impressively complete. Altès deals with each of the components under the element of musical style on some level in his treatise.

One of the most exciting passages in the *Méthode pour flûte* is a small essay entitled "The Perfection of Execution" (p. 286). In this essay, Altès outlines the requirements of good performance. Taking for granted that by the time the student has reached this point in the treatise, he will have conquered the difficulties of the instrument, Altès commences his essay by identifying two considerations of perfect execution: the application of the technique of the instrument, and the intelligent application of the "special theory" of the flute (quality of sound and special fingerings). He stresses the importance of clarity which arises from a scrupulous observation of the measure, an exact sense of note values, and a precise ensemble of fingers and tongue. To these items he subsequently adds the possession of a full range of tonal expressions, good intonation, and the ability to punctuate the musical line as one would a discourse. In closing, Altès encapsulates his thoughts in the following powerful statement:

The considerations which I have enumerated are of a material order, and for that reason are only

meant as a *relative perfection*. But, as one needs to be completely convinced, that material perfection is the route which leads the student to *natural expression*, the basis of the *ideal perfection* to which he aspires...²⁸⁴

Altès then concludes the essay with a lengthy statement by M^f Baillot which reiterates the point that Altès has made: that artistic expression is only gained through exactitude, and all that remains is the search to find one's own musical soul. As with Coche, we again find that the meticulous attention to the musical text preached by Altès is a radical departure from the perceptions of decadence which pervade many current opinions of nineteenth-century wind performance.

Further instruction on stylistic performance may be gained from the discussion of Italian terminology throughout the treatise. Early in Chapter 5, Altès provides his students with a list of basic Italian words indicating tempo, and categorizes them into the general speeds of very slow, slow, moderate, and fast. Many of these words reappear in Chapter 22 where Altès discusses and defines numerous Italian words suggesting tempo and character. It is interesting to note that Altès considers *allegro* as a

²⁸⁴ Altès, *Méthode pour flûte*, 286: "Les considérations que je viens d'énumérer sont d'un ordre matériel, et par cette raison, ne mènent qu'à une *perfection relative*. Mais, qu'on se le persuade bien, cette *perfection matérielle* est la route qui conduit l'élève à l'*expression naturelle*, base de la *perfection idéale* à laquelle il doit aspirer..." (Altès' italics).

moderate tempo along with *moderato* and *allegretto*. The lessons which follow Chapter 22 liberally incorporate these Italian character indicators as an element of the composition. A large, multi-page glossary of Italian terminology (alphabetized) is included at the end of Part II.

The final source of instruction in stylistic performance is found in Chapter 27, entitled "Style, Expression, Phrasing, Taste." In this chapter, Altès establishes that the mission of the performer is to find the distinct style for each composition, and to be immersed in the style in which the work was composed.²⁸⁵ In what may be considered by many performers to be a most controversial statement, Altès asserts that:

style for the performer...is not having *one* style which is particular to him, but being able to adapt himself to the different characteristics of the masters which he interprets.²⁸⁶

Whether or not one is inclined to agree with this statement, it must nevertheless be conceded that Altès has very clearly made his position known. With this statement, Altès again directs the performer's attention toward the integrity of

²⁸⁵ Ibid., 203:

²⁸⁶ Ibid.: "...le style, pour l'exécutant,...est donc de n'en point avoir un qui lui soit particulier, mais bien de se plier aux différentes manières des maîtres qu'il interprète" (Altès' bold and italic print).

the musical text and forbids inappropriate use of excessive virtuoso style in performance.

Instruction in music history does find a small place within the Altès treatise. The most direct example of music history instruction is Lesson 30, subtitled "Ancient Music," which presents the student with the *Sonata in b minor* by Handel, arranged for two flutes. This lesson will be closely examined later in this chapter for the clues which it offers with respect to the interpretation of early music in the late nineteenth century.

Ornamentation receives a substantial amount of emphasis in the *Méthode pour flûte*. Since ornamentation bears heavily on the performance practice of any musical period, the whole section on ornamentation will be carefully examined further on as to its performance practice implications.

The components of phrasing, direction, and line, if they may be allowed to be considered together as one stylistic unit, are discussed in two larger verbal sections of the Altès treatise. In Chapter 27, he discusses the need for dynamics to inflect the direction and phrasing of a musical line. At this point, he counsels the student to employ dynamics even when they are not supplied by the musical text and suggests that the best manner of accomplishing this is to make a *crescendo* as the line rises,

and a *decrescendo* as the line falls; at the same time, he cautions the student not to abuse this technique. Later, in the essay "The Perfection of Execution," Altès takes the same position, also assumed by Coche, that the best manner of punctuating a phrase is to follow the rules governing the delivery of discourse.

Finally, the study of standard repertoire comes to the fore in this treatise. Some works by other composers which have been recommended for additional study by Altès at various points in his treatise have already been enumerated earlier in this chapter. However, what must not be overlooked here is Altès' incorporation of works derived from what must have been standard nineteenth-century orchestral and solo literature. Several examples are immediately recognizable, and the first examples appear in the section devoted to the study of ornamentation. Here Altès includes excerpts from Gluck's *Armide*, and two Haydn *Sonatas* transcribed for flute. The second example is the complete *Sonata in b minor* by Handel, included in lesson 30, as has been previously noted. The third is the incorporation of an excerpt from *The Ruins of Athens* by Beethoven into Complementary Study 15. The fourth and final example is a transcription for two flutes of the "Scherzo" from *A Midsummer Night's Dream* by Mendelssohn, which is Complementary Study 22. By including works from the

standard repertoire, Altès conveniently provides ample opportunity for the student to begin to practise his interpretive skills on the works which will ultimately provide the basis for his professional life.

In summary, Altès uses the opportunities presented by his 429 page treatise thoroughly to instruct the student in the virtuoso technique for his instrument and in the techniques of stylistic performance. While a number of components from each of the elements of rhythm, timbre, and dynamic are not considered by Altès, the student can nevertheless be assured of having received a significant amount of instruction on each of these topics. The only element which is, for all intents and purposes, completely ignored by Altès is form, admittedly the most difficult to incorporate into a treatise, even one as large as this one. Still, despite the failings of the treatise, the *Méthode pour flûte* does move a student from a very elementary level of flute performance to a highly virtuosic standard, allowing enough time and study material to permit the student to gain full competence at this task, and at the same time focuses the attention of the performer away from virtuosic exploitation and toward maintaining the integrity of the composer's intentions.

Topics of Special Attention

Having traced the contents of the *Méthode pour flûte* and the six elements of music, the topics which have been given special attention by Altès must now be explored. These topics may be divided into two categories: those which are unique to the Altès method, and those which bear strong performance practice implications.

The introduction of numerous specialized fingerings is specific to the technique of the Boehm-flute. At the time of the treatise's composition, Parisians had been using the Boehm-flute for about forty years; therefore, there was already a third generation of flutists trained from the beginning of their studies on the instrument. However, Altès himself began his studies on the old-system flute, an instrument which by its structure possessed the possibility of numerous fingerings for some notes. Knowing these fingerings intimately would have been a part of the technique of the old-system flute. While the Boehm-flute, constructed on acoustic principles, has one best fingering for each note, Altès demonstrated how the laws of acoustics can be manipulated to serve the purposes of the flutist as surely as Boehm used them in designing his flute. Drawing on his early experiences with the multiple fingerings of the old-system flute, Altès has provided his students with a rich resource of technical possibilities previously

unexplored by writers of flute treatises. Such an extensive discussion of special fingerings is unique to Altès.

Some alternate fingerings are standard in flute performance, most notably those used to produce those trills which would be impossible with the standard fingerings. However, what makes the Altès method remarkable is the author's inclusion of numerous tables of alternate fingerings and his absolute insistence on their use. These tables have already been identified above; however, they merit elaboration here.

Table B gives the flutist the requisite fingerings for the *notes sensibles*. The Boehm-flute was designed according to the acoustic principles governing equal temperament. As a result, any adjustment of pitch required by the rules of just-temperament would have to be made by some external means employed by the flutist. In the specific case of the *do-ti-do* progression, Altès, like his predecessor Coche, has chosen to adopt a series of alternate fingerings which may be employed in accomplishing this task. By drawing on alternate fingerings, Altès has successfully prevented the flutist from having to make constant adjustments of the embouchure to produce the required alteration of pitch. Embouchure adjustment can, of course, cause inconsistent intonation if over-used.

Table C gives the alternate fingerings required to produce trills not possible with ordinary fingerings. While many trills can be produced by a variety of fingerings, only those which yield the best results of intonation and tone colour are given. Each trill is followed by the best fingering to produce the most desirable termination for that trill. The inclusion of terminations in the trill chart suggests that the application of terminations to trills was the rule at the time of the treatise's composition.

Five tables of fingerings are combined under the general heading of Table D. The table designated "D" shows the alternate fingerings which are used to correct the intonation of certain upper register notes, as well as those which facilitate the playing of certain combinations of upper register notes which are otherwise awkward or even impossible - for example, A³ to E³, and vice versa. Tables D¹, D², and D³ each show fingerings to be used when a given passage would necessitate the movement of numerous fingers or would produce cross fingerings. While the two obstacles just noted are not impossible to deal with, nor even particularly difficult to overcome with sufficient practice, they carry the potential of causing excessive noise in the key mechanism, of causing the flute to bobble against the bottom lip if the balance of the instrument is disrupted, or of causing unevenness in technical passage work. Tables D¹

to D³ are given to assist the flutist in avoiding these problems by showing which fingers may remain in position from one note to the next, contrary to their normal motion, but without extreme effect on intonation or tone colour. Table D⁴ demonstrates the use of the B^b thumb key which eliminates the cross fingering required by the regular B^b fingering.

Discussions of stylistic performance in the *Méthode pour flûte* have isolated the first example of the separation of early music from contemporary music to be found in pedagogical materials for flute, namely the study of the *Sonata in b minor* by Handel. It is known that in the waning decades of the nineteenth century, a revolution in music swept Paris, a re-awakening of interest in the study and performance of early music (see chapter 3 of this dissertation). Presumably influenced in part by that revolution, Altès' inclusion of the Handel *Sonata in b minor* demonstrates how stylistic performance - in the midst of the Parisian early music revival - took shape. A number of features of early music performance which are today considered standard are not incorporated into Altès' realization of the *Sonata*. The most obvious difference is Altès' interpretation of ornaments. Trills, for example, are to be performed without dissonant preparation. Altès makes no attempt to equalize duple and triple rhythms when

they appear simultaneously in the two parts. Nor does he advocate any tempo relationship between paired slow and fast movements (as his metronome markings attest). In addition, Altès provides no indication either allowing or encouraging additional ornamentation of the musical text. However, it must be noted that Altès has not superimposed any dynamic markings, nor has he chosen to re-write the *longa* note values which appear at the close of movement IV as tied whole notes. It is clear that while Altès has gone to great lengths to preserve the integrity of the written musical text, he and presumably his fellow performers primarily viewed early music in the context of performance in his own time.

The daily exercises which Altès has composed are unique both in the material which they cover and the manner in which they do so. The daily exercises are based on scale and arpeggio patterns in all major keys; however, most of the studies incorporate ornaments into these basic patterns. While it might be tempting to assume that Altès is concentrating on the execution of ornaments, one must look deeper to understand that ornaments embody small bursts of extremely rapid finger movement. In most cases, this motion is the fastest demanded of the flutist, particularly in the context of the requirements of nineteenth-century composition. By incorporating alternate fingerings Altès

seizes the opportunity to work these fingerings in small isolated bursts. This "sprint" technique when applied to the fingers encourages extremely rapid but accurate finger movement whenever it is required of the flutist. Altès, however, does not overlook tone development as an important part of the daily process. Through his daily exercises of simple, predictable patterns, he successfully challenges the flutist to reach the highest degree of technical prowess and to develop both aspects of the "special theory" of the flute, namely tone and alternate fingerings.

Also unique to Altès's treatise is his instruction on the placement of the embouchure hole of the flute against the lower lip. In Chapter 9, Altès instructs the student to cover only one-quarter of the embouchure hole with his lower lip. He continues by saying that a sound may be made with half or two-thirds of the hole covered, but it will not allow the flute to speak with its full resources. This is a radical departure from earlier treatises. Previously, a student flutist would be asked to cover up to half of the embouchure hole with his lip, giving a pure, focused, but thin sound to the instrument. The notion of opening up the embouchure hole to allow a maximum of air into the instrument speaks to the need for full amplitude of sound from the flute. In addition, uncovering the embouchure hole opens a wider array of tone colour possibilities because the

flutist must rely more on the muscle strength of his lips, and less on the physical properties of the embouchure hole when the flute is held in the suggested position. Despite the fact that Altès does not enter into any discussion of tone colour, his discussion of the positioning of the embouchure hole supplies one small clue as to the presence - if not the importance - of the ability to produce tonal colouration on the flute. However, if we consider his verbal commentary, we must concede that Altès is probably attempting to establish the embouchure conformation best adapted to the contemporary demand of competing with the increasing volumes of ever enlarging orchestras, rather than that best suited to tonal colouration.

A topic found in this treatise which is totally unique in the nineteenth-century pedagogical literature for flute is the study of transposition. In fact, Altès devotes one full chapter and one complete lesson, as well as several Complementary Studies, to the practice of transposition. Altès notes that the ability to transpose is required mostly to accommodate singers and therefore is never required to be carried out over an interval of more than a third. His instructions for transposition suggest that the student should learn to read bass clef, as well as first, third, and fourth line C-clef. In this way the performer need only change the clef and key signature of the piece which is

being performed in order to transpose easily up or down by second or third. Since he states that transposition is necessary to accommodate singers, it may be assumed Altès' stand on transposition was a product of his time as a member of the Opéra orchestra.²⁸⁷ This being the case, it must be assumed that the ability to transpose easily and at sight was a requirement for any position in at least first and probably second rank theatre orchestras of the late nineteenth century.

The proper way to practise is the final topic which is unique to the *Méthode pour flûte*. Altès rarely seems to pass up an opportunity to remind his students that proper practise habits are the basis for acquisition of good skills on the flute. In Lesson 1, he tells his students that they must not be content with repeating each exercise once, but must do so ten or twenty times, slowly increasing the tempo. Later in the same lesson he cautions that the student must not increase the tempo at the expense of perfect accuracy. At the end of Lesson 7, Altès includes a note saying that these lessons must be nearly perfect, and must be repeated if they are not. When he presents

²⁸⁷ It is common practice amongst many singers to transpose arias or other compositions, where possible, if it is necessary to accommodate either the extremes of their range or to place the overall range of the composition in the most characteristic and reliable compass of their voice. This fact is reflected in the numerous editions of lieder currently available for high, medium, or low voice.

technical studies such as scales and daily exercises, Altès always takes the time to assure the student that this is how the technique of the instrument is to be conquered, and that the studies must not be given up even after a high level of competence has been gained.

At this point, those aspects of the treatise which offer clues to the performance practice of late nineteenth-century literature must be considered. These five important aspects consist of *notes sensibles*, articulation, ornamentation, Complementary Studies, and the flutist's library.

The *notes sensibles* have already been discussed in the context of how they are to be produced. Even more interesting, however, is the study of the conditions under which they are to be introduced and of the purpose of such notes. In the introduction to Lesson 18, Altès suggests that the *note sensible* is to be used on note progressions where the leading tone drives up to tonic. However, careful examination of the exercise pieces which Altès composed for the study of the *notes sensibles* shows that the technique is employed more generally than just on $\hat{1}-\hat{7}-\hat{1}$ progressions. In fact, in these studies Altès indicates that *sensible* fingerings should be used on certain instances of the melodic progressions $\hat{5}-\#\hat{4}-\hat{5}$, $\hat{7}-\#\hat{6}-\hat{7}$, $b\hat{3}-\hat{2}-b\hat{3}$, and $\hat{3}-\#\hat{2}-\hat{3}$. In each case the first and last note of the group functions

as the root of the immediate chord. Therefore, the only conclusion to be drawn is that the *note sensible* is used whenever the performer wishes to heighten the importance of a chord or melodic tone. This manner of performing the *note sensible* serves to draw attention to and solidify selected melodic notes.

Many articulations are found in the Altès treatise, but they do not point to the same colouristic style of performance found in Coche's treatise. Near the opening of Part II, Altès presents a more detailed study of the various articulations required of the flute player. These are the *détaché*, *louré*, *lié* or *coulé*, and the *syncopé*.

The *détaché* is a single note to be performed with the natural mono-syllable TU. The simple *détaché* is not indicated by any marking whatsoever. When the note is superscribed with a dot, our simple staccato, the note must still be taken with the natural mono-syllable TU, but must be performed as a very dry, short note. If the note is superscribed by a wedge, it must be started with TU and played drily, but not so much as the note superscribed by a dot. Altès is, however, quick to point out that this instruction is in direct contrast to performance of this notation at the piano; in the case of piano performance, the wedge-note is performed shorter and more drily than the dot.

The *louré*, or notes superscribed by both dots and slurs, is an articulation which Altès terms as "meaningful only to strings."²⁸⁸ While it is true that this articulation has a very particular interpretation on a stringed instrument, Altès clarifies the interpretation of this articulation for wind instruments so that it is in no way ambiguous. Notes thus marked must be detached with the greatest sweetness, producing a gentle undulation in the sound. If the *louré* is given as a combination of slur and accent marks, it should then be performed in a less detached and more undulating fashion. Altès makes no provisions for the marking, used commonly today, of the slur combined with a tenuto mark.²⁸⁹

Ex. 6 - Two styles of *Louré* discussed by Altès (p. 103)



Altès does not choose to elaborate on the performance of the *liés* in this section. The student is therefore left with Altès' instructions from Chapter 6,

²⁸⁸ Altès, *Méthode pour flûte*, 102.

²⁸⁹ This marking is discussed by Altès' 1956 editor Caratgé.

which indicate that passages superscribed by a slur marking should be performed "...with one single articulation of the tongue."²⁹⁰ The only new contribution to be found in Part II is his note that this same marking can be used to indicate a tie, which in turn may be used to produce syncopation.

Syncopation is the final articulation presented by Altès in this section. Why Altès chooses to consider this figure as an articulation and not a rhythmic figure is profoundly unclear. Perhaps the reason is the connection offered above between the markings for slurs and ties, and the notation of syncopation through their use. Some light may be shed on this particular topic by Altès' 1956 editor, who classifies the *syncopé* as a rhythmic figure, but then notes that it must be strongly accented and then diminished. If this is also Altès's original articulatory conception of this figure, it is possible that he refrained from expounding on its interpretation because at the point of the treatise when the *syncopé* is presented, he has not yet introduced the means of producing such a dynamic variation of the sound. Altès obviously considers the *syncopé* a form of articulation, and to that end great care must be given to the attack and release of syncopated notes.

²⁹⁰ Altès, *Méthode pour flûte*, 46: "...avec une seule articulation de langue."

Altès writes:

...articulation... renders instrumental performance intelligible.

The more different means [which] an instrument [has] for articulating the sound, the more one is able to give variety to the performance.²⁹¹

Nevertheless, when comparing the great number and variety of articulation styles and techniques presented by Coche in his treatise to the smaller number of possibilities given by Altès, it is clear that by the late nineteenth century, articulation was becoming more mechanical, less colourful than that which we find earlier in the century.

The direct study of ornamentation as presented by Altès is concentrated in a fifty-eight page section comprising six chapters and six lessons, which offer a vital contribution to an understanding of nineteenth-century performance practice. Chapter 14 introduces the student to ornamentation [*agréments*]. Here Altès defines the difference between melody and accompaniment, as well as noting that each piece has its own particular style. He suggests that ornaments may be introduced even when not indicated, but only according to style and taste. He continues his caution to the student, writing:

²⁹¹ Ibid., 278: "L'articulation... rend l'exécution intelligible sur les instruments.

"Plus un instrument à de *moyens différents* pour articuler les sons, plus on peut donner de variété à l'exécution."

...if the performer abuses [grace notes] by using them too often or inappropriately, he will give proof that he has not understood the piece which he plays....²⁹²

He concludes this chapter by indicating that five types of ornaments will be studied: small notes, trills, small passing trills, mordents, and turns.

Small notes are the subject of Chapter 15. In this chapter, Altès presents both the long or melodic grace note [*appoggiatura*] and the short grace note [*acciaccatura*]. As concerns the style of playing the long grace note, Altès suggests that the etymological derivation of the word *appoggiatura* from the Italian *appoggiare*, meaning to lean upon, and gives us all the indication we need to interpret the ornament. He states that, as a rule, descending long graces should be played according to the key signature, while ascending long graces should always be taken from a half-step below the principal note. When deciding the length of the long grace note, one may take as a rule that it be held for one-half the value of a note divisible by two, and one-third the value of a note divisible by three, or that it receive the actual value in which the small note is written. In each case the long grace note must be heavily accented.

²⁹² Ibid., 136: "...si l'exécutant en abusait, soit en les multipliant trop, soit en ne les plaçant pas à propos, il donnerait la preuve qu'il n'a pas compris le morceau qu'il exécute..."

Ex. 7 - Long grace notes
 notation (above), realization (below)
 Adapted from Altès (pp. 136-7)

The image shows two staves of musical notation. The top staff is in G major (one sharp) and common time (C). It contains a sequence of notes: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4. Above the first four notes (G, A, B, C) are long grace notes, represented by a slash through the stem. The bottom staff shows the realization of these grace notes as short grace notes, which are small notes with stems that do not reach the main note's stem. The realization is: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4. The short grace notes are placed on the same beat as the main notes they ornament.

The long grace note is practised in Lesson 19, which incorporates excerpts from Gluck's *Armide* and a *Sonata* by F.J. Haydn. Altès' realization of the ornaments included in these study pieces confirms the rules given above.

The rules governing the performance of short graces are more flexible. While he does not say so, Altès appears to consider short grace notes as being denoted by a slash through the stem. This figure may span any interval, and may include one or more notes, but should always be quick and unmeasured. Since this figure has the tendency to stress and emphasize the rhythm (much as would a percussive flam), it is often found at cadences. The above-mentioned tendency of small graces also suggests that they should be stressed on the beat of the principal note. The short graces are practised in Lesson 20.

Ex. 8 - Short single grace notes, Adapted (Altès, p. 137)



Multiple grace notes are always to be played quickly so as not to interrupt the pulse of the movement,²⁹³ and may be performed on or before the beat. Even though he does not specifically say so, Altès implies by his examples that the manner in which multiple grace notes are notated may be used as a clue in determining on-beat or pre-beat interpretation.

Ex. 9 - Multiple grace notes (Altès, p. 137)
 On-beat interpretation (above)
 Pre-beat interpretation (below)



²⁹³ Variation in the speed of these ornaments is advocated by Altès' 1956 editor Caratgé depending on the tempo of the piece including these figures. However Altès strictly forbids this in his original publication.

Altès presents many rules governing the execution of trills. He requests that the student practise trills slowly and evenly because "...in this way one will easily come to possess a trill [which is] even, brilliant, flexible, lively, and light, qualities ... [which] are necessary if one does not wish to alter the melody disgracefully."²⁹⁴ As a rule, the trill of this period should begin on the principal note unless otherwise indicated. Chromatic alteration of the trill may be indicated either by standard means of applying an accidental to the tr sign itself or by altering any upper auxiliary which might precede the note of the trill.

Ex. 10 - The trill (p. 154)

- 1) Start from the lower or upper auxiliary
 - 2) Chromatic alteration indicated by auxiliary
 - 3) Standard notation of chromatic alteration
- Adapted from Altès



Another interesting contribution made by Altès is that he permits a trill by augmented second when the trill falls on the sixth degree of the harmonic minor scale.

²⁹⁴ Altès, *Méthode pour flûte*, 160: "...de cette manière on arrivera facilement à posséder un trille égal, brillant, souple, vif et léger, qualités ...rend nécessaires si l'on ne veut disgracieusement altérer la mélodie."

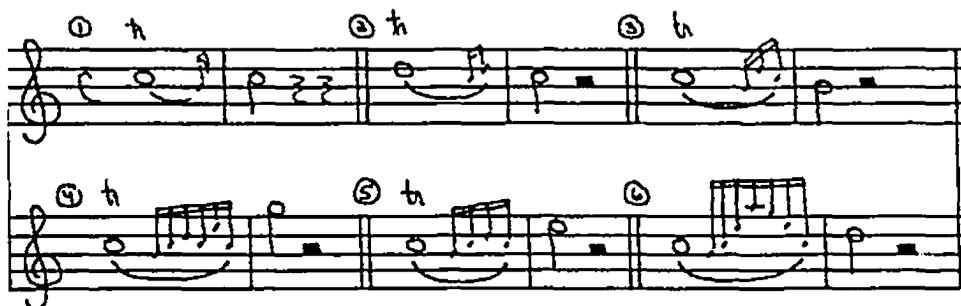
While he leaves the decision to include a termination of one or two notes to the discretion of the performer, it is clear that when time allows, Altès prefers to add a termination to each trill. In fact, Altès voices his preference for the older marking for a trill (+) because this marking always indicates a trill and termination.²⁹⁵ He further notes that if a termination is not indicated in the musical text, the performer should then use a half-step (altered) termination. In all cases, terminations must be at the same rate of movement as the trill itself. Despite his insistence on the use of mostly small terminations, Altès permits numerous variations of the termination. In the example that follows, it may be seen that in most cases the termination highlights either the leading-tone or dominant function of the harmony under what would appear to be a cadential trill.

²⁹⁵ Altès has an interesting interpretation of the derivation of the + sign, as symbolizing the four notes:

RE
DO + DO
TI

Hence, his understanding that the + represents a trill with termination.

Ex. 11 - Possible trill terminations (p. 155)



Altès concludes his discussion of trills by identifying the two circumstances in which trills need not be terminated, namely in consecutive trills on notes of ascending or descending scale patterns (although a termination is required for the last trill of the pattern), and in cases where the composer indicates the trill in such a way as to make a termination very difficult.

Ex. 12 - Trills not requiring termination
Adapted from Altès (p. 155)



In Chapter 17 Altès presents the passing trill [*brisé*], a short trill of two to four alterations without termination which is indicated by tr or tr . It nearly always appears over a rhythmically dotted note, and always on a descending scale. Often a number of passing trills

succeed one another, always being separated by an intermediate note.

Ex. 13 - Use of the passing trill (Altès, p. 166)



Altès offers two possible executions of the passing trill. His first suggestion is a continuous execution of equal note values moving directly through the short note. His second interpretation incorporates a small hesitation on the principal note, which actually double-dots the principal note, before the short note is played. He prefers the second interpretation because it preserves the characteristic rhythm of the passage.

Ex. 14 - Possible interpretation of the passing trill
Notation (top), option 1 (middle), option 2
(bottom) [p. 166]

Three staves of music in treble clef with a 3/4 time signature. The top staff shows the notation for the passing trill with a double-dotted principal note and a shorter note above it, marked with 'h'. The middle and bottom staves show the execution of the trill as a continuous stream of notes, with the principal note being double-dotted. The first three measures of each staff show the trill, and the fourth measure shows a quarter rest followed by two eighth notes.

Altès discusses the mordent in Chapter 18. The mordent is, at the time of his writing, a small trill of only one alternation. As is found with the passing trill, the mordent has two possible interpretations, depending on its notation. When a note is superscribed by the sign *tr* or the sign W , and the note is too short to sustain a full or even a passing trill, the performer should execute a mordent quickly on the beat, as if performing a double grace note. In the lesson which follows, Altès places mordents of this variety and figures indicated by double grace notes preceding the principal note side by side. Clearly, these two figures have the same manner of execution.

Ex. 15 - Mordent notated by *tr* or W (Altès, p. 170)
 Notation (above), Realization (below)



If the composer writes out the mordent with double grace notes following the principal note, then the mordent is taken as an even triplet. Altès boldly notes that the

difference in the signs should cause no confusion for the performer.

Ex. 16 - Mordent notated by grace notes (Altès, p. 170)
Notation (above), Realization (below)

The image shows two staves of musical notation. The top staff is in treble clef with a common time signature (C). It contains four notes on a single line, each with a grace note above it. The bottom staff is also in treble clef with a common time signature. It shows the realization of the mordent as four triplets of notes, each corresponding to a note in the top staff.

The final ornament to receive Altès's attention is the turn (Chapter 19). Altès describes the turn as a three- or four-note figure spanning a diminished or minor third in range; the major third is possible, but extremely rare. The turn is most commonly notated by the sign  printed directly over the principal note or between two notes of the musical text. The turn may first move up or down. According to Altès' examples, the turn sign always indicates upward motion first; initial downward motion is indicated by grace notes.

When the sign appears directly over the principal note, the turn may be executed either on or before the beat. The decision to perform the turn on or before the beat is

left to the discretion of the performer according to the style of the composition.

Ex. 17 - Turn sign placed directly over a note
 Notation (top)
 Realization 1 (middle)
 Realization 2 (bottom)
 Adapted from Altès (p. 177)

The image shows three staves of music in treble clef with a common time signature (C). The top staff contains a single note on the second line of the staff (G4) with a turn sign (a stylized 'S' with a sharp sign) placed directly above it. The middle staff shows four measures, each containing a realization of the turn: a group of three notes (F#4, G4, A4) beamed together, with the G4 note being the principal note. The bottom staff shows four measures, each containing a realization of the turn: a group of four notes (F#4, G4, A4, B4) beamed together, with the G4 note being the principal note. Vertical dashed lines connect the principal notes across the three staves.

A turn may also be indicated by triple or quadruple grace notes preceding the principal note. This notation is used for indicating three- and four-note turns which first move downward. This notation must be interpreted as initiating from the beat of the principal note.

Ex. 18 - Turn notated by grace notes
Adapted from Altès (p. 177)



When the turn sign is placed between notes, the turn, similar to the sign's placement, is executed after the principal note, and before the following note. The turn takes three or four notes depending on the rhythmic value and placement of the note which it follows. The execution of the turn will vary according to whether the note is duple, short triple, or long triple, and if the metre is simple or compound.

Ex. 19 - Turn sign placed between notes
Notation (above), Realization (below)
Adapted from Altès (p. 176)

Two staves of music in treble clef, 3/4 time signature. The top staff shows the notation for a turn, with a turn sign placed between notes. The bottom staff shows the realization of the turn, where the turn is executed as a sequence of notes. The notation and realization are shown for four measures, with the turn sign placed between the second and third notes in each measure.

A turn on a very short note may be indicated by the sign *tr.* Altès gives no indication as to how one might determine whether this sign suggests a turn or a mordent. However, from his examples it is possible to surmise that when the *tr* sign appears over the second note of a slurred pair, it is taken as a turn, whereas it would be taken as a mordent if it were placed over the first note of the pair or on detached notes. Lessons 24 and 25 confirm Altès' instructions for the execution of the grupetto.

Ex. 20 - The turn substituted for the trill (Altès, p. 176)
Notation (above), Realization (below)

The image displays two musical staves for Example 20. The top staff, labeled 'Notation', shows four pairs of notes in a slurred pair, each with a trill sign (*tr.*) over the second note. The notes are G4-A4, F4-G4, E4-F4, and D4-E4. The bottom staff, labeled 'Realization', shows the same pairs of notes, but the second note of each pair is replaced by a trill (a rapid oscillation between the two notes). The realization is in common time (C) and C major.

Another important contribution by Altès is the set of 26 *etudes*, entitled Complementary Studies, which conclude the practical text of his treatise. While other authors include similar studies in their treatises, those by Altès are unique because of his unflagging insistence on establishing one plan of attack for each study and the

subsequent length of time over which he sustains the requirement of extreme virtuosity. These studies comprise a part of most serious flute study today, but modern editions lack reference notation to tables of alternate fingerings, the second flute part, and the preambles provided by Altès to instruct the student in what is to be accomplished in each study. As a whole, the Complementary Studies incorporate all of the lesson materials presented throughout the treatise. The following catalogue of these studies, including prefatory remarks and points of interest, is offered both to demonstrate Altès' comprehensive approach to the conclusion of a pupil's studies, and to assist future students in their studies.

- 1) For *Martelé* attacks -- a heavy, *pesanté*, firm, rounded, detached articulation; indicated ? .
- 2) For *perle* or *sautillé* attacks ("skipping" single tongue) -- a slightly short, light, detached, but not dry articulation.
- 3) For notes slurred in patterns of two; each pair must be accented vigorously to keep the groups separated.



- 4) For notes slurred in patterns of two; the study should be performed with a very gentle, urging sound.



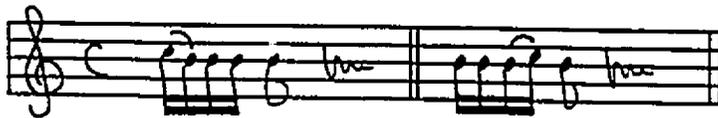
- 5) For the study of arpeggios.
 6) For compound tonguing -- the TU-DU articulation on dotted rhythm patterns of duple and triple meters.
 7) For patterns of two notes slurred, one note detached.



- 8) For the use of the B^b Thumb Key.
 9) For the use of Tables B and C [and D], as well as the occasional use of the B^b Thumb Key.
 10) For frequent and sudden applications of the B^b thumb key [octaves also figure prominently in this study]. Altès' note suggests that the octaves are to be performed in true value and with great evenness.
 11) For sustained tone and expression -- the student is required to learn both parts. [The key (G^b major/e^b

minor) offers a great number of intonation problems on the sustained soft pitches of c^b , D^b , G^b , and the whole of the upper register.]

- 12) [For the study of double tongue.]
- 13) For the use of trill fingerings, and [special fingerings for] high E, F^\sharp , and G^\sharp .
- 14) For the use of trill fingerings -- uses both trills with termination and turn grupetto figures of four or five notes.
- 15) For mordent fingerings -- Altès mentions in his remarks that these are to be employed even though the study is not to be played quickly. Flutists will be interested in noting that the study bears the metronome marking of 192= quarter-note.
- 16) For arpeggios, trills, pauses, and simplified fingerings.
- 17) For patterns of two notes slurred and two notes detached.





- 18) For patterns of two notes slurred and two notes detached (third and fourth articulations).



- 19) For the detached tremolo (triple tonguing).
 20) For the study of a^b minor and c^b major.
 21) For patterns of three notes slurred, one note detached [also variations of triple tonguing].



- 22) For the alternation of single and double tonguing (transcription of Mendelssohn's *Scherzo* for two flutes); the student should practise both parts. Sections to be double tongued are marked.
- 23) For rapid intervals of thirds and fourths.
- 23b) Same study transposed from C major to B^b major.
- 24) For chromatics, mordents, and rapid (small) arpeggios.
- 25) For very long slurs, turns, and measured tremolo
- 26) For the study of *recitativo*, arpeggios, and turn fingerings.

The final topic to be discussed in the context of the Altès treatise is that which closes the treatise itself, a list of repertoire designated as "Library of the Flutist." The list is lengthy but not exhaustive. Here one finds works from the solo, chamber, and study repertoires. The list is overwhelmingly dominated by nineteenth-century composers, primarily French. Altès devotes one entire column of four (total) to the works of his teacher Louis Tulou. Other French composers represented include Berbiguier, Berlioz, Demersseman, Drouet, Hugot, Reicha, and Saint-Saëns. Among the non-French composers, Altès includes Bach, Beethoven, Boehm, Ciardi, Doppler, Haydn, Hummel, Kuhlau, Kummer, Lindpaintner, Mozart, Reber, and Reis. Except for the works of the older masters, including Mozart,

Bach, Beethoven, and Haydn, the list supplies mainly the titles of grand sonatas, grand duos, grand fantasies concertantes, and works in a similar vein. It is easy to deduce from this list that at the time of the treatise's composition, these compositional genres still dominated the solo concert stages, and thus were in the highest demand for study and repertoire pieces. However, the list also reflects the slow arrival of ancient music, and in particular, the works of the early masters on the musical scene of Paris (see chapter 2).

Chapter 7

"L'Art de la flûte" by Paul Taffanel

Paul Taffanel is arguably the finest flutist that has ever lived. His students have been directly responsible for the dissemination of the Paris flute style throughout North America. All of his life he collected a vast array of information pertaining to the history and instruction of the flute which he fully intended to compile into a large treatise to match in scope that by Baillot for the violin, *L'Art du violon*.²⁹⁶ Sadly, he died before having the opportunity to realize his *magnum opus*. However, Taffanel's dream was ultimately realized during the 1920s by two of his favourite students, Philippe Gaubert and Louis Fleury.²⁹⁷

Taffanel's treatise has not come down to us as one large volume, but rather as two monumental, independent works, the *Méthode complète de flûte* edited by Philippe

²⁹⁶ Paul Taffanel and Philippe Gaubert, *Méthode complète de flûte* (Paris: Leduc, 1923, 1958), editor's preface (henceforth cited as *Méthode complète*). The 1958 re-edition which is being used for this study includes translations from the original French into English, German, and Spanish, and differs from the original only in the addition of the four translations (Fischer, 146). No translators are credited for their work.

²⁹⁷ *Méthode complète*, editor's preface.

Gaubert, and "La Flûte" written by Louis Fleury for the *Encyclopédie de la musique et dictionnaire du Conservatoire*.²⁹⁸ In the present study, both of these works will for the first time be considered together as two parts of Taffanel's original conception. Justification for this approach is found in the editor's preface of the *Méthode complète*:

During his long career Paul Taffanel had not ceased to gather material for a vast treatise in which would be included all the history, theory, and practice of the flute.²⁹⁹

Bearing this comment in mind, it is evident that only by taking the two works together can a complete analysis of Taffanel's probable intentions be gained: "La Flûte" contains the complete history along with some practice of the flute, and the *Méthode complète* is comprised of the theory and practice of the flute. The editor of the 1958 re-edition of the *Méthode complète* has noted that Gaubert and Fleury were each uniquely suited to the completion of the individual parts of their master's work as they are now found.

Philippe Gaubert was from its early stages a part of the process which resulted in the *Méthode complète*. Paul

²⁹⁸ Louis Fleury and Paul Taffanel, "La Flûte," *Encyclopédie de la musique et dictionnaire du Conservatoire*, edited by Albert Lavignac, Part 2, Volume 3, 1483-1527 (henceforth cited as "La Flûte").

²⁹⁹ *Méthode complète*, editor's preface.

Taffanel is said to have sought the advice of his student as to the relative merit of studies to be included in his treatise. The plan of the treatise was all but finished in the late stages of Taffanel's life, as noted by the editors of the *Méthode complète*:

Documents, advice, statements of general theories or particular rules, lessons written or sketched, schemes for studies and exercises, works finished or only drafted, numerous musical texts, all these were collected together.³⁰⁰

Gaubert had only to follow what he perceived to be the logic of his master's intentions in editing and compiling the work.

Taffanel's work on "La Flûte" was less complete at the time of his death. Louis Fleury was charged by both Albert Lavignac and Taffanel's widow to complete the task. Fleury himself recounts the process of composing "La Flûte" in the opening paragraphs of that work:

The edition of the article had not yet begun, but I had in hand all of the documents, notes, [and] references which Paul Taffanel had accumulated during a whole lifetime of research and meditation upon the subject which he dreamed of treating thoroughly....

The article which follows has, therefore, been drafted entirely by the present author. I make this declaration so that no one will attribute to Paul Taffanel any errors or weaknesses. However, I would never have been able to write one line had I not benefitted from the

³⁰⁰ Ibid.

documentation of my master and, even more, from his incomparable teaching.³⁰¹

And so, even though Taffanel himself was unable to complete the work on the treatise to be entitled *L'Art de la flûte*, the work was indeed completed by two devoted students who attempted to hold to the best traditions of their master in bringing to fruition his conceptions and intentions. While it certainly cannot be said that what is studied below is Taffanel's work alone, we must nevertheless view it as an accurate reflection of the treatise which would have been his *L'Art de la flûte*.

Format of the *Méthode complète*³⁰²

The *Méthode complète* is organized into eight parts: I, general technique; II, ornaments; III, tonguing; IV, daily exercises; V, progressive studies; VI, twelve studies for virtuosity; VII, style; VIII, difficult

³⁰¹ "La Flûte," 1483: "La rédaction de l'article n'était pas commencée, mais j'ai eu entre les mains tous les documents, notes, références, que Paul Taffanel avaient accumulés durant toute une vie de recherches et de méditations sur un sujet qu'il rêvait de traiter à fond....

L'article qui va suivre a donc été entièrement rédigé par le signataire de ces lignes. Je tenais à le déclarer pour qu'on n'attribuât pas à Paul Taffanel ce qu'on pourra y trouver d'erreurs ou faiblesses. Mais je n'en aurais jamais pu écrire une ligne si je n'avais bénéficié de la documentation de mon maître et, plus encore, de son enseignement incomparable.

³⁰² For ease of reference throughout the course of this study, Gaubert will be considered the author of the *Méthode complète*, and Fleury the author of "La Flûte."

passages. Gaubert's organization of the *Méthode complète* into eight very specific blocks of study cloaks the treatise with an encyclopaedic air, more a reference text in format than a methodical progression of instruction. As a result the treatise embodies neither the spontaneous flow of instruction given by Coche, nor the highly structured organization of pedagogical thought given by Altès.

The pages which precede Part I are filled with advice to the beginning student. The author begins with a note advising students that the treatise is to be used with a teacher, and not under any circumstances as a substitute for a teacher. The treatise may be employed as a constant companion for students, and as a source of ideas for teachers. In the pages which follow, the student learns how he is expected to practise, how to assemble and hold the flute, and how to position his body. Included in the opening pages is a complete chart of the basic fingerings from C^1 to C^4 ; this is the only time fingerings appear within the text of the treatise.

Part I is devoted toward the first trials of the student, and is heavily weighted towards tone production. Gaubert includes a great number of rather sophisticated tonal problems for the student to solve in addition to the expected instruction on holding the instrument and learning the basic technique of the flute. He advocates that the

first sound of the instrument should be made on the head-joint alone (a common practice today, but not one which has been encountered in earlier treatises). Only when this has been conquered should the student should advance to the whole instrument. Gaubert instructs the student to practise the preparatory exercises "with persistence until each note is emitted quite clearly and until the join between the two notes is perfect."³⁰³ These exercises, which attest to the importance of a smooth motion of air, embouchure, and fingers, are very difficult for the flutist who has been playing even as long as one or more years, and much more so for the very beginning flutist. In speaking of the flutist's posture, Gaubert demands that the student must be very attentive to his posture, "realizing fully the fact that faults in posture can in consequence become an obstacle capable of impeding his career."³⁰⁴

In terms of tone production, Gaubert uses a similarly direct style of delivery, always demanding the best from his students immediately. Having listed the physical attributes which assist and hinder the flutist in tone production, Gaubert discusses the acoustic properties of the Boehm-flute which affect the fingering system of that instrument. He stresses the importance of the breath in the

³⁰³ *Méthode complète*, 6.

³⁰⁴ *Ibid.*

production of individual notes and their proper registers apart from correct fingerings. He speaks of the breath in terms of a "thread of breath" having size, shape, and direction. He emphasizes the role that the flutist plays in correctly producing each note by saying that the slightest miscalculation results in an incorrect note. Strong words for a young flutist!

At this point Gaubert allows the student to put all these preliminary remarks into practice. He supplies the student with numerous scale and interval studies in the key of C major. The note values of these exercises are all extremely long, and while he does not yet require the student to articulate each note, he immediately employs long *crescendo* and *diminuendo* patterns. Gradually, Gaubert incorporates rhythmic patterns and simple articulations into the tone studies. The studies primarily stress intervallic or scalar patterns; few offer much melodic enjoyment.

Near the middle of Part I, Gaubert gives a marvelous set of small exercises dedicated to accustoming the student to the fingerings of the highest octave of the flute. These exercises require a minimum of rhythmic or note reading prowess but demand careful attention to finger motion as the student ventures into the third octave. Gaubert introduces the student to reading accidentals in a similar manner just a few pages later. Once these obviously

preliminary although demanding exercises are complete, the level of difficulty of the studies begins to increase at an astounding rate.

In the final twenty pages of Part I, Gaubert introduces the student to major and minor key signatures employing up to two sharps or flats. Throughout these exercises, he does not hesitate to incorporate intense use of the third octave, accidentals, and complicated rhythmic patterns.

At the culmination of Part I, Gaubert instructs the student in the proper manner of breathing, breath control, and the correct places to breathe within the musical context. At the same time he again stresses the need for good posture. He allows the student to practise his breathing and breath control by means of five long-tone studies. He emphasizes to the student that "long experience acquired by thoughtful work alone allows the subordination of the physical elements to the music and the style."³⁰⁵

Part II is entitled "ornaments." In this part Gaubert instructs the student in the execution of trills, mordents, turns, as well as long and short grace notes. He uses a number of works by other composers (Bach, Haydn, Gluck, and Schumann in transcription), as well as original compositions for two flutes (original to Gaubert) to assist

³⁰⁵ Ibid., 53.

in instructing the student in the proper execution of these ornaments. The general studies given in Part II are, however, extremely difficult in comparison to what has preceded them. It is unlikely that a student working through this treatise would have the skills to perform these studies. Only the Haydn *Concert Duet for Two Flutes* which concludes Part II is truly in line with the skill level prepared by Part I. At the close of this section, Gaubert suggests that the student begin to incorporate the Gariboldi *Exercices journaliers* into his practice regime.

Part III, entitled "tonguing," instructs the student in the various compound articulations available to the flutist. These include: the TE-RE articulation used in the execution of rapid dotted-rhythm patterns; the TE-KE double tongue; the TE-KE-TE-TE used to approximate single tongue for passages over which the tempo allows for comfortable execution of neither single nor double tongue; and the TE-KE-TE triple tongue stroke. Gaubert demonstrates for the student how he is to deal with any variations of the above articulation patterns. He includes a number of Bach inventions and sonata fragments arranged for two flutes for the student to use in practising articulation. It should be noted that Gaubert's instructions reflect a return to the syllabication advocated by Coche. Still, nowhere are there to be found the special timbral articulations taught by

Coche and Altès: articulation has in the hands of Taffanel and Gaubert, shifted from a timbral skill to a virtuosic device.

Part IV contains seventeen daily exercises, plus a list of additional exercise and study literature by other composers. The daily exercises use almost every conceivable pattern associated with the major, minor, and chromatic scales, as well as three and four note chords, and trills. The first two exercises employ the range of D¹ to B³; the remaining exercises work from the lowest note on the flute (C¹) except number 7. Exercise 7 is based on small contorted three- and four-note patterns. At the beginning of Part IV, Gaubert indicates that the student should rotate dynamics and articulation patterns in each study, but not necessarily every one, every day. At the conclusion of the daily exercises, Gaubert lists seven additional books of exercises and studies which would be of use to the student at this stage.

Part V is entitled "Twenty-four Progressive Studies in All the Keys on the Principal Difficulties." As the title suggests, Gaubert includes twenty-four one-page studies, each concentrating on a single difficult aspect of flute performance. The composer of the studies is not credited.³⁰⁶ The studies seem to have been offered in the

³⁰⁶ Both Taffanel and Gaubert were themselves composers; either man could have composed these studies.

same spirit as those given by Altès. However, the overall level of difficulty of the studies is much lower than in those by Altès, and none is as comprehensive in its treatment of elements of stamina and virtuosity.³⁰⁷ These studies will be examined in more detail in later sections of this chapter.

Part VI contains *Twelve Grand Studies for Virtuosity*. These studies, longer and more technically demanding than those of the previous section, use most major and minor key signatures and develop the whole of the flute's range. Among the techniques practised in these studies are sweeping arpeggios, high and sustained playing, and widely leaping patterns. The *Grand Studies* will be examined in more detail in later sections of this chapter.

Part VII is a unique section simply entitled "Style." After a rather lengthy discussion of what comprises proper style in flute playing, Gaubert gives a number of pieces for solo flute with complete instructions as to how each should be interpreted. The chosen works cover a wide range of styles and performance demands. The pieces interpreted in this section are: Bach, *Sonata in b minor*, "Adagio;" Gluck, *Dance of the Blessed Spirits*; Taffanel, three cadenzas for the Mozart Concerto in D major,

³⁰⁷ These studies are of approximately Grade 6 level, Toronto Conservatory.

and two for the Concerto in G major; Leroux, *First Romance*; Huë, *Nocturne* and *Gigue*; and Doyen, *Nymphes et Satyres*. Part VII will be thoroughly discussed in its entirety in later sections of this chapter.

Part VIII includes difficult passages from the orchestral, chamber, and operatic repertoires. Forty-four excerpts are given in total. Some are taken from problematic *tutti* passages contained within the works presented, but most are famous solo passages. No instruction is given as to how each should be interpreted. Gaubert has written that these excerpts are given both to fill the need for supplementary literature and to assist young orchestral and theatrical players. He further notes that not all of the necessary passages have been included, but just a representative sampling.

With regards to the overall layout of the *Méthode complète*, the editor takes time to note in his preface that the treatise is "from the point of view of studies for the instrument absolutely complete."³⁰⁸ In truth, the treatise is nearly complete in its presentation of materials necessary for the development of the flutist; furthermore, it is convenient to use, largely because of its sectional construction. However, the same sectional construction which lends itself so well to the organization of such a
³⁰⁸ *Méthode complète*, editor's preface.

large and comprehensive treatise also forbids a truly progressive presentation of materials. The editor has not seemed to notice this fact, as the following quotation demonstrates:

Continuing always from the known to the unknown, it presents step by step, logically and in organized stages all the requirements which will form [the student's] talent and lead him from the transition problems to more arduous difficulties.³⁰⁹

True, the treatise does begin with thorough instruction intended to lead the student through his first sounds produced on the instrument, but the pacing of studies, even within Part I, is far too rapid to be of any real use to a beginning flutist. The eight parts of the treatise are given in order of difficulty; however, each part presents only that element to which it is dedicated, and does not include small exercises - in preparation for the main exercise of each lesson - to instruct the student in the new skills required. Therefore, the treatise is progressive on the whole, but not in terms of its smaller divisions.

Contents of "La Flûte"

"La Flûte" is a massive article totaling forty encyclopaedia pages of tiny, double column print. The

³⁰⁹ Ibid., editor's preface.

article outlines thoroughly and in great detail the history of the flute and flute playing.

After a brief introduction, Fleury begins immediately to relate the history of the flute. Beginning with the most ancient times, he looks first at primitive flutes of various cultures and then settles in to study the recorder. In discussing the recorder, Fleury devotes substantial space to the construction principles and manufacturing techniques of the instrument, important contributions to recorder pedagogy, and literature (mostly pre-1700) which is composed for or includes recorders. The names of composers and works which Fleury includes in this section is largely comprised of the same names, often works for the flute by flutist composers, as would be found in a list compiled in the late twentieth century.

Fleury, however, devotes the bulk of his article to the study of the transverse flute. Returning again to primitive models of the transverse flute, he discusses the acoustic theories which determine how a flute is constructed and played. Using this discussion as a point of departure, he then traces the long line of developments and additions which were brought to bear on the transverse flute from the addition of the first keys to the total reconstruction of the instrument as realized by Gordon and Boehm, including a

detailed description of Boehm's creative process.³¹⁰ Fleury devotes a portion of his article to the variant models of the modern flute, including some which never received much attention from the flute community and, as a result, are no longer manufactured. Also, despite his unequivocal admiration for the capabilities of the modern flute, Fleury includes a lengthy section subtitled "Defects of the Modern Flute" in which he outlines the imperfections which have resulted from various additions and modifications to Boehm's original design.

Fleury then writes about the role of the flute in the performance of orchestral and chamber works. Discussing the flute in orchestral literature, he looks both at the flute's role in the orchestral tutti and at its role as a solo instrument. He traces the entrance of the flute into the orchestra alongside the recorder in the late renaissance. As he moves forward through time, Fleury writes about specific pieces and includes very brief excerpts to clarify his points. The piccolo is also included in this study. Once the orchestral role of the flute has been thoroughly discussed, Fleury moves on to

³¹⁰ The Boehm-Gordon Controversy is outlined in Chapter 2. Fleury clearly credits Gordon with planting the seeds which resulted in the invention of the modern flute. However, he credits Boehm with the expertise to conduct the necessary research and development required to realize the modern flute, and the personality to have the instrument successfully introduced into the community of flute players.

consider the role of the flute in chamber music; he mentions most of the literature for solo flute and piano. He traces the same lines of development for chamber music as for orchestral music, although not in as great detail.

His final section under the heading of the history of the transverse flute is a biographical outline of the virtuosos of the flute. In covering this large topic, he gives only simple biographic details on most of the included flutists. The section is organized by musical period and by country.³¹¹ A number of flutists are treated in greater detail. The history of famous flutists concludes with a list of the players holding major orchestral, chamber, or academic positions at the time Fleury was composing his article.

Toward the end of his article, Fleury includes a section entitled "The Art of the Flutist." In this section he considers the production of a good sound, proper intonation, breathing, development of technique and style, and includes a complete library for the flutist. He insists that this section is not intended to be a method for studying flute performance, and that many other treatises more successfully achieve that purpose. He must surely have been giving the greatest priority to the *Méthode complète*,

³¹¹ Flutists may be included either under the country in which they were born, or the one in which they spent the greater part of their careers.

written four years earlier, and from which he quotes several passages included in this section. It is interesting that much of the descriptive material which Fleury presents in this section of "La Flûte" gives the student a better understanding of how the flute should be played than does the material on similar subjects found in the *Méthode complète*. This small section will figure prominently in later sections of the chapter. The final part of "La Flûte" is a substantial biography of Paul Taffanel. It is obvious that this section is given here by Fleury as much out of admiration for his master as for the edification of his readers.

In its entirety, "La Flûte" is an outstanding source of information for the flutist. Some of the information included in the article may now be shown to be out-dated by virtue of research conducted in the last sixty-five years, but overall the article is both accurate and engaging. Taken by itself, it is an invaluable source of information on the history of the flute. Taken in conjunction with the *Méthode complète* it becomes something considerably greater, offering illumination on topics presented in the treatise, as well as completing Taffanel's original intentions for his *L'Art de la flûte*.

The Six Elements of Music

Pitch -- Intonation, individual digit technique, general technique and pitch accuracy, dexterity and digital virtuosity, the use of various key signatures, range extension exercises, alternate fingerings.

Pitch, as it is considered by Taffanel through his surrogate writers, is closely linked with the development of virtuoso technique and fine intonation. In studying these two works, one gets the impression that the authors almost take for granted that the technique of the flute can be acquired merely through regular contact with the flute. Alternate fingerings are not given at any point except in the context of trills.³¹² Exercises specifically devoted to developing range extension or the use of various key signatures are likewise nonexistent, although these skills are required throughout the last five parts of the *Méthode complète*. Only the pitch components of intonation, individual digit technique, general technique and pitch accuracy, dexterity (ease of moving the fingers) and digital virtuosity (speed of moving the fingers) are developed to any great extent in the Taffanel "Method."

Correct intonation is stressed in both the Gaubert and Fleury portions of the "Method." Fleury approaches the

³¹² It was noted in the previous chapter that the inclusion of trill fingerings is standard in any method book for the flute.

subject from both analytical and practical directions.

Fleury opens his section on intonation with the following:

After having read this article, especially the first chapter, the reader will not be tempted to classify the flute in the category of instruments with fixed sound. As unbelievable as that may seem, this opinion is quite widely held by the public, and the public readily confuses the keys of the flute with the keys of the piano. One could astonish many amateurs of music by letting them hear an inflection of at least a quarter tone in each direction on a single note, achieved by means of more or less pressure of the lips and a larger or smaller opening of the embouchure.³¹³

Fleury continues his discourse by giving the student the notes of the flute which tend to be consistently out of tune; these notes had already been identified earlier in "La Flûte" under the heading of "Defects of the Modern Flute." Once these notes have been isolated, Fleury gives the student simple instructions, based on acoustic principles about correcting faulty intonation on the flute, provided that the student's ear is "juste."

Gaubert begins the *Méthode complète* with a number of general remarks, the first of which is that attention to

³¹³ "La Flûte," 1523: "Après avoir lu cet article, surtout le première chapitre, le lecteur n'aura pas la tentation de classer la flûte dans la catégorie des instruments à son fixe. Si incroyable que cela puisse paraître, cette opinion est assez répandue dans le public, et l'on confond volontiers les clefs d'une flûte avec les touches d'un piano. On étonnerait beaucoup d'amateurs de musique en leur faisant entendre, sur la même note, par le moyen du plus ou moins de pression des lèvres et de l'ouverture plus ou moins grande de l'embouchure, une flexion qui va au moins jusqu'à un 1/4 de ton en chaque sens.

intonation and tone comes before fingering. With this remark, Gaubert sets the tone for the entire treatise. At numerous points throughout the *Méthode complète*, Gaubert reasserts this opening remark, even at the beginning of what would appear to be specifically technical exercises. It is only at the end of Part I, when he introduces long tones (performed *crescendo/diminuendo*), that Gaubert counsels his students on the effect of dynamics on intonation and on the proper way to counteract this effect. He directs, as does Fleury, that any small adjustment must be made with only the lips.

Individual digit technique, as well as general technique and pitch dexterity, are two of the primary topics covered in Part I of the *Méthode complète*, although both take a back seat to tone development. In Part I Gaubert concentrates his efforts on exercises using only a small number of pitches and on fairly simple melodic studies (although these studies become increasingly more demanding in the last pages of the section). Gaubert uses exercises made up of a limited number of notes to introduce new pitch reading problems, such as accidentals, new registers, and high octave fingerings. These small exercises also serve the dual purpose of allowing the student to gain control of difficult finger changes without the complications of difficult passage work. The melodic exercises provide a

context for applying the skills acquired through the small finger exercises. However, it must be said that it is unlikely that a student could perform many of the studies in subsequent sections of the treatise with only the background received in Part I. Fleury provides no supplementary information.

The component of dexterity and digital virtuosity is stressed by both Gaubert and Fleury. Fleury opens the section on technique in "La Flûte" by writing:

A good technique is indispensable to a flutist. There is no [other] instrument of which more virtuosity is demanded. Rapid virtuoso passages, cadenzas, "rockets," etc.: the flute is considered by composers as suited to all of these. The music of all times and schools overflows with technical difficulties which a good flutist must be able to surmount.³¹⁴

He continues his commentary with the suggestion that the student could go about obtaining a virtuoso technique by working at three different kinds of studies. First, the student must practise daily exercises [exercices journaliers] made up of scales, arpeggios, and intervals; however, technical quickness is never to be sought at the expense of evenness. Second is the preparation of studies

³¹⁴ Ibid., 1524: "Un bon mécanisme est indispensable au flûtiste. Il n'est pas d'instrument auquel on demande plus de virtuosité. Traits rapides, cadences, fusées, etc., la flûte est considérés par les compositeurs comme apte à tout faire, et la musique de tous les temps et de toutes les écoles regorge de difficultés techniques qu'un bon flûtiste doit pouvoir surmonter."

which "treat the continuing difficulties of the flute." Among these, Fleury enumerates those by Boehm and Drouet. These studies resemble elaborate daily exercises in many respects. Third, one must practise the studies by Andersen, or those in a similar vein. These, Fleury writes, "...are more tormenting, for they modulate incessantly and present the flutist with the most rarely encountered difficulties."³¹⁵

Exercises fulfilling Fleury's first and third categories of studies may be found in the *Méthode complète*. Part IV includes seventeen daily exercises which meet all the criteria laid out by Fleury for such exercises. Exercises 1 through 4 employ scale patterns on an increasingly broader and more elaborate scheme. Exercise 5 is devoted to the chromatic scale. Exercises 6 and 7 study simple intervals of seconds, thirds, fourths, and sixths in various combinations. Exercises 9 to 16 work most of the possible combinations involved with three and four note chords, including diminished triads and full diminished-seventh chords (the staple patterns of early twentieth-century literature). The final exercise gives the student the opportunity to practise half- and whole-step trills. As has already been stated in this chapter, each of these

³¹⁵ Ibid., 1524: "...sont plus tourmentées, modulent sans cesse et présentent un flûtiste des difficultés plus rarement rencontrées."

exercises is to be performed in conjunction with a variety of articulation patterns and dynamic levels. Gaubert also reiterates Fleury's plea that evenness is paramount over quickness.

The studies found in Part VI resemble those by Joachim Andersen in their scope and technical demands. Gaubert only includes twelve studies of this variety. Perhaps his intention is that the student should turn to the 188 studies composed by Andersen in fulfillment of this requirement.³¹⁶

Apart from fulfilling the suggestions given for the acquisition of virtuoso technique by Fleury, the student must at some point learn to apply these skills. Gaubert's inclusion of forty-four excerpts demonstrating the difficulties of the literature in Part VIII provides ample material for the student to study.

Rhythm -- Rhythmic accuracy, pulse, metre, elementary phrasing, breathing technique/breath length, technical/tonal competence and comfort in all ranges and keys.

Of the six components of rhythm above, only the last two are developed to any extent by either Gaubert or

³¹⁶ It is known that Taffanel made frequent use of the Andersen studies in his daily teaching at the Conservatoire. There is also some speculation that some of the Andersen studies may have been composed for Paul Taffanel's use with his Conservatoire students.

Fleury. In fact, Fleury does not take up the subject of rhythm at all, except as it pertains to breathing. Gaubert only lightly touches on the subject. Unlike the earlier two treatises, in which extensive instructional sections introducing the student to rhythmic accuracy, pulse, and metre are found, there are no such sections in the *Méthode complète*. Rhythmic notation and metres are presented in a progressive manner, but without any explanation to assist the student in understanding the basic relationships between note values and their functions within a given metrical signature. Despite this lack of direct instruction, Gaubert includes a number of highly complex rhythmical passages throughout the treatise, obviously relying on the teacher to illuminate these points for the student.

Similarly, elementary phrasing is only touched upon in the course of Gaubert's treatise. Only occasionally does he include commas in the musical text to indicate the best breathing places. As the last entry of Part I, Gaubert describes for the student three kinds of breaths: deep, medium, and shallow, to be applied according to the context of the phrase. While Fleury quotes this passage in the section of "La Flûte" dedicated to breathing, it is unlikely that the student would gain any real understanding of the art of phrasing from either passage.

The component of breathing technique and breath length occupies a more prominent position in both works than any of the previous elements of rhythm; however, the information provided by both men tends to be directed more to the study of tone than to freeing the student from those physical problems of breathing which often result in faulty rhythm. Fleury writes in a most impassioned manner about breathing technique, expounding its virtues in preserving the good health of the flutist before directing the student in the manner of proportioning the breath through a phrase. Gaubert offers similar instructions, without, however, suggesting any medical benefits derived from proper breathing.

Technical/tonal competence and comfort in all ranges and keys is similarly unstressed in both the *Méthode complète* and "La Flûte" from an instructional standpoint. Unlike the earlier treatises, which carefully ease students into the more difficult key signatures by means of preliminary exercises, the *Méthode complète* thrusts students directly into the most difficult keys (Parts IV to VIII) without adequate preparation. Yet the fact that these keys are required throughout the last sections of the treatise goes a long way toward remedying the under-emphasis of preparation in difficult keys prior to these sections. Gaubert does fully prepare the student for demands of the

extended ranges of the flute through his small exercises introducing the highest register found in Part I, and through the daily exercises found in Part IV. The full range of the flute is used extensively in the final four Parts of the treatise.

Timbre -- Tone development, legato, embouchure and tonal flexibility, intonation, articulation, colour variety, extended timbres.

Issues relating to timbre, particularly as these affect the tone of the flute, are a preoccupation of both Gaubert and Fleury. Both men discuss tone development at length. Legato, development of embouchure and tone, as well as intonation are each considered in the course of the *Méthode complète*. However, articulation, while it is heavily considered particularly by Gaubert, will be seen to have become the hand-maiden of technical virtuosity rather than timbre. Colour variety and extended timbres are not discussed by either author.

Both Fleury and Gaubert devote a significant amount of space to the study of tone development. Fleury offers the best advice and information on the subject of sound as produced on the flute. Fleury begins by insisting that the search for a beautiful tone [*sonorité*] must be the "first project" for the flutist. He notes that of all the wind instruments, the flute has the most natural sound because there is nothing interposed between the performer

and the sounding body.³¹⁷ As a result, he realizes that "the physical make-up of the flutist plays an important role in his performance."³¹⁸ To this end, Fleury points to a projecting lower jaw, and lips which are either too thick or thin as obstacles for the flutist. Gaubert also mentions these, adding as assets even teeth, and a chin which is slightly concave at the upper part.

Fleury is necessarily more vague in his description of the ideal flute sound. Perceptively, he notes that each flutist bears his own unique sound, and that the individual personality of the sound is readily apparent to a trained professor even from the first few weeks of study. Fleury continues by attempting to describe the qualities of a good sound, finally admitting that it is far easier to counsel against, rather than in favour of, certain qualities. He cautions against covering the embouchure hole exaggeratedly, in which case the flutist will draw "...a weak, veiled sonority, which, at the first attempt of force, breaks into harmonics, taking the vulgar name of *squeaky*...."³¹⁹ Fleury also warns about the opposite

³¹⁷ "La Flûte," 1523.

³¹⁸ Ibid: "La conformation physique de flûtiste joue donc un rôle important dans son exécution...."

³¹⁹ Ibid., 1523: "...une sonorité faible, voilée, qui, dès le premier esai de force, éclate en harmoniques qui, dans le langage vulgaire, prennent le nom de couacs...."

stance, that of uncovering the embouchure hole too much. In this case the "...sound becomes fat, fuzzy, without life, [and] airy, which is translated by an equally vulgar word, *smudgy*...."³²⁰ He suggests that the best use of air would result from projecting the entire breath into the embouchure with no loss of air; Fleury calls this the attainment of "maximum efficiency,"³²¹ and offers a number of exercises which may be used to develop this quality. He allows for the use of "a light, and almost imperceptible vibrato," and suggests that one should avoid the "excessive search for a great power of the sound."³²² Fleury suggests that the

³²⁰ Ibid: "...le son devient gros, cotonneux, sans vie, avec perte de souffle qui se traduit par le mot également vulgaire de *bavures*...."

³²¹ In this statement Fleury seems uncharacteristically unaware of the acoustics of the flute, which mandate that to produce a sound the air stream must be split across the far wall of the embouchure hole, half going into the tube, half going over the edge of the tube. Current research has suggested that if this perfect 50/50 proportion is realized, a suction is created which draws air from the external environment into the tube of the flute, thus doubling the efficiency of the breath of the flutist (Keith Underwood lecture, St. Margaret's School, Victoria, BC, July 1991).

³²² In the passage that follows, Fleury seems to suggest that the defects in the sound which one usually possesses when he works toward too large a sound are credited by many as the result of using a metal flute. He quickly discounts this, offering that these qualities are "perfectly audible on a flute of wood." However, it is probable that because a metal flute is usually more capable of producing a forceful sound than is a wooden flute, players of the metal flute might be more easily tempted to explore that facet of the flute sound, thereby giving the impression that it is the construction material of the flute which is at fault.

flutist should work to obtain a minimum of intensity without being weak (and in fact the description offered above would promote such a sound). Fleury's closing words bring the previous discussion succinctly to a close: "However, one should not forget that volume is of little importance, and that timbre is everything."³²³

Gaubert does not offer the same depth of information in assisting his students to find the best quality of sound; however, he does provide a great deal of practical advice on how the best sound should be obtained. Gaubert begins immediately in his opening remarks to stress the importance of body, instrument, hand, and embouchure positioning in the production of a fine sound. In each case Gaubert's instructions stress the need for almost total relaxation when performing on the flute.

As noted above, Gaubert insists from the first lessons on that his students pay close attention to their sound production, not allowing them to move on until they have conquered the tonal problems of the immediate lesson. These instructions, however, do not leave the student in limbo, because Gaubert offers throughout very precise instructions as to how this perfection must be insured. Throughout the treatise he inserts comments into the text

³²³ "La Flûte," 1523: "Mais on n'oubliera pas que le volume est peu de chose et que le timbre est tout."

advising the student to adjust his lips or air stream in the most advantageous manner.

Gaubert's long tone studies give the student a great deal of practice material through which to work at conquering the difficulties of tone production on the flute. What makes these long tone studies unique is Gaubert's inclusion of both single note studies and studies which involve slurred intervals.

Unlike Fleury, Gaubert insists that there be no use of vibrato in the sound of the flute and that instead the flutist should strive for a clear, broad tone.³²⁴ The implications of this difference of interpretation by the two most respected students of the one master Taffanel will be discussed in later sections of this chapter.

The perfection of a beautiful legato tone is insistently pursued in the *Méthode complète*. As has been so often seen in the course of this chapter, Gaubert insists on intense concentration on various components of sound right from the start of flute studies, and legato study is no exception. In the first lesson, Gaubert instructs the student to practise each study "until the join between the two [slurred] notes is perfect."³²⁵ Just ten pages later, Gaubert returns to the subject of legato, admittedly as a

³²⁴ *Méthode complète*, 186, 187, 54.

³²⁵ *Ibid.*, 6.

part of the study of articulation. Nevertheless, Gaubert gives the student a number of additional practical suggestions as to what must be done in order to gain "perfect equality" of legato notes. While few hints are given after these initial studies, Gaubert dedicates a number of his Progressive Studies to the practice of the legato (nos. 4, 8, 10, and 11).

The study of embouchure and tonal flexibility, being so closely related to the study of legato tone, is similarly weighted in the *Méthode complète*. Aside from practical advice and studies which may be gained through the long tones and instructions on the legato, a number of the Progressive Studies are devoted toward perfection of these timbral components: numbers 4, 8, 10, 13, 16, 18, and 19.

Intonation, discussed by both Gaubert and Fleury, has been noted above. However, intonation as it relates to timbral considerations is mentioned only by Fleury. Fleury brings up the topic of intonation often in his discussion of sound because defects in the sound often result in faulty intonation.

Because articulation functions to vary the tone colour of a composition or passage through combinations and patterns of attacks and releases, it must still be considered under the heading of timbre. However, articulation as an element of timbre resulting from numerous

special articulations, as found in the two previous treatises, is not present in the Taffanel works. Articulation as considered by Taffanel and his students is more concerned with the patterns of slurs and *détaché* notes which are common in all compositions. These patterns are continually emphasized through the Daily Exercises, Progressive Studies, and Grand Studies, often to high virtuosic standards. Only one mention of a more specialized style of articulation is given in the *Méthode complète*, namely in Progressive Study 5 which works on the *martelé* tongue stroke. It must be concluded that by the early twentieth century articulation had lost its strong timbral implications and was used primarily to assist in brilliant technical passages.

Dynamics -- Soft to loud flexibility, projection quality, register control, tonal "gimmicks" allowing the impression of dynamic change.

The various components of dynamics are seriously under-emphasized in the two works at hand. Dynamics are included in the studies and pieces from the very earliest stages of the *Méthode complète*; however, only rarely does the scope of dynamics and frequency of dynamic markings exceed what one would consider limited use. The only studies which encourage the development of dynamics are the long tone studies of Part I. Even here the study of

dynamics takes a back seat to the general study of beautiful sound.

Form -- Phrasing, instruction in music theory, variation ability and versatility.

The works at hand are similarly limited in their treatment of form. Only phrasing as it pertains to form is discussed by the authors. The first page and one-half of Gaubert's Part VII deals entirely with the subject of phrasing. In this section, he advises the student as to the art of determining the phrases of music, and in subjugating the physical desire and need to breathe to the formal demands of the music. As with Coche and Altès, Gaubert relates the art of selecting appropriate places to breathe to the practice of reading well aloud, that is, following the punctuation attentively but not blindly.

Musical style -- instruction in the history of music and the flute, phrasing, direction, line, composite performance technique, ornamentation.

Musical style is given high priority in both the works of Gaubert and Fleury. When taken together, the two works comprise an incomparable contribution to the study of musical style in all periods. Each of the components listed above except for composite performance technique is thoroughly discussed through the two works.

Instruction in the history of music and the flute is the purpose and focus of "La Flûte." Because Fleury has

taken the time to realize Taffanel's dream of compiling a complete history of the flute and its literature, the flutist can avail himself of this wealth of information in making decisions as to the best style in which to perform a given work. By studying "La Flûte," the performer can almost instantly know when a composition was written, for what instrument it was written, where the composer fits into the overall scheme of music history, and how the composer treated the flute in his compositions. The performer will understand the evolution of the flute, and how changes to the instrument resulted in changes in the style of playing. He will also have a greater understanding of the performance styles of the great flutists who have preceded him, how his native country participated in the history of the flute, and how the instrument was taught by these masters at various times throughout history. Despite the rather dry discourse left by Fleury, the perceptive student can nevertheless glean invaluable information on various styles of flute playing by merely thumbing through or, better still, by thoroughly reading and digesting "La Flûte."

For the sake of convenience the next four components - phrasing, direction, line, and composite performance technique - are discussed together, making it easier to highlight several larger sections of each author's work. Parts VII and VIII of the *Méthode complète* as well as

the final two sections of "La Flûte" go hand in hand to illuminate these elements of musical style.

Part VII of the *Méthode complète* is entitled "Style." In this section, Gaubert presents numerous interpretive ideas in the context of studying individual compositions. Before beginning the study of specific compositions, Gaubert discusses the use of the breath, the foundation of musical phrasing on the flute, for the purpose of interpreting the musical line; his final paragraph here is particularly evocative:

The breath is the soul of the flute, and the culminating point in the art of playing. The disciplined breath must be a docile agent, now supple, now powerful, which the flutist should be able to govern with the same dexterity as that with which a violinist wields his bow. It is the motion force behind the sound and the spirit which animates it, gives it life and becomes a voice capable of expressing all the emotions. The lips, the tongue, the fingers are only its servants; it is by the breath alone that the artist can communicate to the world outside the most exclusive nuances, the thousand inflexions [sic] of the music with its infinite variety.³²⁶

With this paragraph, Gaubert opens the discussion and application of the interpretive components of phrasing, direction, line, and composite performance technique. In the remaining portion of Part VII, he introduces seven works from the solo flute literature (which have been enumerated above). Over each composition, he inserts comments as

³²⁶ Ibid., 185.

necessary to instruct the student in how each phrase is to be shaped, and how the important aspects of the line and composition are to be brought to life. Surrounding these specific comments for each composition, he includes commentary as to the history and compositional style of the composer in order to illuminate for the student the style in which the work should be performed.

Gaubert's suggestions for the performance of cadenzas are of inestimable value for any player of an instrument capable of only one melodic line. In directing the student through the five cadenzas for Mozart's two *Concerti*, Gaubert speaks of the difficulty which a single line instrument will have in attempting a cadenza when the harmony is no longer completed by the *tutti*. He instructs the student in many individual techniques for preserving the harmony of the cadenza through small harmonic flourishes and arpeggios. Against what he terms the relief of arpeggios, grace notes, and arabesques, the themes will stand out while still creating the illusion of complete although reduced harmony. Gaubert further advises that to complete the performance:

"[t]he tone colour must be varied, opposing brilliance against charm.... [In this way a] musical atmosphere will be obtained in which the public will be able to forget the bareness of a cadenza."³²⁷

³²⁷ Ibid., 189.

The section of "La Flûte" similarly entitled "Style" adds still greater richness to the information already presented by Gaubert. In this section, Fleury recounts just a few of the high points of flute history as they have determined the course of flute composition. He particularly notes the period of "decadence" which overtook musical composition for the flute during the majority of the nineteenth century, and the subsequent reaction which was begun by Paul Taffanel against the fantasy of that period. He writes the following about this change in the history of flute composition:

That renunciation has coincided with a return of curiosity for the music of the eighteenth century when the flute was employed with more tact and discretion. This resulted in a return of a more sober style. It is, in effect, the extreme sobriety of style which we permit ourselves to extol. It would seem to us, with a solid technique and a rich and varied sonority, exact observance of the desires of the author leads to an ideal interpretation, that which places the instrument at the service of the music, and not the music at [the service] of the virtuoso. However it is evident that these principles demand more art and science than confused fantasy on the part of the instrumentalist.³²⁸

³²⁸ "La Flûte," 1525: "Cette renonciation a coïncidé avec un retour de curiosité pour la musique du XVIII^e siècle, où la flûte était employée avec plus de tact et de discrétion. Il en est résulté un retour à un style plus sobre. C'est en effet, l'extrême sobriété du style que nous nous permettrons de préconiser. Il nous paraît, qu'avec une technique solide et une sonorité riche et variée, l'exacte observance des désirs de l'auteur conduit à l'interprétation idéale, celle qui met l'instrument au service de la musique, et non pas la musique à celui du virtuose. Mais il est évident que ces principes exigent plus d'art et de science, de la part de l'instrumentiste, qu'une fantaisie désordonnée."

In making this comment, Fleury is reminding his readers that one must carefully consider the style of the composition about to be performed, then calculate its execution according to the demands of the music.

Part VIII of the *Méthode complète* gives the student a broad range of excerpts taken from difficult orchestral, operatic, and chamber works. Including these excerpts in the treatise itself gives the student a head start in learning the materials of his profession; however, when taken in conjunction with Gaubert's early invocation that the treatise must be studied with a teacher, it is obvious that Gaubert intends that the interpretive skills begun in the previous Part VII be continued under the guidance of a master before the student is released into the professional world.

Fleury writes the final section of "La Flûte" in a similar vein. Here he presents a substantial list of works, primarily solo and study repertoire, which should comprise the library of the flutist. While this list is only loosely associated with the topic under discussion, it must be conceded that as a part of composite performance technique one must receive some direction from a teacher in the best and most representative works of the repertoire with which a student should be acquainted.

Ornamentation is the final component of musical style which should be discussed. Gaubert dedicates Part II to the study of this subject, including trills, mordents, turns, as well as long and short grace notes. Throughout the whole of Part II, Gaubert includes numerous works originally composed or arranged for two flutes to provide repertoire for the practice of the application of ornaments. Interestingly, despite the rise in popularity of early music in the first part of this century, Gaubert does not admit to a difference in interpretation between the ornaments found in, for instance, the music of Haydn or Schumann. However, the instruction given by Gaubert on the execution of ornaments is valuable from the standpoint of late nineteenth- and early twentieth-century performance practice, and as such, Part II will be carefully considered again in the next section of this chapter.

Throughout the whole of the combined Taffanel "Method," one notes striking similarities between the emphasis on particular subjects as recounted by both Gaubert and Fleury. The almost total abandonment of the musical elements of rhythm, dynamics, and form by both authors would strongly suggest that none of these elements were stressed in the teachings of Taffanel. In contrast, the emphasis on musical style, timbre, and the virtuoso components of the

pitch element point to what must have been Taffanel's own pedagogical emphasis.

Areas of Special Interest

As with the treatises of Coche and Altès, the two works inspired by Paul Taffanel's teaching and research emphasize a number of topics which provide insights into the special workings of performance practice in the period. A number of these topics have already been discussed in the course of this chapter: the acquisition of virtuoso technique, the development of individual finger motions by means of small exercises, tone development, and interpretation. The remaining topics will be examined in the course of the following pages. Before launching into the study of these specific topics, the few issues which are, surprisingly, not given detailed treatment by either Gaubert or Fleury should be enumerated.

No author can possibly include all of the instruction necessary to prepare completely his or her students for the world of professional flute playing, although some authors are, of course, more complete in their delivery than others. The Taffanel "Method," however, is missing a surprising amount of basic information which would be needed for even a relatively complete education. The areas that are neglected are rhythmic development, study of

dynamics, use of complicated key signatures, and instruction in the variation of tone colour. The editors of the *Méthode complète* suggest that all treatises move quickly through the early stages of a student's development. In order to correct that problem with the *Méthode complète*, they suggest that the student should use *La Débutante flûtiste* by Marcel Moyse in conjunction with the *Méthode*. Use of this supplementary book would ameliorate the lack of instruction in rhythm, dynamic, and key signatures, but not likely the lack of instruction in tone colour.

Those topics which, as presented by Gaubert and Fleury, offer greater insight into the teachings and performance style of Paul Taffanel, and hence the Parisian and international flute community may now be studied. The topics which will come under discussion are: practice technique, daily exercises, Progressive and Grand Studies, inclusion of and reference to additional repertoire, ornamentation, and use of vibrato. The structure of the student's practice schedule obviously carried a great deal of importance for Gaubert. The general remarks found in the early stages of the *Méthode complète* instruct the student both in how he should structure his practice, and what he should keep in mind while practising. Gaubert provides for a six-day practice schedule (Sundays exempt) in three parts. For the first part of his practice, the student should

concentrate on scales (legato on Monday, various articulations on the remaining days), always with the metronome. During the second part of his practice, the student should work at various non-scalar elements of the daily studies, presumably as indicated in Part IV of the *Méthode* with the metronome, varying the articulations and dynamics. Also in this second part, Gaubert requires long tones to be practised on three of the practice days, to which the student should apply five patterns of dynamics. The third part of practice encompasses pieces and studies on alternate days.

Following the outline of the practice schedule, Gaubert helps the student to focus his attention during practice with the following statement:

1. Pay great attention to intonation. -- 2. Pay great attention to tone.

When practicing [sic] all exercises or studies whatever the degree of difficulty, the student will always remember this rule: tone, purity of sound and intonation must go before concern in fingering.³²⁹

Throughout the remainder of the treatise, Gaubert often returns to just this idea and conception of practice. While the six-day practice regime seems to point to the acquisition of virtuoso technique first and artistic playing second, the commentary and reminders given by Gaubert throughout the treatise suggest the higher aim of artistic

³²⁹ *Méthode complète*, General Remarks [2].

expression. At all times, it must be remembered that it is only by completely conquering the technical difficulties of the instrument that a performer can free himself to perform artistically.

As seen above, the daily studies form the largest part of the practice requirements of the flute student according to Gaubert, and those studies which comprise the whole of Part IV make up a part of the practice schedules of most modern flute students.³³⁰ The overall plan of the daily studies has been discussed in previous sections of this chapter. However, at this time it would be advantageous to point out some striking details of Gaubert's Part IV.

The first four studies are concerned with the practice of scales. One must assume that it is to these four studies that Gaubert refers the student in fulfilling the scale requirements of daily practice. Study 1 is based on five note patterns in all major keys. The patterns rise

³³⁰ The seventeen daily studies are easily obtainable as excerpted from the treatise, and are in the personal libraries of most university-trained and university-bound flutists. Nevertheless, for a number of reasons many of these flutists will remain ignorant of the important place the daily studies hold in the progression of the *Méthode complète*. First, the price of the treatise has been prohibitive enough to prevent widespread use of the whole or even a substantial amount of it. Second, the treatise is in many respects unknown to the educational flute community because the origin of the daily studies is not credited in the popular edition.

through the keys by half step; the keys are given only as accidentals.

Ex. 1 - Pitch pattern of Study 1 (p. 112)



Study 2 is based on the same five note patterns in minor keys. Both studies use the range from D^1 to B^3 and employ a rotating set of ten articulations. Study 3 is constructed on two-octave extended scales in patterns of four and six.

Ex. 2 - Pattern of Study 3

Section A (above) [p. 116]

Section B (below) [p. 117]



Each scale is begun on the lowest note in the given key that is available to the flutist (C^1 or $C^{\#1}$) and is performed two octaves from that note three times. The next repetition of

the scale begins from the next highest note in the key, and so on until reaching the highest note in the key that is available on the flute (in this case B^{b3} or B³). Each of twelve key signatures and eight or ten articulations³³¹ is to be applied to these scale studies. Study 4 is constructed on a pattern of one-octave extended scales in all major and minor keys. The minor key sections of this study use the three forms of the minor scale in rapid, and almost random succession. Study 4 is written in groups of four notes, and carries a rotation of eight articulation patterns.

Study 5 is made up of extended chromatic scales, performed two octaves up and back to each chromatic tone in the low octave of the flute. The notes are grouped in patterns of six, and are to be performed with each of ten articulation patterns. At this point Gaubert notes that the *Méthode complète* contains all of the necessary scale patterns; however, should the student wish still more comprehensive study, he may turn to the *Étude complète des gammes pour flûte* by Gariboldi.

The Studies 6 and 7 are small but demanding. Each focuses on various patterns of intervals. Study 6 incorporates the practice of thirds and sixths across the

³³¹ There are eight articulation patterns for scales in fours, ten articulation patterns for scales in sixes.

whole range of the flute in each major key. The student should apply eight articulation patterns, grouped in patterns of four, to the Study. Study 7 is built on five repetitive three or four note patterns. When required to be played in the highest octave of the flute, these patterns exercise all of the difficult finger changes present in the upper register. A number of key signatures are suggested for Study 7. The groupings of four notes are to be played with ten articulation patterns.

Studies 8 through 16 are all based on various combinations of three and four note chords. Studies 8 and 9 are similar in that each incorporates expanding arpeggio patterns as its primary feature, Study 8 from the lowest possible tonic, Study 9 from the highest. All possible triads are given in these two studies. Each is required to be played with ten, four-note articulation patterns.

Studies 10 and 11 work a pattern of ten, two-octave triads. The pattern is as follows: i° , i , bVI (1st inv.), I^+ , vi (1st inv.), IV (2nd inv.), vi° (1st inv.), $\#iv^{\circ}$ (2nd inv.), iv (2nd inv.), I . The pattern is repeated on each fundamental chromatic tone of the flute. Study 10 requires the triads to be played in "straight form;" Study 11, in "broken form." Ten articulation patterns of six notes should be applied to these studies.

Ex. 3 - Patterns of Studies 10 and 11

- 1) Straight arpeggios - Study 10 (p. 128)
- 2) Broken arpeggios - Study 11 (p. 130)



Studies 12 and 13 are similar, both using four-note chords. The pattern for these studies uses the major-minor⁷, minor-minor⁷, diminished-minor⁷, and full-diminished⁷ chords two octaves from each fundamental chromatic tone of the flute. Study 12 presents the chords in straight form; Study 13, in broken form. Both exercises incorporate a rotation of eight articulation patterns for groups of four notes.

Study 14 employs an interesting pattern of dominant-seventh chords. The study begins with C⁷ (exercise A), moves to F⁷ (exercise B), then B^{b7} (exercise C), and so on through the circle of fifths. Each chord is performed in straight and broken forms three octaves from the lowest note in the chord on the flute. This study requires eight articulation patterns based on groups of twelve notes.

Ex. 4 - Broken arpeggios as they appear in study 14 (138)



Study 15 exercises the diminished triad on all chromatic tones of the flute from C^1 to F^3 in straight and broken-form. Four articulation patterns on groups of three notes are to be applied. Study 16 is similar except that the full-diminished seventh chord forms the basis of the exercise. Here the student is to use ten articulation patterns of four notes each.

Study 17 provides for the study of each half-step and whole-step trill on the flute. No articulation patterns are required for this exercise.

The thoroughness which Gaubert has applied to conquering the difficulties of the flute is easily recognizable from this accounting of the daily studies. The flute repertoire of the time was still rooted entirely in tonal composition; therefore scale, interval, and chord patterns would be of inestimable value to the flutist. However, the late nineteenth-century incorporation of diminished chords into compositions, primarily French, is similarly reflected by Gaubert. These chords were not

emphasized in either of the treatises by Coche or Altès. It must be seen that in the plan of the daily exercises, the *Méthode complète* reflects the most demanding technical requirements of both the ancient classics and contemporary French compositions for the flute.

Part V, the *24 Progressive Studies in All the Keys on the Principal Difficulties*, also reflects several of the standards of contemporary flute composition. We have already noted that these studies are in some ways similar to those by Altès, but that they lack the strong virtuosic elements required by Altès. In the *Progressive Studies*, virtuosity and stamina are replaced by expression, tone, and flexibility. Fleury notes that more restrained playing began to overtake virtuosity in Paris during the last decades of the nineteenth century. The *Progressive Studies* are perfect for the study of this more artistic, less florid style.

By contrast, the *12 Grand Studies for Virtuosity* return to the fantastic fireworks of the previous century, for of course the compositions of the nineteenth century had not been lost or destroyed. Flutists were regularly required to perform works in the "decadent style" both as a requirement for examination at the Conservatoire and also in professional orchestral life (see chapter 3). Fleury recommends practising studies on both the difficulties of

the flute, and the impossibilities of the repertoire as discussed above. The Grand Studies successfully bridge the gap between the two styles of exercises, although they are more rooted in the style of Andersen.

The repertoire included in both the *Méthode complète* and "La Flûte" further illuminates the requirements of the professional flutist. Many of these compositions have been listed in earlier sections of this paper. Compositions by other composers incorporated into these works fall into three categories: pedagogical pieces or additional study materials, orchestral and professional repertoire for reference or practice, and repertoire lists for the flutist's library.

Pedagogical pieces are included in the *Méthode complète* when they serve Gaubert's purpose. Examples of these works are the Bach inventions arranged for two flutes for the study of articulation, arrangements of Haydn sonatas for the study of ornaments, or merely melodic pieces to break the monotony of the exercises found within the treatise.

Suggestions for additional study materials are included by both Gaubert and Fleury. The editors of the *Méthode complète* suggest complementary works in the opening remarks of the treatise. Gaubert makes notes throughout the *Méthode complète*, referring the student to works of other

composers. Gaubert seems generous in suggesting that the student may refer to other materials in the course of his study; however, one gets the sense from the way in which many of the suggestions are phrased that Gaubert believes his work to be complete in its incorporation of study materials, and that additional materials are really not necessary. For example, at the end of Daily Study 5 Gaubert writes the following:

The *Méthode* contains all that which concerns scales. However, the students who wish to have in their hand a collection especially for daily work may find the work by GARIBOLDI: "*Étude complète des gammes pour flûte*" useful.³³²

Even the title of the work, *Méthode complète*, suggests that he considered it to be more than adequate for the purpose of completing a student's studies on the flute. Gaubert and his teacher must have been used to learning quickly and efficiently, and to working with students who did the same. The average student would require the extra time afforded by excursions to the study of supplementary materials.

Fleury, on the other hand, seems more genuine in his referral to other materials. Perhaps this is the result of the fact that no "original" pedagogical repertoire is contained in "La Flûte." Many of the works enumerated by

³³² *Méthode complète*, 123: "La *Méthode* contient tout ce qui concerne les Gammes. Toutefois, les élèves qui voudront sous la main un recueil spécial pour ce travail journalier se p[r]ocureront utilement l'ouvrage de GARIBOLDI: '*Étude complète des gammes pour flûte.*'"

Fleury in the early sections of "La Flûte" are those by older flutist-composers who were at their time the unequivocal masters of their instrument. Such pedagogical references seem most in keeping with the historical trend of the article. The supplementary materials suggested by Fleury in the last section of "La Flûte" and by Gaubert in the *Méthode complète* are almost evenly split between those of earlier composers whose works have stood the test of time, as well as those of contemporary composers. The French repertoire is stressed, but not to the exclusion of foreign music. This trend is in keeping with that demonstrated by contemporary performing arts organizations (Chapter 3).

Perhaps the most important inclusions by either author come in the form of suggested orchestral and chamber repertoire for study. Gaubert, of course, draws forty-four excerpts directly into his treatise as Part VIII. Fleury is only able to mention important excerpts in the body of his article as they pertain to the history and evolution of the flute in orchestra and chamber settings. Both men include numerous solo passages which are still part of the standard repertoire today; Fleury, however, includes a higher percentage of these compositions. Gaubert's list of excerpts is heavily weighted toward French composition, primarily that for opera. Only a handful of compositions

presented in Part VIII are taken from the standard orchestral repertoire of the time. Fleury has taken up the slack on this count by providing snippets of and references to many of the flute solos found in the standard orchestral repertoire.

The last important contribution of repertoire by other composers is the "Flutist's Library" as presented by Fleury. Fleury's list is extensive, including methods and pedagogical materials, study pieces for flute and piano (concert studies and fantasy pieces), classics for flute and piano, classics for flute and diverse instruments, and modern works for flute (mostly Conservatoire contest pieces). Many of the works included by Fleury are still in the current repertoire today, although a number of titles from each of the categories have fallen from favour in the past few decades. While this is noticeable primarily with regard to the modern works of the period, it is surprisingly the case even with the list of classics.

As has been found with the two previous treatises, the author's instructions on ornamentation provide valuable insight into this important aspect of performance practice. In Part II of the *Méthode complète*, Gaubert instructs the student in the correct execution of many of the same ornaments taught by the authors of earlier treatises.

However, we find in this section a decided change in the typical execution of these ornaments.

Trills as taught by Gaubert always begin on the principal note and always have a termination. The interpretation of trills in the music of Bach opens the possibility of a single note termination, although this close is considered obsolete. If an anticipation is written on the principal note, it is to be performed quickly and on the beat. Exercises are given for the practice of trills with and without termination.³³³ In most cases the terminations are written out in small notes. At times these terminations deviate radically from the prescribed manner of execution.

Ex. 5 - Alternate trill terminations

- 1) Trill Study III, bar 14 (p. 64)
- 2) Mordent Study II, final three bars (p. 62)



The mordent, represented by w , is by the early twentieth century principally an ornament involving one

³³³ The written instructions to the exercises indicate whether or not terminations are to be played.

alternation between the principal note and the note above. However, a termination may be applied to the end of the principal note, resulting in a quasi-turn figure. According to Gaubert's examples, the mordent termination should be only by half-step. Gaubert notes that in older styles this symbol indicated an alternation with the note below the principal note, but that interpretation is now considered obsolete. Two of the three studies on the mordent seem to be out of place in the treatise: it appears by numbering and content that pages 62 and 63 should follow exercise 1 on page 65. Apparently the editor has not noticed this incongruity.

Ex. 6 - Mordents with termination

Notation (above), Realization (below)

Adapted from Gaubert, *Methode complète* (p. 65)

The image shows two staves of musical notation. The top staff is in treble clef with a common time signature (C). It contains six notes: a quarter note G4, a quarter note A4, a quarter note B4, a quarter note C5, a quarter note B4, and a quarter note A4. Above each note is a mordent symbol (a small 'm' with a vertical line and a hook). The bottom staff is also in treble clef with a common time signature. It shows the realization of the notes above, with slurs and grace notes indicating the mordent ornamentation. The realization consists of six groups of notes, each corresponding to a note in the top staff. Each group starts with a grace note (a half note) followed by a quarter note, then a series of eighth notes and sixteenth notes that ornament the principal note. The ornamentation for the first five notes is a half-step above, and for the sixth note, it is a half-step below.

The turn, shown by the symbol , is given as a four note ornament. The rhythm of the four notes of the turn depends on whether or not the symbol follows a note

divisible by two or by three. Chromatic alteration is made as would be expected.

Ex. 7 - The common turn (p. 66)
Notation (above), Realization (below)

The image shows two staves of music. The top staff is in treble clef with a key signature of one sharp (F#) and a common time signature (C). It contains two measures. The first measure has a quarter note G4, a quarter note A4, and a quarter note B4, all under a slur. The second measure has a quarter note B4, a quarter note A4, and a quarter note G4, also under a slur. A fermata is placed over the B4 in the second measure. The bottom staff is in treble clef with a key signature of one sharp (F#) and a common time signature (C). It shows the realization of the turn. The first measure has a quarter note G4, a quarter note A4, and a quarter note B4, all under a slur. The second measure has a quarter note B4, a quarter note A4, and a quarter note G4, all under a slur. A fermata is placed over the B4 in the second measure. The realization uses a triplet of notes for the principal note.

If the note preceding and following the turn are the same, then the turn is made up of only three notes.

Ex. 8 - The three-note turn: Gluck, *Marche religieuse*
d'Alceste, bars 5-8 (p. 67)
Notation (above), Realization (below)

The image shows two staves of music. The top staff is in treble clef with a key signature of one sharp (F#) and a common time signature (C). It contains four measures. The first measure has a quarter note G4, a quarter note A4, and a quarter note B4, all under a slur. The second measure has a quarter note B4, a quarter note A4, and a quarter note G4, all under a slur. The third measure has a quarter note G4, a quarter note A4, and a quarter note B4, all under a slur. The fourth measure has a quarter note B4, a quarter note A4, and a quarter note G4, all under a slur. A fermata is placed over the B4 in the second measure. The bottom staff is in treble clef with a key signature of one sharp (F#) and a common time signature (C). It shows the realization of the turn. The first measure has a quarter note G4, a quarter note A4, and a quarter note B4, all under a slur. The second measure has a quarter note B4, a quarter note A4, and a quarter note G4, all under a slur. The third measure has a quarter note G4, a quarter note A4, and a quarter note B4, all under a slur. The fourth measure has a quarter note B4, a quarter note A4, and a quarter note G4, all under a slur. A fermata is placed over the B4 in the second measure. The realization uses a triplet of notes for the principal note. Dynamics markings include 'p' (piano) under the first measure and 'mf' (mezzo-forte) under the third measure.

No provision is made for interpreting the turn at the beginning of the principal note, contrary to the practice of the previous treatises. However, a number of variations to

the common turn are shown by Gaubert through his examples and exercises. He does not offer verbal instruction to assist the student in meeting the demands of these irregular turns, and his intentions are not clear from his notation. A number of rhythmic alterations seem to be at the whim of the composer. The most notable exception occurs when a dotted rhythm figure carries a turn. Apparently, the movement of the figure should be smooth if the overall spirit is lyric, and snappy (as in Example 7 above) if the spirit is lively.

Ex. 9 - Variations to the common turn

1) "Étude sur le grupetto," last bar (p. 66)

2) "Étude sur des grupetti, *Basta moderament espressivo*, bar 8 (p. 67)

Notation (above), Realization (below)

The image displays two staves of musical notation. The top staff, labeled 'Notation (above)', shows two measures. Measure 1 (circled 1) contains a half note G4, a quarter note A4, and a quarter note B4, with a grace note G4 above the A4. Measure 2 (circled 2) contains a half note C5, a quarter note B4, and a quarter note A4, with a grace note B4 above the C5. The bottom staff, labeled 'Realization (below)', shows the same two measures. Measure 1 (circled 1) shows the notes G4, A4, and B4 with a grace note G4, but the grace note is written as a dotted quarter note. Measure 2 (circled 2) shows the notes C5, B4, and A4 with a grace note B4, but the grace note is written as a dotted quarter note. The realization includes various rhythmic alterations and ornaments.

The grace note is considered to be a note used by the composer to strengthen the melodic line. Gaubert relates that the note may be short or long, but usually

takes its value from the note following. The short grace note [acciaccatura] is designated by a slash through the stem. The short grace note is always to be played as short as possible. A grace note which is separated from the following note by more than a second is always considered short with or without the presence of a slash through the stem. The long grace note [appoggiatura] has no stroke through the stem and usually receives half the value of an undotted note, or one-third the value of a dotted note. In both cases the grace may be held longer in slow movements than in fast. Gaubert remarks that in present times composers will write their grace notes out in large notation to avoid any confusion, so interpretation of the grace notes is only an issue in older music.

Ex. 10 - Long grace notes

- 1) on notes divisible by two (p. 68)
 - 2) on notes divisible by three (p. 69)
 - 3) variation for slower tempos (p. 69)
- Notation (above), Realization (below)

The image shows two staves of musical notation. The top staff is the original notation, and the bottom staff is the realization. The top staff has three measures. The first measure has a quarter note with a grace note on top, marked with a circled 1. The second measure has a half note with a grace note on top, marked with a circled 2. The third measure has a dotted half note with a grace note on top, marked with a circled 3. The tempo is marked 'Adagio'. The bottom staff shows the realization of these grace notes, with the first measure having a quarter note with a grace note on top, the second measure having a half note with a grace note on top, and the third measure having a dotted half note with a grace note on top. The realization is marked with a circled 3.

The final topic of interest to this discussion is that of the variation found between Gaubert and Fleury in their instructions governing the use of vibrato. We have already noted that Fleury allows "a light, almost imperceptible" use of vibrato. Gaubert, however, strictly forbids the use of vibrato as this destroys the sound quality inherent to the flute. Gaubert writes:

There should be no vibrato or any form of quaver, an artifice used by inferior instrumentalists and musicians. It is with the tone that the player conveys the music to the listener. Vibrato distorts the natural character of the instrument and spoils the interpretation fatiguing quickly a sensitive ear. It is a serious error and shows unpardonable lack of taste to use these vulgar methods to interpret the great composers.³³⁴

How are these two drastically opposing views to be reconciled? For the answer to this question we must momentarily move outside the two works. Taffanel's sound has been described as being:

"...characterized by brilliance and an 'extraordinarily velvet' purity...Taffanel's emphasis was not on volume but on simplicity of line and phrasing. His tone was forthright and without vibrato, which was considered in bad taste in France as it had been throughout the century."³³⁵

Those of his students who have written about his performance and attitudes toward musicianship suggest that the master of

³³⁴ *Méthode complète*, 186.

³³⁵ Ahmad, 91.

the flute did not favour the use of vibrato. The most well-known account is given by George Barrère:

His musicianship, his style particularly, was highly inspirational. He loathed cheap sentimentality, excessive expression, endless vibrato or shaking of tone, in a word, all the cheap tricks which are as undignified as they are unmusical.³³⁶

Yet a number of the best-known students from Taffanel's class each used vibrato - Philippe Gaubert, George Barrère, René LeRoy, André Maquarre, Georges Laurent, and Marcel Moyse.³³⁷ Nothing is known of Fleury's tone and use of vibrato.

Marcel Moyse, a student of both Taffanel and Gaubert, wrote an article dedicated to the problems surrounding the use of vibrato in which he suggests that it

³³⁶ Lola M. Allison, "George Barrère," *The Flutist*, vol. 2 (Feb. 1921), 319.

³³⁷ Claude Dorgeuille, who has analysed many recordings of Taffanel's students in an effort to determine the true essence of the French sound, has determined that Gaubert did not perform with audible vibrato (Dorgeuille, 44). However Fischer cites William Bennett, who observed that Gaubert was able to change his vibrato as it suited the expression of the music (p. 13). Gaubert's own vibrato has been described as vocally inspired, which to a flutist suggests a light vibrato that is well integrated into the sound (Brett, 1). The tone quality of the remaining students listed above has been documented accordingly: Barrère (Adrian Brett, "The French Style in America, *The Flute Worker*, vol. 2, no. 2 [Dec. 1983], 1; and Ahmad, 111); LeRoy (Harry Moskovitz, "René LeRoy," *Woodwind World, Brass and Percussion*, vol. 14, no. 1 [Jan 1975], 14), Maquarre (Brett, 1); Laurent (Ahmad, 117), Moyse (Marcel Moyse, "The Unsolvable Problem: Considerations on Flute Vibrato," part II, *Woodwind Magazine*, vol. 2, no. 8 [1950], 5).

is a question of intelligently using the vibrato for expressive purposes and not an issue of whether or not vibrato should be used.³³⁸ A sufficiently light vibrato would be, by its very nature, produced as a component part of the flute sound, not as a decoration to the sound. It is possible that Gaubert was drawing this distinction between a light vibrato in the flute sound and a heavy, decorative vibrato which is plainly audible to the listener. He may not have even been aware of the presence of this vibrato in his own playing. Therefore it may be hypothesized that the presence of "a light, nearly imperceptible vibrato" would be characteristic of turn of the century flute playing.

The only remaining point to be strongly re-illuminated is the immeasurable benefit received by the *Méthode complète* from the presence of "La Flûte." So often throughout this chapter, it has been shown how the two works strengthen and complement one another. Early in the chapter concern was raised as to the lack of instructional continuity and detail found in the *Méthode complète*. "La Flûte" goes a long way toward drawing the eight separate parts of the *Méthode* together. The article offers so much continuity where the logic of the treatise will occasionally fail. Individually, each is undeniably a valuable tool to

³³⁸ Marcel Moyse, "The Unsolvable Problem: Considerations on Flute Vibrato," part II, translated Clara Freeman, *Woodwind Magazine*, vol. 2, no. 8 [1950], 5.

the flutist. Nevertheless, the two side by side, jointly fulfilling the dream of one man, constitute a powerfully comprehensive work. In the opinion of this writer, the time has come for the two parts of Taffanel's original conception to be brought together in one volume in order to realize his proposed *L'Art de la flûte*.

Chapter 8

Conclusions

The study of the three treatises by Coche, Altès, and Taffanel/Gaubert/Fleury reveals numerous fascinating points concerning flute performance practice during the nineteenth and early twentieth centuries. As noted in chapters 5 through 7, each treatise is valuable in its presentation of trends in performance practice contemporary to its composition. At this time, it is useful to bring the most interesting of these points together to demonstrate the changes in flute performance which transpired between 1838 and 1927. The process by which two of the most important facets of flute performance practice evolved will be discussed; these facets are: cultivation of performance practice on the Boehm flute, and the evolution of musical style. Once these trends have been identified, they will reveal both the common and divergent philosophies of the various members of the Paris Conservatoire flute faculty whose works have been studied and the manner in which these same men chose to adapt the Boehm-flute to the prevailing musical climate of Paris.

When the Boehm-flute was introduced to Paris, flute performance was considered to be in a frightful state of "decadence." The flute was gaining a tremendous following among amateur performers. Professional flutists often seemed to compete to show off their own superiority on the instrument. Most people who wrote for the flute were flutists themselves who composed works either in a simple melodic style suitable for the parlour or in an overly florid style intended for their own use in the concert hall. Extremely virtuosic compositions like those by Tulou and Demerssemann were the mainstay of the Conservatoire's annual competition. It was only in the orchestral context that the flutist was required to play true musical masterworks such as those by Beethoven, Haydn, Mozart, Wagner, Weber, Gluck, and Mendelssohn. The great orchestral composers, while ignoring the flute for solos and concertos, wrote many solos of varying style for the flute in the orchestral literature. It was into this climate that Coche introduced the Boehm-flute, and it was for these genres of works that he devised his instructional treatise for the Boehm-flute.

The *Méthode pour flûte* by Altès both continues in the traditions of Coche and departs from them. Like Coche, who wrote his treatise as a way of introducing the Boehm-flute to Paris, Altès wrote his treatise at a pivotal time for the flute in France; however, change was influenced by

the musical public and its taste in music. The Boehm-flute had come into its own under the auspices of a highly virtuosic and affected style of flute performance. By the time at which Altès wrote his treatise, a more conservative style of performance, resulting in part from a renewed interest in the compositions by the older masters and by contemporary French composers, was beginning to take over the Paris music community. The works by Altès and Tulou were still staples of the annual Conservatoire competition, and highly virtuosic compositions for the flute continued to be written, primarily by flutist-composers. Programmes of the Société des concerts were filled with familiar compositions by foreign romantic composers. However, beginning around 1872, contemporary French composition began to find its place alongside popular foreign works on orchestral concert programmes. This transition along with the reintroduction of the music of Bach, Handel, and Mozart into the flute repertoire placed new demands on flutists. As principal Professor at the Conservatoire, Altès turned his attentions to composing a treatise intended to meet the demands of contemporary flute performance.

In his youth Paul Taffanel was instructed by Altès, but his treatise, as realized by two of his students, reflects a life-long distillation of thought on the true art of performing music, as well as the art of playing and

teaching the flute. As one of the most respected principal flutists and, later, as conductor of the Opéra and Société des concerts, Taffanel knew what was required of the professional flutist at the highest echelon. His life's work witnessed and contributed to the rejuvenation of the French spirit in music, as this movement sought to resurrect the music of the early French masters and encourage contemporary French composers to bring forth their own contributions to the various repertoires. Under Taffanel, flute pieces for the annual competition of the Conservatoire were often composed by established Parisian composers rather than by the principal Professor himself, as had been the case during most of the nineteenth century, and required competence in both expressive and virtuosic styles. Music for small ensembles of solo winds with or without other families of instruments, primarily composed by contemporary French composers, rose to take a place beside music for the traditional string and piano chamber ensembles. At the same time, the music of the baroque and classical masters had become firmly re-entrenched in the performance repertoire. In general, despite the fact that virtuosity remained a part of most flute performance, the flute was overtaken by a more restrained style of performance than would have been expected several decades earlier.

In performing the new French repertoire, the flutist was being asked to use an increased range, move between registers rapidly and fluidly, execute technical passages which departed from traditional tonal patterns, and employ a full range of dynamics and tonal colours. Virtuoso passages placed a higher emphasis on articulation than finger dexterity. Expressive passages departed from the broad, expansive lines of French and German romanticism and required the flutist to bring numerous small gestures together as a musical whole. Rarely were the expressive and virtuosic styles mutually exclusive; the flutist was therefore required to cope with radical shifts of mood and colour.

With the return of baroque and classical music to the concert stage alongside traditional nineteenth-century and newly composed literature, the flutist was expected to perform in a variety of styles with equal prowess. While earlier in the nineteenth century, a flutist needed to be comfortable only with the prevailing style of performance, the flutist now needed to develop the technical abilities to deal with music of the past three centuries and to have the intellectual ability to discriminate between styles and select the most appropriate manner of performance. The treatise by Taffanel provides the student with the foundations necessary to carry out these high orders of

performance in the late nineteenth and early twentieth centuries.

While the fundamental acoustic principles behind the Boehm-flute are the same as those for the old-system flute, the Boehm-flute and the old-system flute are by all accounts radically different instruments. In the new instrument, the bore of the flute, the cut of the embouchure hole, and the size of the tone holes results in an instrument with an increased capacity for volume. The use of silver in the manufacture of the Boehm-flute contributes to a brilliance in the sound and the possibility of numerous colour variations of the sound, neither of which is easily produced on a wooden flute. The open-key system devised by Boehm on the one hand allows for improved intonation in all keys, as well as increased volume of sound, but also results in a change of the fundamental scale of the flute from D major to C major, as well as numerous fingerings of individual notes.

The new flute held both new possibilities and potential problems for the performer and composer. A flutist changing from the old-system flute to the Boehm-flute first had to overcome the obstacles of a new fingering system. Once these new fingerings were learned, the flutist would likely find himself performing old compositions, often in the key of D or G major, on an instrument far more suited

to flat key signatures. While the Boehm-flute is theoretically capable of greater technical virtuosity than the old-system flute, flutists learning the new instrument sought to find further "short-cuts" to ease any remaining difficulties in technical passages. Where he would have needed to be constantly adjusting the irregular pitch and colour of some notes on the old-system flute, the flutist now had to resist ingrained habits and instincts because the Boehm-flute was, for all intents and purposes, a well-tuned instrument. Yet the acoustically derived placement of the tone holes on the Boehm-flute eliminated a great deal of the latitude offered by the old-system flute to manipulate the pitch when a deviation from the practice of equal temperament was desirable.

Great volume and brilliant sound, difficult to achieve on the old-system flute, were easy to produce on the silver Boehm-flute which was adopted by the Paris flute community. With the old-system flute, rapidly articulated passages were not desirable because they could not be produced on that instrument with sufficient volume to render the notes audible. The silver Boehm-flute with its quick response made articulated passage work a viable option for composers and flutists, and eventually brought an end to the continuous sweeping, legato scales and arpeggios which the

old-system flute was forced to play merely to be heard above the orchestra.

The early writers of treatises for the Boehm-flute pioneered a style of flute playing suited both to the capabilities and potentials of the new flute, and to the needs of contemporary music, a trend which has continued into the next century. With his treatise, Coche cultivated a highly complex and colouristic style of flute performance. From a theoretical standpoint, his writings about the history and science of the flute, and his subsequent incorporation of some of the elements of acoustic theory into the instruction of extended timbres are unique to the early methods for the Boehm-flute. On the purely practical side, he lays the foundations of good flute playing both through his emphasis on the proper way to practice the flute and his instrumental solfège, which establishes the fundamentals prior to embarking on more advanced study. Coche explores the possibilities of colouristic performance through the extreme emphasis which he places on ornamentation and articulation. Finally, his inclusion of numerous quotations from the masters of other instruments encourages the student to explore the musical world beyond the flute and its repertoire in an attempt to highlight the highest standards of musical performance.

Altès' treatise suggests a style of colourful, exuberant, yet careful and conscientious performance. By placing theoretical and practical studies in the treatise, delaying the study of dynamics, integrating numerous small exercises for individual fingers, and insisting on correct intonation, Altès demonstrates his concern for the acquisition of solid performance skills along with academic musical knowledge. His inclusion of many works of standard repertoire in the course of study provides not only a valuable source of material, but focuses the student's attention on the goal of applying technical skills to music performance. The incorporation of numerous alternate fingerings to ease difficult passage work, of discussion on the manner in which a sound is to be drawn from the instrument and of the correct way to practise, and of daily exercises and complementary studies not only suggests the need for virtuosic pyrotechnics in contemporary performance but reveals how the Boehm-flute was being adapted to the performance demands of the nineteenth-century flutist. The description of ornaments whose execution is based on the principle of dissonance and resolution, the use of the *notes sensibles*, the mention of baroque repertoire, and instruction in transposition are all symptomatic of a time when the flutist was being asked to meld older traditions with new performance demands, and when scrupulous attention

to the musical text was used as the primary means of approaching all musical performance.

Fleury and Gaubert, on Taffanel's behalf, demonstrate the juxtaposition of virtuosity and restraint which the newer French style of performance required. The acquisition of a virtuoso technique hand in hand with the development of individual finger movements through small exercises, the emphasis placed on tone development and intonation, and intense instruction on interpretation and musical style exemplify Taffanel's insistence on the intelligent application of both theoretical and practical knowledge in performing the flute repertoire. Emphasis on the proper structure and function of practice sessions, daily exercises, and progressive and virtuosic studies, and references to additional repertoire suggest that the work of the flutist is never complete and that only consistent application of intelligent effort can produce the results required to maintain one's abilities in a professional market which places ever-increasing demands on versatility and adaptability.

While each of the three treatises is comprehensive, each is comprehensive in a unique way. Each treatise focuses on the skills and techniques necessary to cope with the music being performed at the time the treatise was written. By highlighting a few of the most important

topics addressed by the three treatise composers, the techniques both unique and intrinsic to performance on the Boehm-flute may be illuminated.

Principal and alternate fingerings for notes play an important role in the earlier treatises for the Boehm-flute. Coche includes four tables of fingerings in his *Méthode à l'enseignement*. His first table gives basic fingerings for the full range of the flute, including fingerings for the highest C[#], D, and E^b. Only Coche gives fingerings for these last three notes. The remaining tables give alternate fingerings for trills, turns, and notes sensibles. The first three of these tables would be commonplace in any contemporary treatise; however, the number of possibilities which Coche provides, many designated as appropriate for specific situations according to their ease of production and intonation at a given dynamic, is not matched.

Altès carries the theory of alternate fingerings to even greater heights. While he provides the standard tablatures for both principal note fingerings and alternate fingerings for trills and turns, he also includes five tables showing alternate fingerings to ease passages involving certain combinations of notes. These fingerings operate within acceptable standards of acoustic theory by eliminating unnecessary finger motion without disrupting the

tone quality or intonation of any note. These fingerings are as unique and intrinsic to the Boehm-flute as are the principal fingerings.

Taffanel departs from the system of alternate fingerings except for their use on trills. The repertoire being composed at Taffanel's time does not seem to suggest a reason for the abandonment of alternate fingerings. Perhaps an answer may be found in the historical development of the flute. Coche and Altès both began their studies on the old-system flute. A standard part of the technique of that instrument is the presence of a number of principal fingerings for some notes, as well as the expected alternate fingerings for the execution of ornaments. Both men would likely have carried the philosophy of multiple fingerings into their own use of the Boehm-flute, and therefore sought to realize a system of fingerings to ease technical passages on the new instrument. Taffanel began his studies on the Boehm-flute, and while he surely would have known about the use of alternate fingerings from his studies with Altès, he, unlike his converted predecessors, may not have felt the same urgency to deviate from the principal fingerings as a part of common practice.

A similar evolution may be seen in the use of the *note sensible* by Coche and Altès but not by Taffanel. Again, the elder two gentlemen would probably have learned

from their studies on the old-system flute to discriminate fine gradations of pitch, to manipulate them by means of special fingerings, and to employ such shadings as might be necessary or applicable for musical effect. The Boehm-flute, with its relatively constant intonation, would not ordinarily encourage the use of finely tuned notes for the purposes of musical effect. Still, Coche and Altès retained this technique in their performance and individually developed a system of alternate fingerings to produce this effect easily. Taffanel, having become a highly accomplished flutist before matriculating with Altès, would have known about the use of the *note sensible*, but might not have seen sufficient merit in the system to depart from the conventions of equal-temperment simply for musical effect.

The development of the virtuosic capabilities unique to the Boehm-flute is signaled by the three treatises and is embodied in a shift from the virtuosic style dominated by legato scales and arpeggios most often employed on the old-system flute to a style dominated by brilliant, rapid articulation, enabled by the quick response of the Boehm-flute. Coche makes only passing reference to multiple articulations such as double and triple tonguing. Altès incorporates a great deal of instruction on multiple articulations, and employs the technique heavily in his *Complementary Studies*; however, he grants equal emphasis in

these Complementary Studies to typical middle nineteenth-century passage work of legato scales and arpeggios. Taffanel brings the transition full circle by concentrating almost exclusively on rapid, multiple articulations, only giving passing attention to florid passages of scales and arpeggios.

Use of extreme dynamics on the flute evolved in large part as a result of the development of the Boehm-flute style. The old-system flute was barely capable of great volume, and even the finest performers were unable to produce a voluminous sound without altering the structure of their instrument. The Boehm-flute with its larger embouchure and tone holes was suddenly capable of producing an extremely large sound, sufficient for projecting over a full orchestra. Once performers and composers began to discover this feature, flutists started developing techniques for the effective use of the instrument's full dynamic range, and included the study of dynamics in their instruction. This development is mirrored in the historical progression of the three treatises. Coche makes only limited use of abrupt shifts in dynamic level, sweeping crescendo/diminuendo, and extreme dynamic ranges. Furthermore, he does not offer any instruction in the development of dynamic control. Altès delays his instruction of dynamics until Part II of the *Méthode pour*

flûte, and from that point forward uses the techniques just noted. Taffanel uses dynamics more frequently and over a greater range than does Altès; however, his instruction of dynamics is limited at best.

Like the evolution of the Boehm-flute style, the evolution of music performance style from the mid-nineteenth century to the early twentieth century may be traced through the treatises. Performance style is highlighted in both subtle and direct ways in the three treatises. This evolution may be traced through each writer's approach to music performance, style of ornamentation and improvisation, and the use of colour in flute performance.

Coche, Altès, and Taffanel are each explicit as to what is expected from a flutist in approaching performance. A remarkable uniformity of the opinions held by these men is easily recognizable. Altès states that the true art of style is gained by relinquishing the personality of the performer in favour of adopting the mind and personality of the composer to be performed. Each writer stresses the importance of strict observance of and adherence to the musical text, particularly to metre, rhythm, and intonation. Provided that the performer is capable of handling the technical requirements of the music, exact realization of metre and rhythm would result in a performance which is, in most respects, crisp and clean. When exact intonation is

scrupulously observed, the performer would most likely also be attending to careful regulation of his tone production, thus avoiding any sound which is truly unpleasant and preserving the clarity of the performance.

Once instruction in older styles of music becomes a part of the lesson in the Altès and Taffanel treatises, these criteria still hold true. Both Altès and Taffanel, while ignorant of baroque performance practice as it would come to be revealed by the research of the twentieth century, instruct the student in the performance of baroque music according to their own guidelines of good taste. In this particular case, both advocate strict observance of the musical text: the ornaments and rhythms are executed according to the convention of the time of treatise composition, and nothing is added to the text in the way of articulations, free ornamentation, or dynamics.

The emphasis which Coche, Altès, and Taffanel place on preserving the integrity of the musical text suggests that while nineteenth-century flute performance, swollen by ranks of amateur flutists, may have seemed to reflect an age of decadence in the eyes of many a critic, at the higher levels of instruction and performance, a fair margin of sobriety and clarity governed the approach of the nineteenth-century flutist. The change in performance and composition which overtook Paris in the late nineteenth and

early twentieth centuries was therefore less than a total reformation of style for the professional flutists of that city.

The nineteenth and early twentieth centuries witnessed a dramatic change in the execution of ornamentation on the flute, which briefly may be summed up by noting that throughout this time period the use of ornamentation resulted in a shifting emphasis of intensification of the melodic line is to be achieved. In the early part of this period, the intensification was achieved by the use of dissonance as a part of the ornament and, by the end of the period, by rhythmic agitation.

Coche taught a style of rendering ornaments which was deeply rooted in the tradition where they provided dissonance followed by resolution and functioned primarily within a melodic rather than rhythmic context. Each of Coche's ornaments stressed a dissonant preparation or dissonant element of the ornament on the beat, resolving that dissonance on a weaker part of the beat or measure. While the rules were simple, and exceptions few, great freedom was granted to the performer to alter the written ornamentation as he saw fit. Dissonances could be held longer or shorter, depending on the character of the movement. The resolutions could be simple or florid. Free improvisation on a penultimate note of a composition or

movement was permitted, presumably to add an air of lift and elegance to the cadence. Improvisation of preludes as a part of performance was given a place of respect by Coche.

By the time that Altès wrote his treatise forty years later, ornaments still retained their melodic function, but had lost the bulk of their dissonant implication. With Altès, ornaments are most often executed by placing the dissonance on the beat; however, the length and amount of stress afforded the dissonance is severely curtailed from that granted by Coche. Altès' rules governing the selection and rhythmic placement of ornaments are more numerous than those of Coche. These rules highlight the essentially melodic character of Altès' ornaments as they serve to join and intertwine with the structural notes of the melody. The performer still has the freedom to vary his ornaments, particularly at the resolution, but not to the extent permitted by Coche. Free improvisation is no longer considered by Altès to be a valuable aspect of performance.

By the time that Taffanel's two students finally compiled his notes into an instructional treatise in two parts, ornamentation had totally lost its dissonant implication and only served in a somewhat melodic capacity. Taffanel no longer advocated the use of dissonant preparations to ornaments, which not only removed the

strongly dissonant implications of some ornaments but often the elegant melodic entry into the ornament. Part of the melodic function of ornaments was retained by means of terminating figures which gracefully elide to the notes following the ornament. Ornamentation under Taffanel serves more to agitate and intensify the note with which it is associated, or to emphasize the rhythmic placement of the principal note by its plain, crisp execution. Taffanel simplified the rules of ornamentation, giving each ornament one single execution and eliminating the freedom to vary and to add to the written ornamentation which was enjoyed by the nineteenth-century performer.

The use of colour in music made a similarly dramatic shift throughout the course of the nineteenth and early twentieth centuries. This shift was characterized by the movement away from colouristic devices and techniques in the early part of the period to the use of tone colouration only in the later stages of the period.

Coche's treatise demonstrates a style of flute playing which is steeped in colouristic devices. The most visible of these are the special articulations which permit numerous variations to the attack, duration, and release of individual or groups of notes. One of these articulations even implies the use of vibrato to produce the desired effect of strong resonance. Coche also instructs the

student in the use of extended timbres, both in connection with his original chromatic tablature where he provides fingerings for many notes specifically adapted to a particular tone colour, and in the final stages of his treatise when he introduces the student to the use of harmonics for colouristic effect.

Altès is less demanding in his use of specific colour devices and more cognizant of the potential of tone colouration. Most of the special articulations given by Coche are not to be found in Altès' treatise; Altès replaces them with numerous articulation patterns of slurs and tongued notes along with the occasional verbal indication suggesting the manner in which certain articulation patterns are to be executed, whether with urgency or soft undulation, vigour or nearly imperceptible attack. Gone too are the special fingerings and techniques used to achieve timbral effects such as harmonics. Yet despite this particular loss of colour in music, Altès begins to define the techniques used for producing supple and malleable tone quality on the Boehm-flute which ultimately led to Taffanel's contributions to musical colour.

Following in the footsteps of Altès who began to move away from the colouristic components of timbre in favour of tone development, Taffanel does not include any of the colouristic devices previously discussed, but raises

tone production to new heights, particularly its sub-components of legato and tonal/embouchure flexibility. His instructions as delivered through Gaubert and Fleury point to a flute tone which is supple and gentle, but not in any way lacking in projection quality. Taffanel's tone production is based on extremely relaxed muscles about the mouth and face, and a naturalness of body and hand position which precludes muscle rigidity. A tone produced by these means is easily manoeuvrable with respect to dynamics and shadings of colour, and allows the performer complete control of intonation in extreme dynamics. Taffanel's students even permit a light and almost imperceptible vibrato to be a part of the fundamental flute sound. Text found in both the last sections of "La Flûte" and in Part VII of the *Méthode complète* points to the use of newly acquired colouristic ability in the performance of works to bring out the character of individual sections of a composition. In addition, Taffanel advocates much more ebb and flow in the use of unwritten dynamics to propel and shape phrases than did either Coche or Altès.

Flute performance practice may be seen as maintaining a steady evolution through the nineteenth and into the twentieth century, at each step revealing itself both to be steeped in the traditions of the past and to possess a remarkable forward looking perspective,

particularly on the part of the finest professors of the instrument, which kept the flute at the vanguard of music in Paris.

The introduction of the Boehm-flute into the flute community of Paris breathed new life into a situation which had witnessed the flute's fall into a perceived state of decadence. Coche pioneered a performance technique which was suited to that instrument. At the same time, he allowed for an intensely colouristic mode of performance which he required to function within the boundaries of musical correctness and style. With this step, Coche realized a performance style which permitted both the florid concert music and parlour music of the nineteenth century to be full of vibrance and colour, and also to be attentive to detail, allowing these genres to be far more subtle and refined than is usually believed in the late twentieth-century.

Altès and his treatise stand at the pivotal moment in Parisian music history when expectations of music performance and composition were shifting at an almost alarming rate to allow for the resurgence of interest in older music, French and foreign, and contemporary music by native composers. By building on the past traditions of Coche's generation, and his own experience in adopting the Boehm-flute mid-way through his career, Altès guided flute performance through the murky waters of the contemporary

Parisian music scene. He created a style which left flute playing slightly less colourful in some respects than that used during Coche's time, but no less attentive to fine detail, and certainly more capable of meeting the virtuosic demands of the coming century.

Taffanel's work is the culmination of a nearly century-long evolution of performance practice on the Boehm-flute. Taffanel's own performance and musical activities provided a model for contemporary composers and young flutists. Because his proposed *L'Art de la flûte* was not compiled until after his death, his treatise, albeit in two parts, brings together an entire life-time of experience and presents it to future generations. His work is thoughtful and comprehensive and reflects the needs of the flute player at the time of its composition. Taffanel presents a flute style which is charming, attentive, somewhat restrained, and which is fundamentally rooted in tone production, tone colouration, and the art of phrasing.

The evolution from Coche to Taffanel demonstrates the abandonment of colouristic devices in favour of tone colouration and a sobriety of style complete with the loss of special articulations, dissonance as the focus of ornamentation, alternate fingerings for timbral and intonation effect, free improvisation, and performers' elaboration of written ornaments. The same evolution

witnessed the positive contributions of a performance style uniquely suited to the best qualities of the Boehm-flute: rapid and brilliant articulation, supple and vibrant tone quality, fantastic virtuosity in all key signatures, and the employment of a full range of dynamic and tone colour in the art of phrasing. These qualities are the ones which have been passed down to succeeding generations of North American flute players by a number of French flutists, many of them Taffanel's students, who came to perform with the fledgling orchestras of this continent during the first half of this century.

SELECTED BIBLIOGRAPHY

- Adler, Samuel. *The Study of Orchestration*. New York: W.W. Norton and Co., 1982.
- Ahmad, Patricia. "The Flute Professors of the Paris Conservatoire from Devienne to Taffanel, 1795-1908." MA Thesis, North Texas State University, 1980.
- Aitkin, Robert. "Marcel Moyse - A Long and Productive Life." *The National Flute Association, Inc. Newsletter*, vol. 4, no. 2 (February 1979): 1, 11-13.
- Allan, H.P. "Some Considerations of the Effect of Orchestral Colour upon Design and Texture in Musical Composition." *Proceedings of the Musical Association*, vol. 35 (1908-9): 109-121. Reprint. Vaduz: Kraus Reprint, Ltd., 1966.
- Allison, Lola M.. "George Barrère." Parts 1-3. *The Flutist*, vol. 2 (1921): 316-319, 340-342, 364-366.
- Altès, Henry. *Complete Method for the Flute Boehm System. Containing Complete Theory of Music*, vol. 1. English. Paris: Schönaers-Millereau, 1906.
- . *Method for the Boehm Flute (New and Revised edition)*. New York: Carl Fischer, n.d..
- . *Méthode pour flûte système Boehm*. Paris: Millereau, [c. 1880].
- . *Méthode pour Flûte par Henry Altès, Professeur au Conservatoire, partie 1-3*. Edited by Fernand Caratgé. Paris: Leduc [1956].
- Anonymous. Review of *Rapport présenté à M. le Ministre de l'Instruction publique et des Beaux-Arts au nom de la Commission des grands auditions musicales de l'Exposition Universelle de 1900* by A[lfred] Bruneau. *La Revue Musicale*, vol. 1 (1901): 110-119. Reprint. Scarsdale, NY: Annemarie Schnase, Publisher, 1965.
- Ansermet, Ernest. "Le Language de Debussy." In *Debussy et l'évolution de la musique au XXe siècle*, 33-45. Edited by Edith Weber. Paris: Editions du Centre National de la Recherche Scientifique, 1965.

- Apthorp, William Foster. *The Opera Past and Present: An Historical Sketch*. London: John Murray, 1901.
- Auric, Georges*. "Paris - The Survival of French Music." *Modern Music*, vol. 22, no. 3 (1945): 157-160. Reprint. New York: AMS Press, Inc., 1966.
- Auriol, Député de la Haute-Garonne, Henri. *Decentralization musicale*. Preface by Gabriel Fauré. Paris: Eugène Figuière et C^{ie} [1972].
- Austin, William W. *Music in the 20th Century from Debussy through Stavinsky*. New York: W.W. Norton, Inc., 1966.
- Averitt, Frances Lapp. "An Outsider's View, Inside the Paris Conservatoire." *Flute Talk*, vol. 7, no. 7 (March 1988): 11-13.
- Baines, Anthony. *Woodwind Instruments and Their History*. Revised edition. New York: W.W. Norton and Co., Inc., 1963.
- Barrère, George. "Flute and Piccolo." *The Flutist*, vol. 4 (June 1923): 1003.
- Barzun, Jacques. *Berlioz and the Romantic Century*. 1949. 2 vols. 3rd edition. New York and London: Columbia University Press, 1969.
- Bate, Philip. *The Flute: A Study of its History, Development and Construction*. London: Ernest Benn Limited, 1975.
- Bellasis, Edward. *Cherubini: Memorials Illustrative of his Life*. London: Burns and Oates, 1874.
- Bender, Gabriel, et al.. *Le Guide du concert et le guide musical, numéro spécial de l'Exposition 37*. Paris: n.p., [1937].
- Berbiguier, Benoit Tranquille. *Nouvelle méthode pour la flûte divisée en trois parties, dédiée à Mr Le Comte Charles de Saporta, Colonel de la Legion de l'Ain par T. Berbiguier*. Paris: Janet et Cotelle [1818].
- Berlioz, Hector. *Treatise on Instrumentation*. Enlarged and Revised by Richard Strauss. Translated by Theodore Front. New York: Edwin F. Kalmus, 1948.
- Bernard, R[obert]. *Les Tendances de la musique française moderne: Cours d'esthétique -- Huit conférences*

prononcées au Conservatoire international de musique de Paris et en Sorbonne. Paris: Durand, 1930.

- Bibliographie de l'Empire français ou Journal Général de l'imprimerie de la Librairie.* Paris: 1811-1812.
Reprint. Nendeln, Liechtenstein: Kraus Reprint, Ltd., 1967.
- Bibliographie musicale française, nos. 2-174.* Paris: n.p., 1875-1914.
- Blencoe, A.J. "Observations." *The Flutist*, vol. 6 (August 1925): 184.
- Bloom, Peter H.. "Observations on the Advantageous Use of the 'Eight-Key' Flute." *The Flutist's Quarterly*, vol. 11, no. 1 (Fall 1985): 18-27.
- Boehm, Theobald. *The Flute and Flute Playing in Acoustical, Technical and Artistic Aspects.* 1871. Translated by Dayton C. Miller. 1922. Introduced by Samuel Baron. Reprint. New York: Dover Publications, 1964.
- Bohnet, Andra Anne Cook. "The Transcription as a Supplement to Nineteenth-Century Flute Repertoire." Ph.D. Dissertation, Texas Tech University, 1985.
- Bonnet-Roy, Flavier. (Lafloret, Claude, pseud.). *La Vie au temps romantique (Salons, Théâtres et Concerts).* Paris: J. Peyronnet, 1929.
- "Boston Flute-Players' Club Concert." *The Flutist*, vol. 6 (May 1925): 112-113.
- Boulanger, Nadia. "Modern French Music." In *Lectures on Modern Music Delivered under the Auspices of the Rice Institute Lectureship in Music, January 27, 28 and 29, 1925.* The Rice Institute Pamphlet, vol. 8, no. 2 (April 1926), 113-152.
- Bouvery, André. *Les Musiciens célèbres du second empire jugés par leurs contemporains précédé des anecdotes, manies, habitudes et biographies de compositeurs anciens et modernes.* Paris: Challamel, 1911.
- Brenet, Michel. "La Musicologie." In *Rapport sur la musique française contemporaine*, edited by Paul-Marie Masson, 15-19. Rome: Armani and Stein, 1913.
- Brett, Adrian. "The French Style in America." *The Flute Worker*, vol. 2, no. 2 (December 1983): 1, 5.

- . "The French Style in England." *The Flute Worker*, vol. 2, no. 1 (May 1983): 1, 5, 7.
- . "Three-Hundred Years of The French Style." *The Flute Worker*, vol. 1, no. 2 (November 1982): 1-2, 4-5.
- Bricqueville, Eugène de. "La Facture instrumentale." In *Rapport sur la musique française contemporaine*, edited by Paul-Marie Masson, 151-156. Rome: Armani and Stein, 1913.
- Brody, Elaine. *Paris: The Musical Kaleidoscope 1870-1925*. New York: George Braziller, 1987.
- Brussel, Robert and Louis Vuillemin, contributors. "Louis Fleury is Gone." Translated by Madam Bacon. *The Flutist*, vol. 7 (June 1926): 156-158.
- Bundy, Geo. M. "The Flute of To-Day." *The Flutist*, vol. 9 (July 1928): 198-199.
- Calvocoressi, M[ichael] D. *Music and Ballet*. London: Faber and Faber [1934].
- Camus, [Pierre-Hippolyte]. *Méthode pour la nouvelle Flûte-Boehm, Dédiée à Mr Theobald Boehm de la Musique du Roi de Bavière et inventeur de cet instruments par Camus, Ire Flûte de Théâtre Royal Italien. Cet ouvrage comprend aussi l'usage de la Clef de Sol# Inventée par Mr Dorus*. Paris: J. Meissonnier, [1839].
- Carse, Adam. *The History of Orchestration*. New York: Dover Publications Inc., 1964.
- Catalogue Général de la librairie française. Continuation de l'ouvrage d'Otto Lorenz (période de 1840 à 1885: 11 volumes). Vols. 12-13, (1895-1890). Vols. 14-17 (1891-1899). Vols. 18-20, (1900-1905). Vols. 21-23, (1906-1909). Vols. 24-25, (1910-1912). Vols. 26-27 (1913-1915). Edited by D. Jordell. Paris: 1896-1920. Reprint. Nendeln, Liechtenstein: Kraus Reprint, Ltd., 1967-1970.*
- Catalogue Général de la librairie française. Continuation de l'ouvrage d'Otto Lorenz (période de 1840 à 1885: 11 volumes) et de D. Jordell (période de 1886 à 1918: 17 volumes). Vol. 28, (1916 à 1918). Vols. 29-30, (1919-1921). Edited by Henri Stein. Paris: Edouard Champion, 1924.*

- Catalogue Général de la librairie française. Continuation de l'ouvrage d'Otto Lorenz (période de 1840 à 1885: 11 volumes) et de D. Jordell (période de 1886 à 1918: 17 volumes). Vols. 31-34, (1922-1925). Edited by Henri Stein. Paris: Service Bibliographique Hachette, 1945..*
- Catalogue Général de la librairie française. Vol. 1-5, Pendant 25 ans (1840-1865). Vol. 6-8, depuis 1840. Vol. 9-11, (1876-1885). Edited by Otto Lorenz. Paris: 1867-1888. Reprint. Nendeln, Liechtenstein: Kraus Reprint, Ltd., 1966-1967.*
- Catalogue Général des livres imprimés de la Bibliothèque National, Auteurs. 250+ Volumes. Paris: Imprimerie Nationale, 1925-1981.*
- Catalogue Thématique of Berbiguier's Works. Single folio sheet. London: Monzani and Hill, n.d.*
- Charlton, David and John Trevitt. "Paris, VI." *The New Grove Dictionary of Music and Musicians*. 6th edition. Edited by Stanley Sadie. Vol. 14.*
- Charpentier, Gustave. *Lettres inédites à ses parents: La Vie quotédienne d'un élève du Conservatoire, 1879-1887*. Collected by Françoise Andrieux. Centre de Recherche, d'Étude et d'Édition de Correspondances du XIX^e siècle de Université Paris-Sorbonne (Paris IV). Paris: Presses Universitaires de France, 1984.*
- Chouquet, Gustave. *Rapport sur les instruments de musique et les éditions musicales. Exposition Universelle Internationale de 1878 à Paris, Group II - Class 13*. Paris: Imprimerie Nationale, 1880.*
- Coche, V[ictor]. *Examen critique de la flûte ordinaire comparée à la flûte de Boehm, présenté à MM. Les Membres de l'Institut (Académie Royale des Beaux-Arts, section de la musique)*. Paris: Chez l'Auteur, 1838.*
- . *Méthode pour servir à l'enseignement de la nouvelle flûte, Inventée par Gordon, modifiée par Boehm et perfectionnée par V. Cêche. Dédiée à Monsieur Cherubini, Directeur du Conservatoire de Musique, Membre de l'Institut, Officier de la Légion d'Honneur et Chevalier l'Ordre de St. Michel par V. Cêche, Professeur au Conservatoire de Musique, op. 15*. Paris: Schonenberger, [1839].*

Combarieu, Jules. *Des Origines au debut de XXe siècle.*
Vol. 8 of *Histoire de la musique.* Paris: Armand
Colin, 1950.

----- . "Études d'esthétique musicale." *La Revue musicale,*
vol. 2 (1902): 46-49, 82-86, 119-121, 177-184, 228-232,
268-270, 364-5, 428-430, 523-4. Reprint. Scarsdale,
NY: Annemarie Schnase, Publisher, 1965.

-----, ed. *Congrès International d'histoire de la musique;*
documents, mémoires et voeux. Paris: Fischbacher,
[1900].

Conservatoire imperial de musique et de déclamtaion.
Ministère d'État. *Distribution des prix pour le cours*
d'études de l'année 1853-1870, 1872-1873. 20 vols.
Published annually. Paris: Vinchon, Imprimeur du
Conservatoire imperial de musique et de déclamation,
1853-1870, 1872-1873.

Conservatoire nationale de musique et de déclamation, Paris.
Academie des Beaux-Arts de l'Institut national de
France. *Distribution Solonnelle des prix pour le cours*
d'études de l'année 1872-1873. 2 vols. Published
annually. Paris: Vinchon, Impimeur du Conservatoire
imperial de musique et de déclamation, [1872-1873].

----- . *Organisation du conservatoire de musique.* 1795.
Paris; Imprimerie de la Republique, an V.

----- . Ministère de l'Interieur. *Distribution Solonnelle*
des prix pour le cours d'études de l'année 1844-1845,
1847-1854. 10 vols. Published annually. Paris:
Vinchon, Imprimeur du Conservatoire imperial de musique
et de déclamation, [1844-1854].

----- . Ministère de l'Instruction publique et des Beaux-
Arts. *Distribution Solonnelle des prix pour le cours*
d'études de l'année 1897-1900. 4 vols. Published
annually. Paris: Vinchon, Imprimeur du Conservatoire
imperial de musique et de déclamation, [1897-1900].

----- . Ministère de l'Instruction publique, des Beaux-Arts
et des Cultes. *Distribution Solonnelle des prix pour*
le cours d'études de l'année 1893-1896. 4 vols.
Published annually. Paris: Vinchon, Imprimeur du
Conservatoire imperial de musique et de déclamation,
[1893-1896].

----- . Ministère de l'Instruction Publique, des Cultes et
des Beaux Arts. *Distribution Solonnelle des prix pour*

le cours d'études de l'année 1874-1892. 19 vols. Published annually. Paris: Vinchon, Imprimeur du Conservatoire imperial de musique et de déclamation, [1874-1892].

-----. Ministère de la Maison de l'Empereur et des Beaux-Arts. *Distribution Solonnelle des prix pour le cours d'études de l'année 1863-1869*. 7 vols. Published annually. Paris: Vinchon, Imprimeur du Conservatoire imperial de musique et de déclamation, [1863-1869].

-----. Ministère des Lettres, Sciences et Beaux-Arts. *Distribution Solonnelle des prix pour le cours d'études de l'année 1870-1871*. 2 vols. Published annually. Paris: Vinchon, Imprimeur du Conservatoire imperial de musique et de déclamation, [1870-1871].

Cooksey, Lynne MacMorran. *The Flute in the Solo and Chamber Music of Albert Roussel (1869-1937), A Lecture Recital, Together with Three Recitals of Selected Works by J.S. Bach, I. Dahl, G. Fauré, H. Genzmer, P. Hindemith, Jolivet, Schubert, and Others*. DMA Dissertation, North Texas State University, 1980.

Cooper, Martin. *French Music from the Death of Berlioz to the Death of Fauré*. London: Oxford University Press, 1951.

Copland, Aaron. "Gabriel Fauré, A Neglected Master." *The Musical Quarterly*, vol. 10, no. 3 (1924): 573-586.

Coppola, Piero. *Dix-Sept ans de musique à Paris 1922-1939*. Lausanne: F. Rougl et C^{1e}, 1944.

Cox, David. *Debussy Orchestral Music*. BBC Music Guides. London: British Broadcasting Corporation, 1974.

Crane, Frank. "When George Barrère Played the Flute." *The Flutist*, vol. 4 (October 1923): 1090-1091.

Dandelot, A. *La Société des Concerts du Conservatoire de 1828 à 1897: Les Grand concerts symphonique de Paris*. Paris: G. Havard Fils, editeurs, 1898.

-----. *Résumé d'histoire de la musique*. Paris: Ed. Salabert, 1915.

Daubresse, M. *Le Musicien dans la société moderne*. Paris: Le Monde Musical, Librairie Fischbacher, 1914.

- De Lorenzo, Leonardo. "Jean Louis Tulou." *The Flutist*, vol. 5 (January 1924): 4-6.
- Deldevez, Edouard-Marie-Ernest. *La Société des Concerts 1860 à 1885 (Conservatoire national de musique)*. Paris: Firmin-Didot, 1887.
- Devienne, François. *Nouvelle Méthode pour la flûte*. N.p.: Nadermann, 1795.
- . *Célèbre Méthode Complète de Flûte Systèmes Boehm et Ordinaire*. Revised and Augmented by Philippe Gaubert. Paris: Leduc [1909]
- Donington, Robert. *The Interpretation of Early Music*. London: Faber and Faber, 1989.
- Dorgeuille, Claude. *The French Flute School 1860-1950*. 1983. Translated and edited by Edward Blakeman. Revised discography by Christopher Steward. With Some recollections of Barrere, Fleury, Laurent, Moyses. London: Tony Bingham, 1986.
- Dorus, Louis. *Méthode complète de flûte*. Nouvelle édition augmentée...3 sonates, 2 flûtes par Tulou, 36 airs d'opéras par Berbiguier et suivie de tablatures pour la patte d'Ut par L. Dorus. Paris: Schonenberger [c. 1860-61].
- Drouët, Louis-François-Philippe. *Méthode pour la flûte ou Traité complet et raisonné pour apprendre à jouer de cet instrument (Ouvrage dédiée à S.M. le Roi de Prusse)*. Mayance et Anvers: B. Schott, n.d..
- Dubois, Théodore. L'Enseignement Musical. In *Encyclopédie de la Musique et Dictionnaire du Conservatoire*, edited by Albert Lavignac and Lionel de la Laurencie. Part 2- Technique, Esthétique, Pédagogie. Vol. 6 - Pédagogie, Écoles, Concerts, Théâtres. Paris: Librairie Delagrave, 1931.
- Dukas, Paul Abraham. *Chroniques musicales sur deux siècles 1892-1932*. Reprint. Collection "Musique." Edited by Claude Glayman. N.p.: Éditions Stock, 1980.
- Dumesnil, René. *La Musique contemporaines en France*. 2 vols. Paris: Armand Colin, 1930.
- . *La Musique en France entre les deux guerres 1919-1939*. III Collection "Bilans." Edited by Gérard Bauer. Geneva: Editions du Milieu du Monde, 1946.

- . *Le Monde des musiciens*. Paris: G. Cres, 1924.
- Dunwell, Wilfrid. *Music and the European Mind*. London: Herbert Jenkins, 1962.
- Eagle, David. "Flutomania: The Flute in London 1800-1850." *The Flutist's Quarterly*, vol. 14, no. 2 (Spring 1989), 34-37.
- Elwart, A[ntoine Aimable Elie]. *Histoire de la Société des concerts du Conservatoire imperial de musique avec dessins, musique, plans, portraits, notices biographiques, etc..* Paris: Castel, 1860.
- . *Histoire des Concerts populaires de musique classique*. Paris: Librairie Castel, 1864.
- État Sommaire des pièces et documents concernant le théâtre et la musique conservés aux Archives nationales à Paris, vol. 1. N.p.: Bibliographe Moderne, 1899.
- Etienne, David Eugene. "A Comparison and Application of Selected Teaching Methods for the Flute by Henri Altès, Paul Taffanel, Philippe Gaubert, Marcel Moyse, and Trevor Wye." DMA Dissertation, Louisiana State University and Agricultural and Mechanical College, 1988.
- Ewen, David, ed. *European Composers Today: A Biographical and Critical Guide*. New York: H.W. Wilson, 1954.
- . *Great Composers, 1300-1900: A Biographical and Critical Guide*. New York: The H.W. Wilson Company, 1966.
- Fairbanks, Ann. "Friedrich Kuhlau: A Bicentennial Tribute." *The Flutist's Quarterly*, vol. 12, no. 2 (Spring 1987): 17-20.
- Fairley, Andrew. *Flutes, Flautists and Makers (Active or born before 1900)*. London: Pan Educational Music, 1982.
- Fétis, François Joseph. *Curiosités historiques de la musique, complément nécessaire de la musique mise à la portée de tout le monde*. Paris: Janet et Colette, 1830.

- Fischer, Kurt von. "Debussy and the Climate of Art Nouveau--Some Remarks on Debussy's Aesthetics." *Miscellanea Musicologica*, vol. 13 (1984): 49-56.
- Fischer, Penelope Ann Peterson. "Philippe Gaubert (1879-1941): His Life and Contributions as Flutist, Editor, Teacher, Conductor and Composer." DMA Dissertation, University of Maryland, 1982.
- Fleury, Louis. "Chamber Music for Wind Instruments." Parts 1, 2. *The Chesterian*, new series 36 (January 1924): 111-116; new series 37 (February 1924): 144-148.
- . "De la situation économique des musiciens d'orchestre en France." In *Haydn-Zentenarfeier, III. Kongress der Internationalen Musikgesellschaft, Wien, 25. bis 29. Mai 1909*. Vienna: Artaria, 1909; Leipzig: Breitkopf and Härtel, 1909.
- . "Music for Two Flutes without Bass." Translated by Wyatt Edgell. *Music and Letters*, vol. 6, no. 2 (April 1925): 110-118.
- . "Paris Letter." *The Flutist*, vol. 5: 234-235; vol. 6: 235.
- . "Souvenirs d'un flûtiste." Eight Parts, Carrying various subtitles. *Le Monde Musical*, vol. 35 (1924-25): 309-311, 329-331, 403-406; vol. 36: 10-12, 44-46, 89-91, 139-140, 218-220.
- . "The Flute and Its Powers of Expression." Translated by A. H. F. S.. *The Flutist*, vol. 4 (July 1924): 1013-1023. (First Published in *Music and Letters*, London, England, n.d.)
- . "The Flute in Paris." Translated by Arthur Brooke. *The Flutist*, vol. 5 (August 1924): 183; vol. 6: 38-39, 176-177.
- . *Oeuvres Originales des XVIIe et XVIIIe siècles pour la flute*. Paris: Leduc, 1928.
- Forsyth, Cecil. *Orchestration*. 1914. 2nd edition. New York: Macmillan Co. , 1942.
- Gabillard, Paul. *La Musique en France au XIXe siècle*. Tours: Alfred Mann et Fils, éditeurs, 1900.
- Galway, James. *Flute*. Yehudi Menuhin Music Guides. New York: Schirmer Books, 1982.

- Gervais, Françoise. "La Notion d'arabesque chez Debussy." *La Revue musicale*, no. 241 (1958): 3-22.
- Griffiths, Paul. *A Concise History of Avant-garde Music from Debussy to Boulez*. New York and Toronto: University of Oxford Press, 1978.
- Gut, Serge and Danièle Pistone. *La Musique de chambre en France de 1870 à 1918*. Paris: Honoré Champion, 1978.
- Hamilton, Amy Sue. "The Relationship of Flute Construction to the Symphonic Role of the Flute and Orchestral Performance Practice in the Nineteenth Century." D.M.A. Dissertation, Northwestern University, 1984.
- Handbuch der musikalischen Literatur ... oder allgemeines systematisch geordnetes Verzeichniss gedruckter Musikalien, auch musikalischer Schriftung und Abbildungen mit Anzeige der Verleger und Preise*. Edited by Carl Friederich Whistling, 1828. Leipzig: C.F. Whistling, 1828; Hildesheim and New York: Georg Olms Verlag, 1975.
- Handbuch der musikalischen Literatur ... oder allgemeines systematisch geordnetes Verzeichniss gedruckter Musikalien, auch musikalischer Schriftung und Abbildungen mit Anzeige der Verleger und Preise*. Edited by Adolph Hofmeister, 1829-1838. Leipzig: Fr. Hofmeister, 1834 and 1839.
- Handbuch der musikalischen Literatur ... oder allgemeines systematisch geordnetes Verzeichniss gedruckter Musikalien, auch musikalischer Schriftung und Abbildungen mit Anzeige der Verleger und Preise*. Hildesheim and New York: Georg Olms Verlag, 1975.
- Handbuch der musikalischen Literatur ... oder allgemeines systematisch geordnetes Verzeichniss gedruckter Musikalien, auch musikalischer Schriftung und Abbildungen mit Anzeige der Verleger und Preise*. Under the title *Hofmeisters Jahresverzeichnis* vols. 1-6, 1852-1857. Leipzig: Friedrich Hofmeister, n.d.; New York: Johnson Reprint Corporation, 1968.
- Handbuch der musikalischen Literatur ... oder allgemeines systematisch geordnetes Verzeichniss gedruckter Musikalien, auch musikalischer Schriftung und Abbildungen mit Anzeige der Verleger und Preise*. Various editors 1818-1827, 1839-1851, 1858-1900 (text-fiche).

- Hefner, Donald L. "The Tradition of the Paris Conservatory School of Oboe Playing with Special Attention to the Influence of Marcel Tabuteau." Ph.D. Dissertation, The Catholic University of America, 1984.
- Hervey, Arthur. *Masters of French Music*. 1894. Reprint. Plainview, NY: Books for Libraries Press, 1975.
- Hill, Edward Burlingame. *Modern French Music*. Boston and New York: Houghton Mifflin Co., 1924.
- Hindley, Geoffrey, ed. *Larousse Encyclopedia of Music*. Based on *La Musique: les hommes; les instruments; les oeuvres*, edited by Norbert Dufourq (Paris: Librairie Larousse, 1965). London: The Hamlyn Publishing Group Ltd., 1971.
- Hopkins, Anthony. *Sounds of Music: A Study of Orchestral Texture*. London: J.M. Dent and Sons, 1982.
- Hopkins, G.W. "Orchestration," part 4 - Nineteenth Century, part 5 - Improvements and Later Developments. In *The New Grove Dictionary of Music and Musicians*, 6th edition, edited by Stanley Sadie, vol. 13, 696-700. London: Macmillan Publishers, Ltd., 1980.
- Hopkinson, Cecil. *A Dictionary of Parisian Music Publishers 1700-1950*. Reprint. New York: Da Capo Press, 1979
- Hotteterre, Jaques, dit le Romain. *Principes de la flûte traversiere, ou flûte d'Allemagne; de la flûte à bec, ou flûte douce; et du haut-bois, divisez par traitez*. Amsterdam: Estienne Roger [1707].
- Houtchens, Alan. "Romantic Composers Respond to Challenge and Demand." In *The Orchestra: Origins and Transformations*, edited by Joan Peyser, 169-190. New York: Charles Scribner's Sons, 1986.
- Hugot, A. and J.G. Wunderlich. *Méthode de flûte du Conservatoire (Adoptée pour servir à l'étude dans cet Etablissement*. Edited by David Jenkins. Reprint. Buren: Frits Knuf, 1975. Originally Méthode de Flute (Paris: LeRoy, 1804).
- Jacob, Gordon. *The Elements of Orchestration*. London: Herbert Jenkins, 1962.

- Jean-Aubry, Georges. *French Music To-day*. 1919. Preface by Gabriel Fauré. Translated by Edwin Evans. Reprint. Plainview, NY: Books for Libraries Press, 1976.
- Jorgensen, Estelle Ruth. *A Critical Analysis of Selected Aspects of Music Education*. Calgary, Alberta: The University of Calgary Department of Educational Administration, 1977.
- Kabalevsky, Dmitri Borisovich. *Music and Education: A Composer Writes About Music Education*. Educational Sciences. Published under the International Bureau of Education. London: Jessica Kingsley Publishers of UNESCO, 1988.
- Kapfer, Miriam. "Behavioral Objectives in Music Education." In *Resources for Planning Instruction and Evaluating Achievement*, compiled by J. David Boyle for The National Commission on Instruction, 18-26. Vienna, VA: Music Educators National Conference, 1974.
- . "The Evolution of Musical Objectives." In *Resources for Planning Instruction and Evaluating Achievement*, compiled by J. David Boyle for The National Commission on Instruction, 12-17. Vienna, VA: Music Educators National Conference, 1974.
- Klump, Rolland S. "The Use of Modern French Music to the Student." *The Flutist*, vol. 5 (January 1924): 892-893.
- Koechlin, Charles-Louis-Eugène. *Les Instruments à vent*. Paris: Presses Universitaires de France, 1948.
- . "La Pédagogie musicale." In *Rapport sur la musique française contemporaine*, edited by Paul-Marie Masson, 139-149. Rome: Armani and Stein, 1913.
- Kohut, Daniel L.. *Musical Performance: Learning Theory and Pedagogy*. Englewood Cliffs, NJ: Prentice-Hall, 1985.
- Kolneder, Walter. "Die Entstehung des Pariser Conservatoriums." *Musikerziehung*, vol. 20, no. 5 (May 1967): 195-202.
- Krell, John. *Kincaidiana: A Flute Player's Notebook*. Malibu, CA: Trio Associates, 1973.
- Labuta, Joseph A.. "Curriculum Development for Music Education." In *Symposium in Music Education: A Festschrift for Charles Leonhard*. A Symposium

dedicated to Duane Adams Branigan, Director, School of Music, University of Illinois, 1950-1971, edited by Richard Cowell, 111-131. Urbana-Champaign, IL: University of Illinois, 1982.

Landormy, Paul. "La Musique de Chambre en France de 1850 à 1871." *La Revue musicale*, vol. 7/8 (1911): 37-50. Reprint. 1968.

----- . *La Musique française de la Marseillaise à la mort de Berlioz*. 3 vols. 8th edition. N.P.: Gallimard, 1944.

Langer, Susanne K. *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite and Art*. 3rd edition. Cambridge, MA: Harvard University Press, 1979.

Lassabathie, [Théodore]. *Histoire du Conservatoire imperial de musique et de déclamation suivie de documents recueillis et mis en ordre*. Paris: Michel Lévy frères, 1860.

Lattimore, Lee Ian. "Les Morceaux de Concours de Flûte du Conservatoire de Paris: A Structural Comparison of Selected Works of Jean-Louis Tulou and Joseph-Henri Altès: A Lecture Recital, Together With Three Recitals of Selected Works of Mozart, Halffter, Gaubert, and Others." DMA Dissertation, North Texas State University, 1987.

----- . "Metamorphosis of the Morceaux de Concours for Flute if the Paris Conservatory, 1829-1900." *The Flutist's Quarterly*, vol. 14, no. 2 (Spring 1989): 41-48.

Lavignac, Albert. *Musical Education*. Translated by Esther Singleton. Appleton's Musical Series. New York: D. Appleton and Co., 1903.

----- . *Les Galetés du Conservatoire*. Paris: Librairie Ch[arles] Delegrave [1899].

Lavoix, H. *Histoire de l'instrumentation depuis le seizième siècle jusqu'à nos jours*. Paris: Firmin-Didot, 1878.

Lawrence, Eleanor. "Interview with Marcel Moyse." *The National Flute Association, Inc. Newsletter*, vol. 4, no. 2 (February 1979): 3, 6, 8-10.

Lawrence, Ian. *Composers and the Nature of Music Education*. London: Scolar Press, 1978.

- Le Roy, René with Claude Dorgueille. *Traité de la flute. Historique, technique et pédagogique.* Paris: Éditions Musicales Transatlantiques, 1966.
- Lesure, François and Roger Nichols. *Debussy Letters.* Translated by Roger Nichols. London and Boston: Faber and Faber, 1987.
- Lesure, François. *Debussy on Music: The Critical Writings of the Great Composer.* Translated and edited by Richard Langham Smith. Ithaca, NY: Cornell University Press, 1971.
- Levine, Susan E. *An Annotated Bibliography of Literature on the Flute, 1936-1972.* City University of New York. Authorized Photocopy.
- Libby, Denis. "Opera, III," *The New Grove Dictionary of Music and Musicians.* 6th edition. Edited by Stanley Sadie.
- Lichtenstein, Alfred. "The Flute Round the World." Translated from the German by Frank A. Waugh. *The Flutist*, vol. 8 (January 1927): 21-22.
- Lockspeiser, Edward. "The Berlioz-Strauss Treatise on Instrumentation." *Music and Letters*, vol. 50 (January 1969): 37-44.
- . *Debussy: His Life and Mind.* 2 vols. London: Cassell and Co., Ltd., 1962.
- Lucas, E[usèbe]. V. *A Wanderer in Paris.* 1909. 10th edition. London: Methuen and Company, ltd., 1913.
- . *Les Concerts Classiques en France.* Paris: Sandoz and Fischbacher, 1876.
- Macdonald, Hugh. "Berlioz's Orchestration: Human or Divine?" *The Musical Times*, vol. 10 (March 1969): 255-8.
- Maclean, Charles. "On Some Causes of the Changes of Tone Colour Proceeding in the Most Modern Orchestra." *Proceedings of the Musical Association*, vol. 21 (1894-5): 77-102. Reprint. Vaduz: Kraus Reprint, 1966.
- Mari, Pierrette. "La Musique de Chambre." *La Revue musicale*, nos. 316-7 (1978): 145-150.

- Marmontel, A.. *Conseils d'un Professeur sur l'enseignement technique et esthétique du piano. Catalogue gradué et raisonné des meilleures méthodes, études et oeuvres choisies des maitres anciens et contemporains, du degré le plus élémentaire à la difficulté transcendente. Art classique et moderne du Piano. Solfèges et Méthodes du Conservatoire.* Henri Heugel, ed. Paris: Au Ménestrel, [1890].
- Marnold, Jean. "Le Conservatoire et la Schola." *Mercure de France*, vol. 43, série moderne (July 1902): 105-115.
- Massenet, Jules-Emile-Frederic. *My Recollections.* 1919. Translated by H. Villars Barnett. Reprint. Freeport, NY: Books for Libraries Press, 1970.
- Mather, Betty Bang and David Lasocki. *The Art of Preluding 1700-1830 for Flutists, Oboists, Clarinetists and Other Performers.* New York: McGinnis and Marx Music Publishers, 1984.
- Mather, Roger. "The Flute Sound of Georges Laurent." Parts 1, 2. *Woodwind World, Brass and Percussion*, vol. 15 (1976): 12-14, 30-31, 47.
- Medicus, Emil, ed.. *The Flutist: A Monthly Magazine Devoted to the Interests of the Flute and Flute Players.* Ashville, NC: Emil Medicus, 1920-1928.
- Mersenne, Marin. *Harmonie universelle contentant la theorie et la pratique de la musique*, book 3. Paris: n.p., 1636; Reprint, Paris: Éditions de Centre National de la recherche scientifique, 1986.
- Michel, François, et al., eds. *Encyclopédie de la musique*, vol. 1. Paris: Fasquelle, 1958.
- Miller, Dayton C. "Flutes of Glass." *The Flutist*, vol. 6 (July 1925): 151-155.
- Moskovitz, Harry. "René Le Roy." *Woodwind World, Brass and Percussion*, vol. 14, no. 1 (January 1975): 14-15.
- Moyse, Marcel. "The Unsolvable Problem: Considerations on Vibrato." Part 2. Translated from the French by Clara Freeman. *Woodwind Magazine*, vol. 2, no. 8 (1950): 5.
- . *Cent études faciles et progressives d'après Cramer adaptées à la flûte.* Paris: Leduc, 1932.

- . *Comment j'ai pu maintentir ma forme*. Translation by Paul M. Douglas (privately published folio). West Brattleboro, VT: Marcel Moyse, 1974.
- . *De la sonorité: Art et technique*. Enseignement complète de la flûte. Paris: Leduc, 1934.
- . *Dix études d'après Wieniawsky adaptés à la flûte*. Paris: Leduc, 1935.
- . *École l'articulation*. Enseignement complète de la flûte. Paris: Leduc, 1928.
- . *Enseignement complète de la flûte*. 6 folio vols. Paris: Leduc, 1927-1932.
- . *Exercices journaliers*. Enseignement complète de la flûte. Paris: Leduc, 1923.
- . *Gammes et arpèges, 480 exercices*. Enseignement complète de la flûte. Paris: Leduc, n.d..
- . *La Débutant flûtiste*. Enseignement complète de la flûte. Paris: Leduc, 1935.
- . *La Grande vitesse*. San Antonio, TX: Southern Music Co., 1953.
- . *Tone Development Through Interpretation*. New York: McGinnis and Marx, 1962.
- . *Vingt études d'après Kreutzer adaptées à la flûte*. *Études et exercices pour la flûte*. Paris: Leduc, c. 1929.
- . *Vingt-Cinq études melodique avec variations (moyenne force)*. Paris: Leduc, 1932.
- . *Vingt-Quatre petites études melodiques avec variations*. Paris: Leduc, 1932.
- Myers, Rollo. *Modern French Music: Its Evolution and Cultural Background from 1900 to the Present Day*. Oxford: Basil Blackwell, 1971.
- Nectoux, Jean-Michel. "Les Orchestration de Gabriel Fauré: Légende et vérité." *Schweizerische Musikzeitung*, vol. 115 (1975): 243-9.

- , ed. *Gabriel Fauré: His Life Through His Letters*.
Translated by J.A. Underwood. London: Marion Boyars,
1984.
- Newlin, Dika. *Bruckner, Mahler, Schoenberg*. 1947. Revised
edition. New York: W.W. Norton and Co., 1978.
- North, Chas. K. "Inspiration from Two Masters." *The
Flutist*, vol. 9 (March 1928): 73-74.
- O'Loughlin, Niall. "18th- and 19th-Century Flute." *The
Musical Times*, vol. 125 (July 1984): 397.
- , "Classical and Romantic Flute." *The Musical Times*,
vol. 126 (August 1985): 471.
- Orenstein, Arbie. *Ravel: Man and Musician*. New York and
London: Columbia University Press, 1975.
- Pazdirek, Franz. *Universal-Handbuch der Musikliteratur*.
Vienna: N.p., 1904-1910. Reprint; Hilversum: Frits
Knuf, 1967.
- Phelps, Roger P. *A Guide to Research in Music Education*.
2nd edition. Metuchen, NJ: The Scarecrow Press, 1980.
- Philipp, Isidor. "The French National Conservatory of
Music." Translated by Frederick H. Martens. *The
Musical Quarterly*, vol. 6 (1920): 214-226.
- Pierre, Constant and Victor Désiré. *Les factures
d'instruments de musique les luthiers et la facture
instrumentale précis historique*. Paris: Ed. Sagot,
1893.
- Pierre, Constant. *La Facture instrumentale à l'exposition
Universelle de 1889; Notes d'un musicien sur les
instruments à nouveaux et perfectionnés*. Paris:
Librairie de l'Art Indépendant, 1890.
- , *Histoire du Concert spirituel, 1725-1790*. Paris:
Heugel for the Société Française de Musicologie, 1975.
- , *Le Conservatoire nationale de musique et de
déclamation. Documents historiques et administratifs
recueillis ou reconstitués*. Paris: Imprimerie
Nationale, 1900.
- Pierreuse, Bernard. *Flûte Litterature: catalogue des
oeuvres éditées et inédites Général*. [Paris]: Société

des Éditions Jobert, Éditions Musicales
Transatlantiques, 1982.

Pistone, Danièle. *La Musique en France de la Revolution à
1900*. Paris: Honoré Champion, 1979.

----- . *La Symphonie dans l'Europe du XIXe siècle (histoire
et langage)*. Paris: Honoré Champion, 1977.

Pontécoulant, (Adolphe le Donlcet) Marquis de. *La Musique à
l'exposition Universelle de 1867*. Paris: Bureau du
Journal l'Art Musical, 1868.

Prout, Ebenezer. *Instrumentation*. 1877. Reprint. New
York: Haskell Horss, 1969.

Quantz, Johann Joachim. *On Playing the Flute*. Translated
and introduced by Edward R. Reilly. New York:
Schirmer, 1966. From *Versuch einer Unweisung die
flötetraversiere zu spielen mit verschiedenen, zur
Beförderung des guten Geschmacks in der praktischen
Musik*. Berlin: Johann Friedrich Voss, 1752.

Rapport, Nat. "An Enjoyable Event." *The Flutist*, vol. 5
(April 1924): 82.

Rauscher, Donald J. *Orchestration: Scores and Scoring*.
London: The Free Press of Glencoe, 1963.

Rimsky-Korsakov, Nicholai. *Principles of Orchestration,
with Musical Examples Drawn from His Own Works*. Edited
by Maximilian Steinberg. Translated by Edward Agate.
New York: Dover Publications, Inc., 1964.

Robert, Gustave. *La Musique à Paris 1894-1900*. 5 vols.
Published annually. Paris: Librairie Fischbacher,
1895-1901.

Rockstro, Richard Shepherd. *A Treatise on the Construction,
the History and the Practice of the Flute: Including a
Sketch of the Elements of Acoustics and Critical
Notices of 60 Celebrated Flute Players*. 1889. 3rd
Edition. London: Musica Rara, 1967.

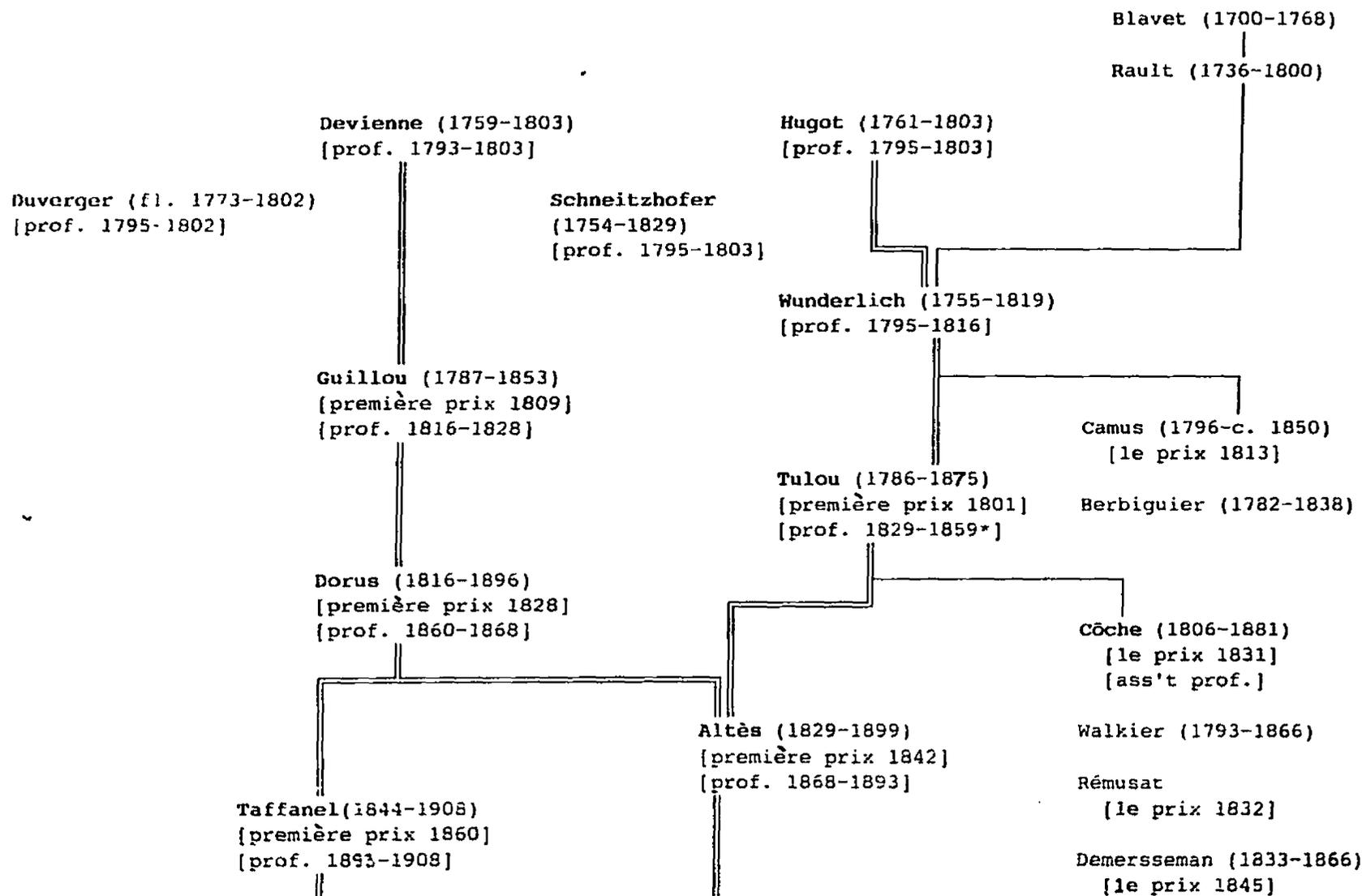
Saint-Saëns, Camille and Gabriel Fauré. *Correspondance
soixante ans d'amitié*. Edited by Jean-Michel Nectoux.
Paris: Société française de musicologie, Heugel and
C^{ie}, 1973.

- Samazeuilh, Gustave Marie Victor Fernand. *Musiciens de mon temps: Chroniques et Souvenirs*. Paris: Marcel Daubin, [1947].
- Schmid, Willy. *Concerts: Notes sur la musique et sur quelques musiciens*. Neuchatel and Paris: Delachaux et Niestlé S.A., 1941.
- Seyfrit, Michael. *Musical Instruments in the Dayton C. Miller Collection at the Library of Congress: A Catalogue*. Washington, D.C.: Library of Congress, 1982.
- Siccama, Abel. *Theory of the New Patent Diatonic Flute*. London: Cramer, Beale and Co., 1847.
- Vincent Joseph Van Steerkiste (Louis Dorus, pseud.). *L'Etude de la nouvelle flûte. Méthode progressive arrangée d'après Devienne*. Paris: Schonenberger, 1845.
- Suckling, Norman. "'La Clarté française' in Orchestration." *Music and Letters*, vol. 27 (July 1946): 141-6.
- Swilley, Wanda Sue. "A Comprehensive Project in Flute Literature With an Essay on Flute Embouchure Pedagogy in the United States from ca. 1925-77 as Described in Selected Writings." DMA Dissertation, University of Iowa, 1978.
- Taffanel, Paul and Louis Fleury. "La Flute." In *Encyclopédie de la Musique et Dictionnaire du Conservatoire*, edited by Albert Lavignac and Lionel de la Laurencie. Part 2 - Technique, Esthétique, Pédagogie. Vol. 3 - Technique instrumentale: Instruments à vent, Instruments à percussion, Instruments à cordes, Instruments automatiques. Paris: Librairie Delagrave, 1927.
- Taffanel, Paul and Philippe Gaubert. *Méthode Complète de Flute: Nouvelle Édition en huit parts*. 1923. Paris: Leduc, 1958.
- Thomson, Virgil. "A Noble and Lovely Evening - March 5, 1942." In *The Musical Scene*. New York: Greenwood Press, Publishers, 1968.
- Tiersot, Julien. *Un Demi-siècle de musique française entre le deux guerres, 1870-1917*. Les Maîtres de la musique. Paris: Alcan, 1918.

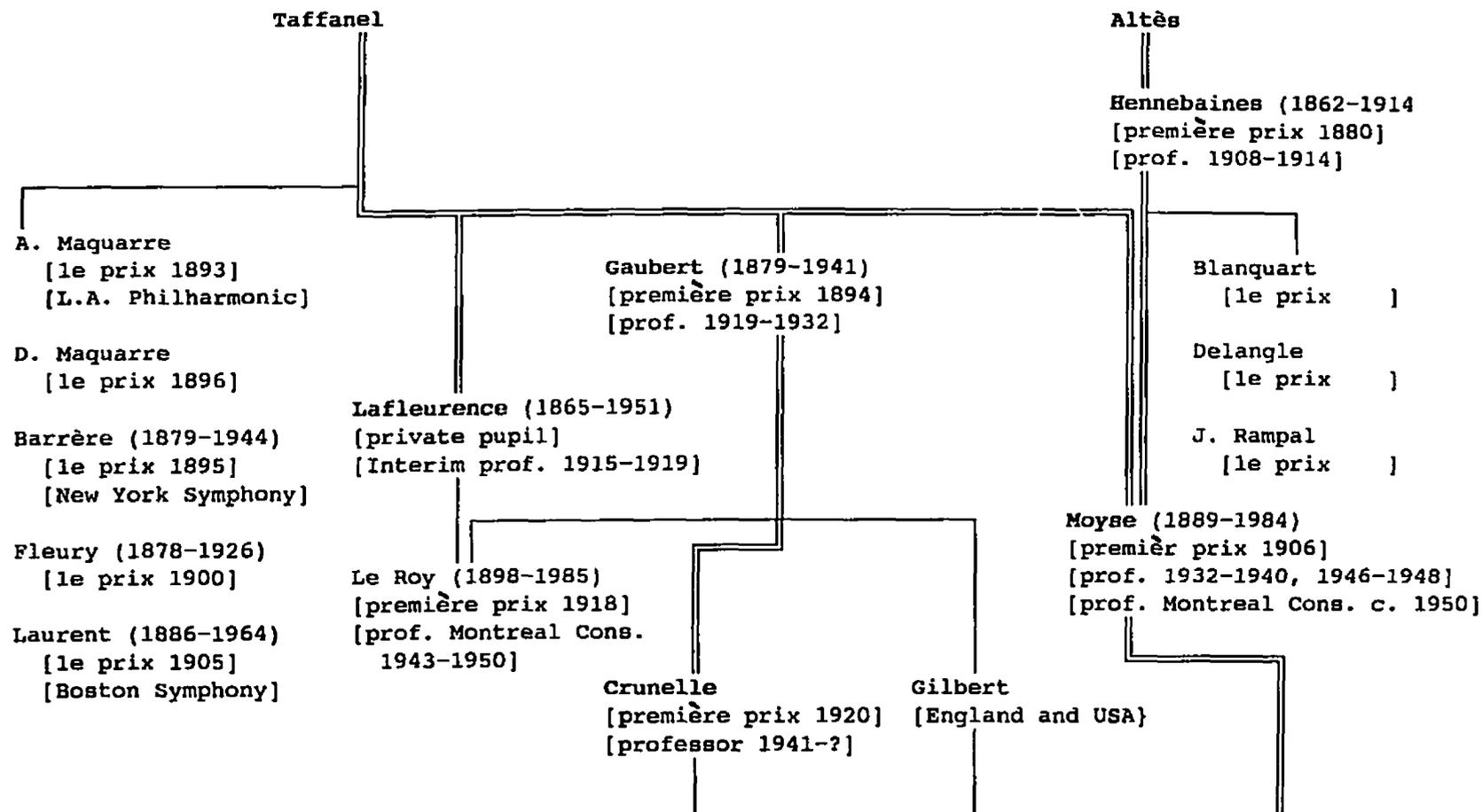
- Todd, R. Larry. "Orchestral Texture and the Art of Orchestration." In *The Orchestra: Origins and Transformations*, edited by Joan Peyser, 191-226. New York: Charles Scribner's Sons, 1986.
- Toff, Nancy. *The Development of the Modern Flute*. 1979. Re-edition. Urbana and Chicago, IL: University of Illinois Press, 1985.
- Tulou, Jean Louis. *Méthode de flûte*, op. 100. Paris: Chabal, 1835.
- . *Petite méthode élémentaire pour la Flûte*, op. 108. Paris: Lemoine, c. 1840.
- Vallas, Léon. *Claude Debussy: His Life and Works*. Translated by Maire O'Brien and Grace O'Brien. London: Oxford University Press, 1933.
- Vance, Stuart-Morgan. "Carte's Flute Patents of the Mid-Nineteenth Century and Related Systems." *Journal of the American Musical Instrument Society*, vol. 13 (1987): 89-106.
- Vanhulst, Henri. "La Musique du passe et la creation du Conservatoire de Paris: sa presance dans les premières Methods." *Revue Belge de Musicologie*, vol. 24-7 (1972-3): 50-58.
- Verroust, Denis. "Forgotten Flute Music of the Nineteenth Century: A Preview of a Lecture to be Delivered at the NFA New York Convention." *The Flutist's Quarterly*, vol. 11, no. 4 (Summer 1986): 37.
- Vester, Frans. *Flute Repertoire Catalogue, 10,000 Titles*. Lnodon: Musica Rara, 1967.
- Vuillermoz, Emile. "La Schola et le Conservatoire." *Mercure de France*, vol. 81, serié moderne (October 1909): 234-243.
- Wagner, Joseph. *Orchestration: A Practical Handbook*. New York: McGraw-Hill Book Co., Inc., 1959.
- Weckerlin, Jean-Baptiste-Théodore. *Bibliothèque du Conservatoire nationale de musique et de déclamation. Catalogue bibliographique, orné en huit gravures avec notices et reproductions musicales des principaux ouvrages de la Réserve*. Paris: Firmin-Didot, 1885.

- , *Musiciana: Extraits d'ouvrages rare ou bizarres*.
Paris: Garnier Frères, 1877.
- Welch, Christ[ophe]r. *History of the Boehm Flute*. 3rd
edition. N.p. [1896].
- Wenk, Arthur B. *Claude Debussy and Twentieth-Century Music*.
Twayne's Music Series. Boston, MA: Twayne Publishers,
1983.
- Widor, Charles-Marie. *The Technique of the Modern
Orchestra: A Manual of Practical Instrumentation*.
Translated by Edward Suddard. Revised edition.
London: Joseph Williams, 1946.
- Woldu, Gail Hilson. "Gabriel Fauré, directeur du
Conservatoire, les réforme de 1905." *Revue de
Musicologie*, vol. 70, no. 2 (1984): 199-228.

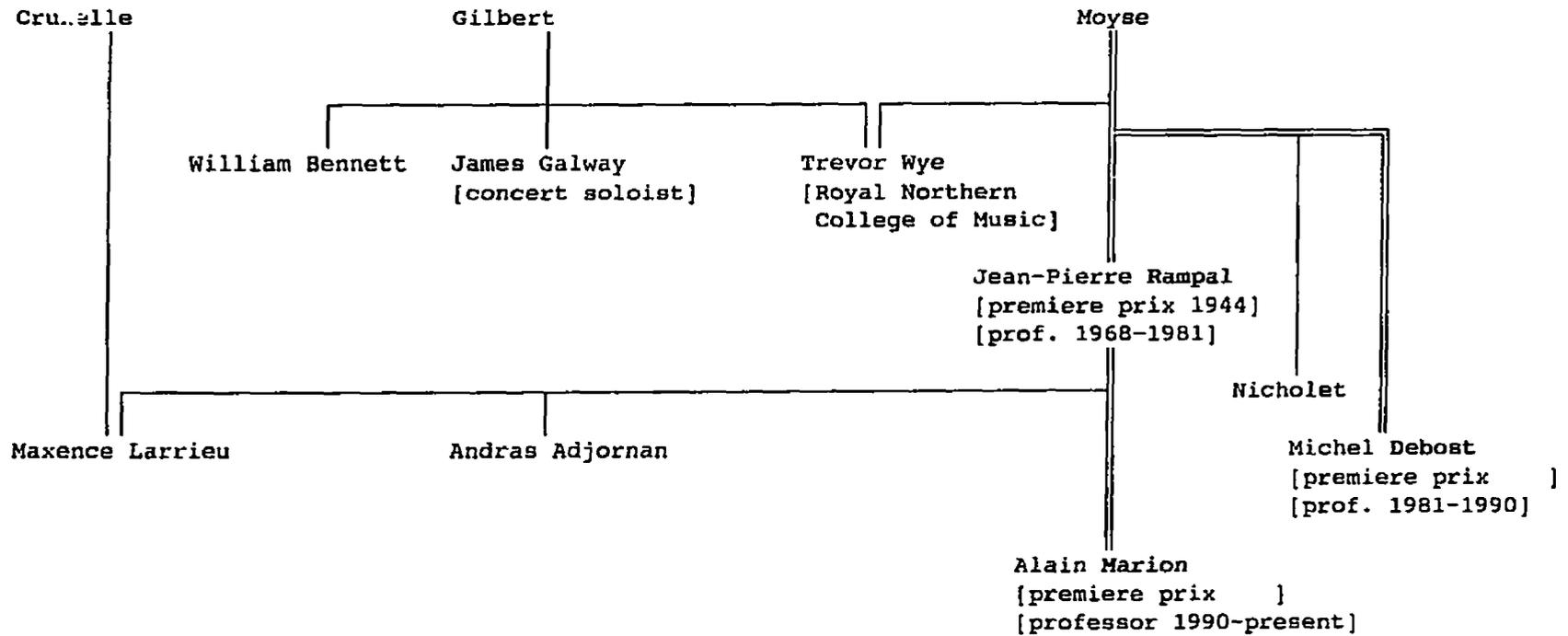
TEACHERS AT THE PARIS CONSERVATOIRE



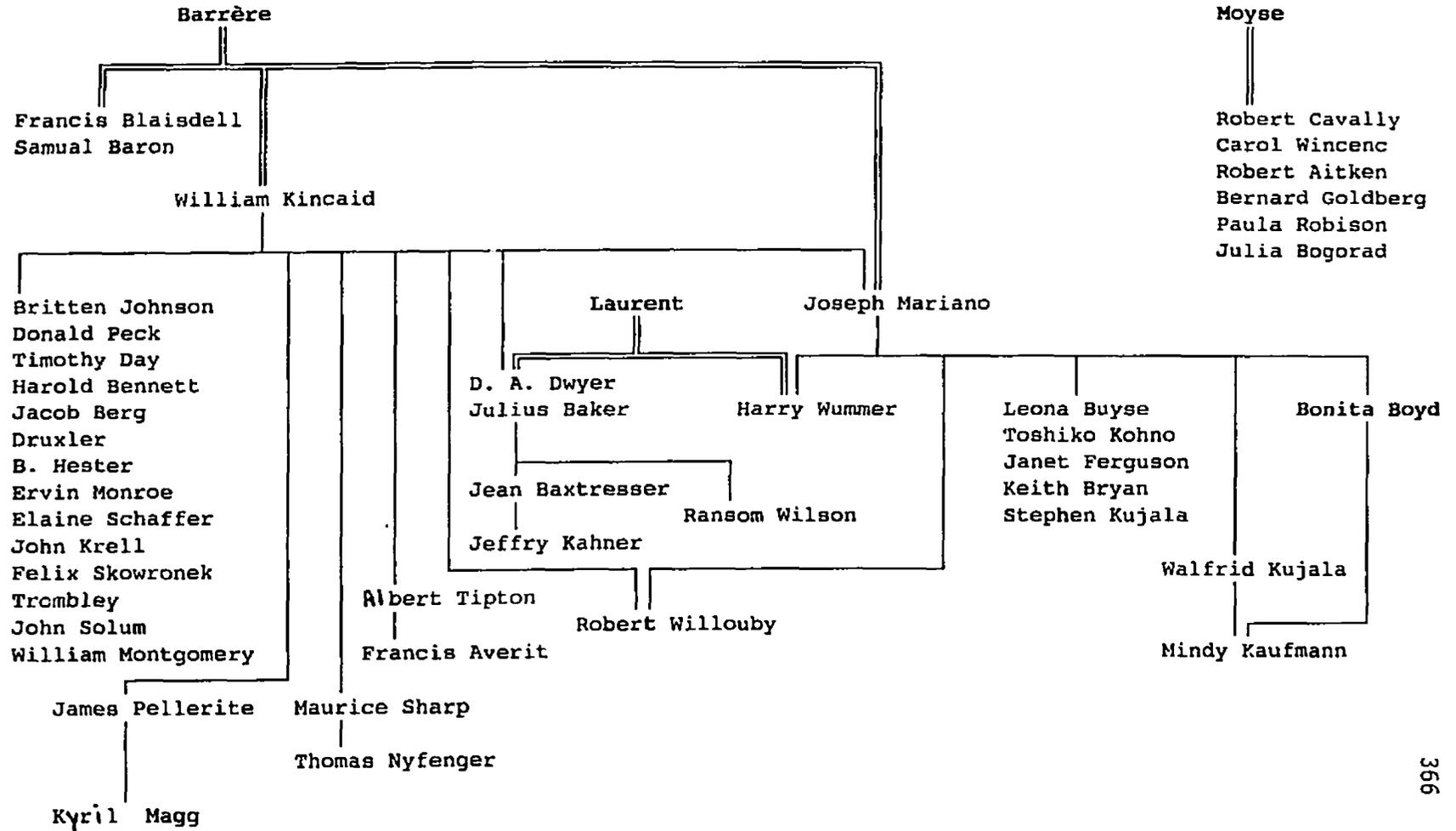
TEACHERS AT THE PARIS CONSERVATOIRE



TEACHERS AT THE PARIS CONSERVATOIRE



THE FRENCH INFLUENCE IN NORTH AMERICA



Appendix II
CONCOURS WINNERS FOR FLUTE*

Paris Conservatoire
 1797 to 1900

<u>Year</u>	<u>First Prize</u>	<u>Second Prize</u>	<u>First Accessit</u>	<u>Second Accessit</u>
an VI	Jean Moudru	Antoine Grandjean	-----	-----
an VII	Antoine Grandjean	Alexandre Moudru Joseph Gillou Jean-Baptiste Lépine	-----	-----
an VIII	Jean-Baptiste Lépine	Joseph Guillou Jean Louis Tulou	-----	-----
an XI	Alexandre Moudru	Jean-Louis Tulou	Jean-Baptiste Leblond	-----
an X	Jean-Louis Tulou	Joseph Cardon	Jean-Louis Rocart	-----
an XI	Louis-Valentine Rochier	-----	A. J. Bizetsky	-----
an XII	Joseph Gillou	-----	A. J. Bizetsky	J. L. Rochart
an XIII	-----	-----	-----	encouragement to Jean Clayton
an XIV	A. J. Bizetsky	-----	Julien Dubois	B. T. [Berbiguier]
1807	Julien Dubois	-----	P. F. Advier	-----
1808	-----	-----	P. F. Advier	-----
1809	P. F. Advier	-----	P. H. Camus	-----
1810	-----	-----	-----	-----
1811	-----	Emann Manuel Pierre-Louis Nermel Paul Hypolyte Camus	-----	-----
1812	Emann Manuel	-----	-----	1) P. H. Camus 2) P.L. Nermel
1813	Paul Hipolyte Camus	-----	-----	-----
1814	-----	Desiré Couronneau	Antoine-Anne Roger	-----
1820	Durocher	Leplanquais	L. H. Tocquet	-----
1821	Leplanquais	L. H. Tocquet	-----	-----
1822	L. H. Tocquet	J. Ch. Bidal	Simon Laurent	-----
1823	Adolphe Secquie	Léopold Carrière	-----	-----

CONCOURS WINNERS FOR FLUTE*

Paris Conservatoire
1797 to 1900

<u>Year</u>	<u>First Prize</u>	<u>Second Prize</u>	<u>First Accessit</u>	<u>Second Accessit</u>
1824	Léopold Carrière Simon Laurent	-----	-----	-----
1825	Gabriel Leplus	David Scarzella	-----	-----
1826	Théodore Mermet	Louis Dorus Vital Boujut	-----	-----
1827	David Scarzella	Alfred Olivier Emmanuel Fabre	-----	-----
1828	Louis Dorus	-----	-----	-----
1829	-----	-----	-----	-----
1830	-----	J. B. V. Franchomme Vicor Coche	-----	-----
1831	J. B. V. Franchomme Victor Coche	Ernest Alkan	-----	-----
1832	Jean Rémusat Ernest Alkan	J. B. Bagnières A. F. E. Bisetzky	-----	-----
1833	J. B. Bagnières A. F. E. Bisetzky	-----	-----	-----
1834	-----	J. M. Forestier (elder)	-----	-----
1835	J. M. Forestier (elder)	J. J. Henricet (elder)	L. A. Brunot P. M. Constans	-----
1836	Henricet (younger)	P. M. Constans Alexis Donjon	-----	-----
1837	P. M. Constans	L. A. Brunot	-----	-----
1838	Alexis Donjon L. A. Brunot	J. A. Mathieu	-----	-----
1839	H. J. J. Miramont	J. T. Pillard (younger)	-----	-----
1840	B. M. Rémusat (younger) L. M. S. Brunet	J. F. A. Moreau	-----	-----
1841	J. F. A. Moreau	J. H. Altès	-----	-----

CONCOURS WINNERS FOR FLUTE*

Paris Conservatoire
1797 to 1900

<u>Year</u>	<u>First Prize</u>	<u>Second Prize</u>	<u>First Accessit</u>	<u>Second Accessit</u>
1842	J. H. Altès	-----	-----	-----
1843	-----	Gustave Lemou	F. E. Lascoretz	-----
1844	Gustave Lemou	A. N. Alrit	-----	-----
1845	J. A. E. Demersseman	P. E. Blanco	J. A. Couplet	-----
1846	P. E. Blanco	F. E. Lascoretz	E. J. Morel (younger) J. B. Penas	-----
1847	F. E. Lascoretz	J. B. Penas	Frédéric Heinbach	-----
1848	A. N. Alrit J. B. Penas	J. A. Hermant (younger)	E. J. Ferret	-----
1849	J. Hermant E. J. Ferret	V. B. Doudies A. D. C. Brivady	E. J. Devalois	-----
1850	-----	Heinbach	M. A. Alves	-----
1851	V. B. Doudies A. D. C. Brivady	E. J. Devalois	-----	-----
1852	F. Heinbach	M. A. Alvès	-----	-----
1853	E. J. Devalois M. E. Alvès	J. B. Laflorance	-----	-----
1854	J. B. Laflorance	J. B. Donjon (younger)	A. C. Bernard	Bernard Coquet
1855	A. C. Bernard	C. J. Delamour	-----	-----
1856	J. B. Donjon (younger)	C. E. Ritter	-----	-----
1857	C. E. Ritter	Théophile Peltier J. B. A. Lamaire	C. C. Trousseau	Henri Thorpe 3) J.P.M. Mommeja
1858	J. B. A. Lamaire	Henry Thorpe	-----	-----
1859	-----	C. C. Trousseau	L. E. Richard	E. H. Feillou 3) A. J. Crave
1860	C. P. Taffanel	P. A. Génin	H. H. Hiltemann	E. Stennoisse
1861	Henry Thorpe P. A. Génin	L. E. Richand	A. J. Cantié	M. J. Donat

CONCOURS WINNERS FOR FLUTE*

Paris Conservatoire
1797 to 1900

<u>Year</u>	<u>First Prize</u>	<u>Second Prize</u>	<u>First Accessit</u>	<u>Second Accessit</u>
1862	Trousseau	A. J. Cantié L. S. F. Edouard	Théodore Martin	C. N. Boulart 3) Dominique Merle
1863	A. J. Cantié	Théodore Martin J.J.H.A. Simon	P. L. Denni (younger)	-----
1864	Denni J. J. Simon Théodore Martin	F. J. Brossa	Prosper Corlieu	Alfred Rauch L. A. Krantz 3) Henry Muller
1865	F. J. Brossa	Prosper Corlieu	Alfred Rauch L. A. Krantz	A. G. Quenay 3) J. R. Bouzerand
1866	Prosper Corlieu	Alfred Rauch L. A. Krantz	A. G. Quenay	A. A. Alba 3) Eugene Bergin
1867	L. A. Krantz A. G. Quenay	A. A. Alba Mascret	Eugene Bergin	J. E. Mélé Pierre Krebs
1868	Alfred Rauch	J. E. Mélé	T. N. Lehmann	J. T. Jouve Hippolyte Houziaux
1869	J. E. Mélé	T. N. Lehmann	Hippolyte Houziaux Alfred Lefebvre	3)P.L.C. Delrieux
1870	T. N. Lehmann	Alfred Lefebvre	E. L. Dubois	Georges Siegrist 3) Charles Molé
1871	(No Concours Held)			
1872	Alfred Lefebvre	E. A. Bertram	-----	-----
1873	-----	Charles Molé	E. C. Arthur	-----
1874	Charles Molé	E. A. Bertram	-----	L. E. Michel
1875	E. A. Bertram	-----	L. E. Michel	T. A. Brunot
1876	-----	T. A. Brunot	Antoine Sega	T. G. D'aquin Antoine Vendeur
1877	-----	Antoine Sega Antoine Vendeur	E. F. Lematte	A. I. Bondues

CONCOURS WINNERS FOR FLUTE*

Paris Conservatoire
1797 to 1900

<u>Year</u>	<u>First Prize</u>	<u>Second Prize</u>	<u>First Accessit</u>	<u>Second Accessit</u>
1878	Antoine Vendeur	E. F. Lematte	A. I. Bondues G. A. A. Schmit	-----
1879	Antoine Sega	C. E. E. Feillou	A. J. Hennebain Edouard Gabus	F. V. Douchet
1880	A. J. Hennebain	-----	F. V. Douchet	M. P. A. Gennaro
1881	C. E. E. Feillou	F. V. Douchet	L. H. R. Sault L. A. Jacquet	-----
1882	-----	L. A. Jacquet	M. P. A. Gennaro Louis Bléman	Gaston Delaune
1883	L. A. Jacquet	M. P. A. Gennaro	C. A. Carme	-----
1884	M. P. A. Gennaro	Richaud	C. L. Engrand	E. E. Chèvre
1885	-----	C. L. Engrand	Jules Roux	E. H. Fournier
1886	Richaud	Jules Roux	A. F. J. Davenne	-----
1887	-----	F. C. Boblin	E. H. Fournier	J. H. Verroust
1888	Jules Roux	A. F. J. Davenne	J. H. Verroust L. E. Balleron	-----
1889	F. C. Boblin	J. C. Mascret J. H. Verroust	-----	G. L. Lamirault
1890	-----	L. E. Balleron	P.J.R.E. Deschamps	Gaston Danis
1891	J. H. Verroust L. E. Balleron	-----	André Maquarre	-----
1892	-----	P.J.R.E. Deschamps André Maquarre	Gaston Danis	Georges Barrère
1893	André Maquarre	J. A. Pascal	A. E. Million	E. J. Leclercq
1894	Philippe Gaubert P.J.R.E. Deschamps	J.A.L.G. Leduc	J. L. A. Grenier Georges Barrère	A. H. Sténosse
1895	Georges Barrère	J. L. A. Grenier	M. Maquarre	-----
1896	Daniel Maquarre J. L. A. Grenier	A. E. Million	-----	Charles Boudier Blanquart

CONCOURS WINNERS FOR FLUTE*

Paris Conservatoire
1797 to 1900

<u>Year</u>	<u>First Prize</u>	<u>Second Prize</u>	<u>First Accessit</u>	<u>Second Accessit</u>
1897	A. E. Million	Blanquart	L. F. Fleury	G. E. Jurish
1898	Blanquart	G. D. Bladet	G. D. Krauss G. E. Jurish	L. E. Sorel
1899	-----	L. F. Fleury	-----	U. A. Baudin F. Dusausoy
1900	L. F. Fleury G. D. Bladet	U. A. Baudin	F. Dusausoy	G. Cardon

*Sources:

an VI to 1811 -- Constant Pierre, Le Conservatoire National de musique et de déclamation, Documents Historiques et Administratifs recueillis ou reconstitués par Constant Pierre (Paris: Imprimerie Nationale, 1900), 511-520.

1818 to 1852 -- M. Lassabathie, Histoire du Conservatoire Imperial de Musique et de Declamation suivie de documents Recueillis et mis en ordre (Paris: Michel Levy, 1860), 140-216.

1853 to 1873 -- Ministère d'état, Conservatoire impérial de musique et de déclamation, Distribution des prix pour le cours d'études de l'années 1853-1873, 21 volumes (Paris: Vinchon, Imprimeur du Conservatoire impérial de musique et de déclamation, 1853-1873).

1874 to 1892 -- Ministère de l'Instruction publique, des cultes et des Beaux-Arts, Distribution Solonelle des prix pour le cours d'Etude de l'années 1874-1892, 19 volumes (Paris: Vinchon, Imprimeur du Conservatoire impérial de musique et de déclamation, 1853-1873).

1893 to 1896 -- Ministère de l'Instruction publique, des Beaux-Arts et des cultes, Distribution Solonelle des prix pour le cours d'Etude de l'années 1893-1896, 4 volumes (Paris: Vinchon, Imprimeur du Conservatoire impérial de musique et de déclamation, 1893-1896).

1897 to 1900 -- Ministère de l'Instruction Publique et des Beaux-Arts, Distribution Solonelle des prix pour le cours d'Etude de l'années 1897-1900, 4 volumes (Paris: Vinchon, Imprimeur du Conservatoire impérial de musique et de déclamation, 1897-1900).

*Winners only from 1900 to 1950 are documented in Claude Dorgeuille, The French Flute School, 1860-1950, translated by Edward Blakeman (London: Tony Bingham, 1983), 69-76.

Appendix III

Dated Method Books Published in France 1795-1927

- 1795 François Devienne, *Nouvelle méthode pour la flûte* (Nadernann)
- 1798 c. Armand Vanderhagen, *Méthode claire et facile pour apprendre à jouer entrès peu de temps de la flûte* (N.P.)
- 1799 c. Giovanni Giuseppe Cambini, *Méthode pour flûte* (N.P.)
- 1801 Hugot and Wunderlich, *Méthode de flûte* (Conservatoire de Musique, Paris)
- 1801 c. Etienne Ozi, *Méthode de flûte* ([Ozi & Cie])
- 1802 H.F.L. Dormieux, *Méthode pour la flûte* (Janet)
- 1802 c. Franz Louis Michel, *Nouvelle méthode de flûte* ([Leduc])
- 1803 c. François Devienne, *Petite méthode* (Richault)
- 1815 c. Robert Nicolas Charles Boscha, *Petite méthode* ([Lemoine])
- 1818 Benoit Tranquille Berbiguier, *Nouvelle méthode pour la flûte* (Janet)
- 1820 Benoit Tranquille Berbiguier, *Grande méthode de la flûte* (N.P.)
- 1820 c. Jamme, *Méthode de flûte harmonique ou à doubles parties* ([Richault])
- 1827 Louis Drouët, *Méthode pour la flûte* (Pleyel)
- 1828 c. Pérault, *L'Art de la flûte* ([Leduc])
- 1829 c. Eugene Walkiers, *Méthode de flûte*, op. 30 ([Benoit])
- 1835 c. Jean Louis Tulou, *Méthode de flûte*, op. 100 ([Chabal])
- 1838 Pierre Hippolyte Camus, *M0thode pour la nouvelle flûte Boehm* ([Gérard])

- 1838 Victor Jean Baptiste Coche, *Méthode pour servir à l'enseignement de la nouvelle flûte inventée par Gordon, modifiée par Boehm et perfectionnée par V. Coche et Buffet* (Chez auteur)
- 1838 c. Benoit Tranquille Berbiguier, *L'Art de la flûte*, op. 140 (Aulagnier)
- 1845 Louis Dorus, *Méthode pour la flûte système Boehm* (Schonenberger)
- 1850 c. Philippe Gattermann, *Méthode pour la flûte système Boehm* ([Richault])
- 1855 Hugot and Wunderlich, *Méthode de flûte* (Republished by Arnold as *Conservatoire méthode*)
- 1865 c. Jean Remusat, *Méthode* ([Leduc])
- 1870 Marie Joseph Duverges, *Méthode pour la flûte système Boehm* (Joubert)
- 1875 c. Jean Louis Tulou, *Petite méthode élémentaire* (N.P.)
- 1880 Joseph Henri Altès, *Méthode pour la flûte système Boehm*, op. 31 (Millereau)
- 1885 c. L. Blemant, *Méthode de flûte* ([Evette])
- 1906 c. Jean Remusat, *Méthode élémentaire* ([Leduc])
- 1908 Philippe Gaubert, François Devienne, *Nouvelle méthode pour la flûte* (Leduc)
- 1923 Paul Taffanel and Philippe Gaubert (*Méthode complète de flûte* (Leduc)
- 1923+ Marcel Moyse, numerous individual method volumes (Leduc, released through 1950)