# The Development of Cello Technique

in the String Quartets of

JOSEPH HAYDN

with special reference to

(a) The various external influences causing this development and

(b) The potential use of the cello parts within a teaching situation

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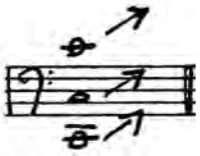
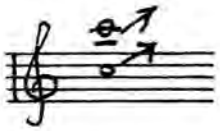
(b) THE POTENTIAL USE OF THE CELLO PARTS WITHIN A TEACHING SITUATION

## Abbreviations used.

### Haydn's Works.

String Quartet, Op. 1 no. 1, first movement - Op. 1 / 1 - i.

### Musical terms.

Octave pitches from  to 

- C, c, c', c'', c'''

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# C O N T E N T S .

# PREFACE.

The sources for this thesis are the published quartets by Haydn whose authorship has been proved by recent scholarship, and does not include works that were not originally composed for string quartet or whose authorship is dubious. The total number of completed quartets included in this study is thus sixty-seven, plus the incomplete last quartet. A full list of the quartets used in this study is given below.

| | |
|---|---|
| Op. 1 | Nos. 1, 2, 3, 4, 0, 6 |
| Op. 2 | Nos. 1, 2, 4, 6 |
| Op. 9 | Nos. 1 - 6 |
| Op. 17 | Nos. 1 - 6 |
| Op. 20 | Nos. 1 - 6 |
| Op. 33 | Nos. 1 - 6 |
| Op. 42 | |
| Op. 50 | Nos. 1 - 6 |
| Op. 54 | Nos. 1 - 3 |
| Op. 55 | Nos. 1 - 3 |
| Op. 64 | Nos. 1 - 6 |
| Op. 71 | Nos. 1 - 3 |
| Op. 74 | Nos. 1 - 3 |
| Op. 76 | Nos. 1 - 6 |
| Op. 77 | Nos. 1 - 2 |
| Op. 103 | |

# INTRODUCTION.

## THE RISING STATUS OF THE VIOLIN, VIOLA AND CELLO IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES.

In the middle of the eighteenth century, when Haydn began composing his first string quartets, violin writing was highly advanced and the violin an established solo instrument, its supremacy already firmly endorsed by the Italian Violin Schools of the seventeenth and early eighteenth centuries. The pace of development of the cello, however, was not comparable to that of the violin, despite the fact that the first cello known to us was made in 1572.[1]

Corelli (1653 - 1713) a virtuoso performer, prolific composer and contemporary of Stradivarius, produced his finest compositions for the violin when Stradivarius' craftmanship reached perfection. These beginnings were brought to their fulfilment by Vivaldi, Locatelli and Tartini, three of the most celebrated of the composer-violinists. In addition, Tartini added an extra vitality and meticulousness to violin playing. His technique was elaborate and exact, and we know that he paid great attention to precise intonation. The expertise of the Italian

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1. Christopher Bunting, "The Violoncello", in Musical Instruments through the Ages, ed. Anthony Baines, p.139.

school spread to other countries of Europe and culminated in the concertos, sonatas and suites of J.S. Bach.

After 1750 two new developments further enhanced the virtuosity of violin technique. The first was the new bow, perfected in 1780 by Tourte; the second the lengthening of the fingerboard which brought about the increase in the upper compass of the violin to a '''. Consequently, works of great technical difficulty were produced in the last quarter of the eighteenth century.

Violas had evolved concurrently with the violin, but in about 1700 were still considerably larger than the modern instrument. During the next fifty years these instruments were physically reduced in size; this caused a reduction in volume but a more mellow sound.

The earliest extant cello was made in 1572 by Andrea Amati. It had evolved from numerous different instruments: the vaulting, for example, came from the viola da Bracčio, and the size from the bass Geig-de-Braccio. These characteristics influenced its eventual shape and tone-quality. Andrea Amati and his sons made cellos, but it was his grandson Nicolo, who, after experimenting, produced a more robust instrument which resulted in the increased popularity of the cello. The expertise of these Italian crafts-

men spread north of the Alps where an Austrian maker, Jacob Stainer (1621 - 1683) was also making excellent instruments during this period.

In the first half of the seventeenth century the cello was only given modest, humble, simple music in the bass line and there were as yet no solo works composed for it. The main reason for this was that it was a very large, unwieldy instrument, similar to the bass viol in size. Thus it was extremely "slow to speak", since the thick strings (necessitated by the greater size of the instrument) were incapable of vibrating as quickly as those of the cello today. Another disadvantage resulting from the large size was the virtual impossibility of any rapid cross-string technique. By 1700 a smaller, more manageable instrument had been constructed although it was certainly not in general use. The main advantage of the latter was that it could be held between the knees more comfortably.

It was in the concerto grosso form with the more florid bass line that the cello began to be regarded more favourably, and solo cellists now began to make an appearance. Some of the well-known cellists in the latter half of the seventeenth century were Gabrielli of Bologna (1640 - 1690), Ariosti (b. 1660) and Buononcini (b. 1672).

Unfortunately, there is no evidence of the exact measurements of the Amati cellos before they were reduced in size by later makers. One can speculate as to their proportions only from paintings of that period. The portrait of the "Cello Player" by the seventeenth-century Dutch artist Dirk Hals gives a clear indication of the size and clumsiness of the early cello:

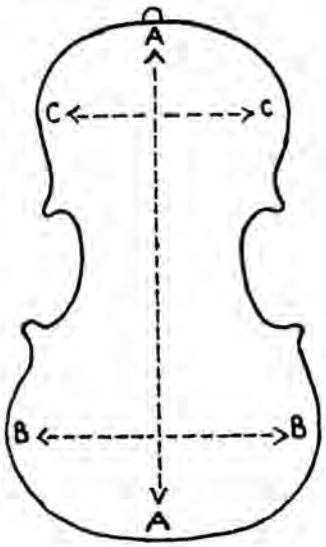
Even taking into account the stylistic differences between the Dutch and Italian schools, and also the idiosyncracies of the individual artist's approach to portraiture, it is obvious that the cello held by Boccherini in the portrait (by Pompeo Batoni) is a much smaller and more refined instrument.

Boccherini by Pompeo Batoni.

The reduction in the cello's size did not happen dramatically, but evolved over a number of years and in the hands of various craftsmen. The most important of these were Nicolo Amati's pupil Guiseppi Guarneri (d. 1698) and Francesco Ruggieri (c. 1650 - 1720), both of whom made cellos for Gabrieli, Ariosti and Buononcini. They experimented in the production of slightly smaller instruments than those of Amati, and Guarneri sometimes reduced the length to as little as 28½ inches.

The following diagrams illustrate the dimensions of the various cellos made by Andrea Amati, Andrea Guarneri, Francesco Ruggieri and Stradivarius (among others) over a period of more than a century from approximately 1600 to 1730. It can be seen that there was a continuous experiment with dimensions, resulting in a gradual overall reduction in size.

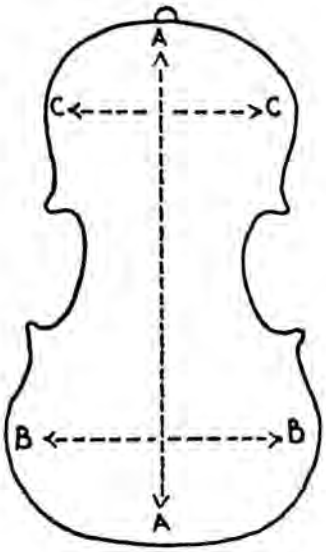
DIAGRAM 1.




Violoncello dated 1669.

| | | |
|---|---|---|
| Length | A to A | 31.3/4" |
| Width | B to B | 18.1/2" |
| | C to C | 15.1/16" |
| Sides | | 6" |
| | | 5.3/4" |

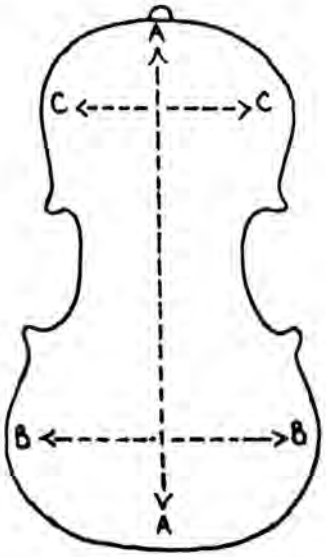
DIAGRAM 2.




Andrea Amati : late-sixteenth century.

| | | |
|---|---|---|
| Length | A to A | 31" |
| Width | B to B | 18.3/4" |
| | C to C | 14.1/2" |
| Sides | | 4.11/16" |
| | | 4.1/2" |

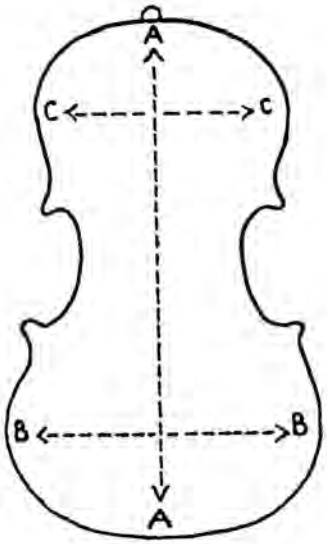
DIAGRAM 3.




Francesco Ruger : circa 1670.

| | | |
|---|---|---|
| Length | A to A | 31.1/4" bare |
| Width | B to B | 19.1/8" |
| | C to C | 15" |
| Sides | | 5.1/8" |
| | | 4.7/8" |

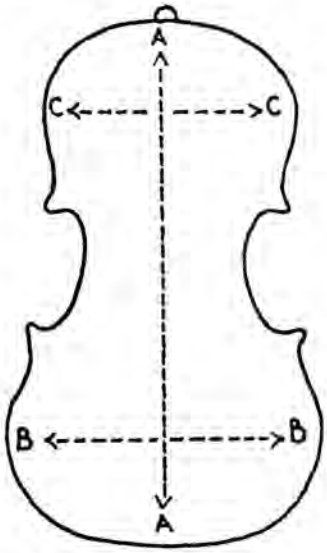
DIAGRAM 4.




Francesco Ruger : 1667.

| | | |
|---|---|---|
| Length | A to A | 30.5/16" |
| Width | B to B | 18.3/8" |
| | C to C | 14.7/8" |
| Sides | | 4.5/8" |
| | | 4.1/2" |

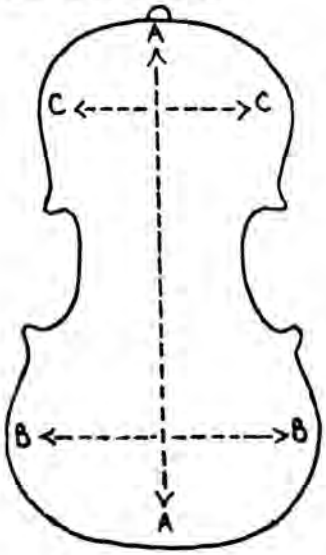
DIAGRAM 5.




Andrea Guarneri (small form)

| | | |
|---|---|---|
| Length | A to A | 29.1/4" |
| Width | B to B | 17.5/8" |
| | C to C | 14.1/4" |
| Sides | | 4.1/2" |
| | | 4.1/2" |

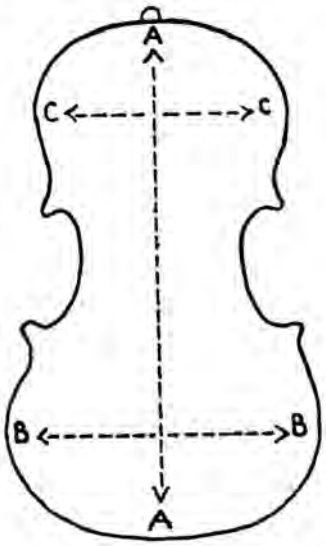
DIAGRAM 6.




Stradivarius : 1690 "The Tuscan"

| | | |
|---|---|---|
| Length | A to A | 31.3/8" |
| Width | B to B | 18.1/2" |
| | C to C | 14.1/2" |
| Sides | | 4.3/4" |
| | | 4.1/2" |

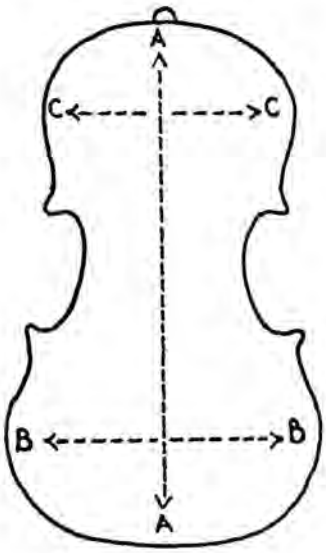
DIAGRAM 7.




Stradivarius : 1696 "The Aylesford".

| | | |
|---|---|---|
| Length | A to A | 31.1/4" |
| Width | B to B | 18.3/8" |
| | C to C | 14.3/8" |
| Sides | | 4.3/8" |
| | | 4.1/2" |

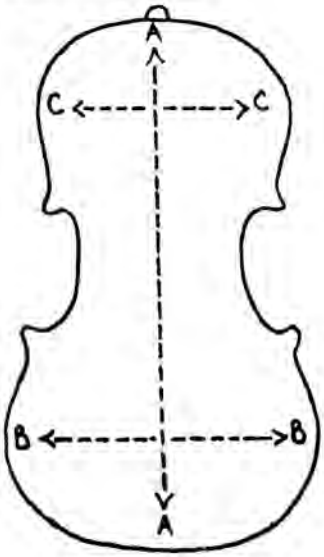
DIAGRAM 8.




Stradivarius : 1700 "The Cristiani".

| | | |
|---|---|---|
| Length | A to A | 30.1/2" bare |
| Width | B to B | 18.1/8" |
| | C to C | 14.1/8" |
| Sides | | 4.3/4" |
| | | 4.5/8" |

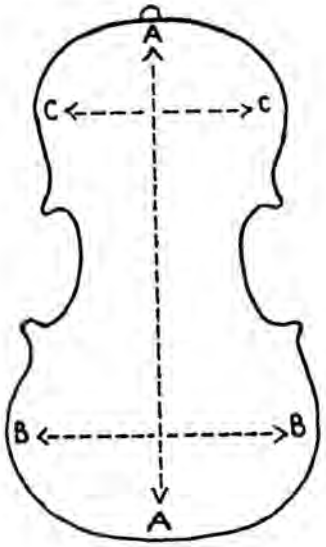
DIAGRAM 9.




Stradivarius : 1700 Spanish Court.

| | | |
|---|---|---|
| Length | A to A | 30.1/4" full |
| Width | B to B | 18" |
| | C to C | 14" |
| Sides | | 4.1/2" |
| | | 4.3/8" |

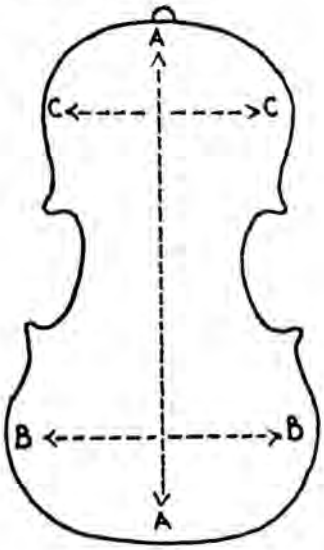
DIAGRAM 10.




Stradivarius : 1713 "ex Adam".

| | | |
|---|---|---|
| Length | A to A | 29.15/16" |
| Width | B to B | 17" |
| | C to C | 13.1/4" |
| Sides | | 5" |
| | | 4.3/4" |

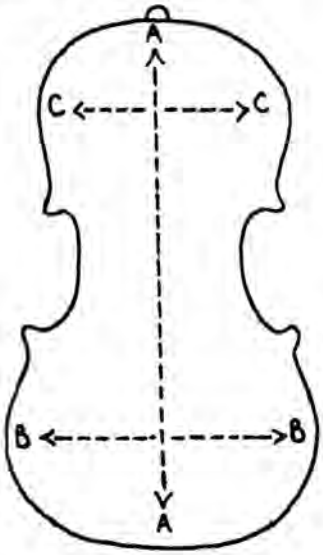
DIAGRAM 11.




Stradivarius : 1710 "The Gore-Booth"

| | | |
|---|---|---|
| Length | A to A | 29.7/8" |
| Width | B to B | 17.3/8" |
| | C to C | 15.5/8" |
| Sides | | 4.7/8" |
| | | 4.5/8" |

DIAGRAM 12.




Stradivarius : 1730 Mr. Murray.

| | | |
|---|---|---|
| Length | A to A | 29.1/2" bare |
| Width | B to B | 16.1/2" |
| | C to C | 17.7/8" bare |
| Sides | | 4.7/8" |
| | | 4.5/8" |

The production of Stradivarius' best instruments coincides with the composition of J.S. Bach's Solo Suites for cello. As there has been some controversy as to whether they were written for the viola pomposa, viol da gamba or cello, it is not out of place to discuss here briefly the relative claims of each, based largely on technical evidence from the music itself. The first of these instruments may be excluded from the argument at once as the compass of the instrument did not extend low enough for Bach's requirements.[1] The Solo Suites would be playable on the viol da gamba only with considerable difficulty, as the first five suites were obviously designed for an instrument tuned in fifths. Thus the cello is the most likely instrument for which they were intended, and this is confirmed by the fact that they were almost certainly written for Bernardt Christian Linigke.[2] He was a member of the Court orchestra at Cöthen, and was described as an outstanding cellist of his time.[3]

It is generally considered that Franciscello (1692 - 1739) was the performer largely responsible for the cello superceding the popularity of the viol da gamba as a solo instrument. Quantz heard him play in Naples in 1725 and commented on the new bow grip he used. He pioneered the technique of holding the bow palm-downward, whereas until

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1. The strings are tuned to d g d' g' c".
2. Christopher Bunting, Op. cit. p.143.
3. Elizabeth Cowling, The Cello, p.67.

that time cello bowing had remained the same as that of the viol da gamba - the bow being held resting in the palm of the hand. Franciscello's new technique improved the tone quality tremendously, as the downward weight of the arm on the string extracted a controlled and more ample sound from the instrument. Furthermore, this technique made it possible to play more easily in higher positions. A comparison of the portraits on pages four and five above shows clearly the differences between the old and new bowing techniques, as well as the improvement in posture facilitated by the smaller cello.

Cello music written during the late seventeenth and early eighteenth centuries bears out these technical advances and shows that the cello had become a highly developed instrument. A few disparaging remarks about the instrument indicate however, that it had not yet become universally accepted. Hubert le Blanc for example, wrote in 1740:

> The violoncello, that until now has been looked upon as a miserable, hated and pitiful wretch, whose lot was to starve to death for want of a free meal, now flatters itself that it will receive many caresses. It conjours up a bliss that will make it weep with tenderness ... How dreadful are the thick strings demanding an exaggerated pressure of the bow and a tension that makes them shrill ...'[1]

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1. Christopher Bunting, Op. cit., p.144.

Leopold Mozart, in his "A treatise on the fundamentals of Violin Playing"[1] was less critical of the cello, but maintained that it had a "less pleasant tone" than the viol da gamba, and that it overpowered the violin.

One of the main reasons for these complaints about the cello's tone probably arose from the way the instrument was held. Even as late as 1756 the cello was still balanced between the knees, usually resting on the lower right leg,[2] and without the aid of the tailpin. The tone would thus have been rather difficult to control. It was only when treatises specifically on the cello began to appear that the position of the instrument in relation to the player became more fully described and standardized.

The first cello method was produced in France by Michel Corrette in 1741, and was entitled Methode Theorique et Pratique, pour apprendre en Peu de Tems le Violoncelle Dans Sa Perfection. As the cello's popularity increased during the latter half of the eighteenth century no fewer than forty cello methods were published (between 1741 and 1810) including the famous Essaie Sur Le Doigter du Violoncello by Jean Louis Duport (1749 to 1819) the younger brother of Jean Pierre Duport.[3] Both

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1. First published in 1756.
2. See above, p.5.
3. Elizabeth Cowling, in The Cello, p.76 avers that this was written in 1806, but also quotes E.Heron Allen's suggestion that the date of publication was more likely to have been 1790.

these brothers had a tremendous influence on the technique of the instrument, and on composers such as Mozart and Beethoven.

A significant point emerging from Duport's treatise is the implication that even in the early 1800's the tailpin was still not in use, as he gave these instructions for holding the cello:

> The player must seat himself on the forepart of the chair, extend his left foot forward and draw in his right; then place the instrument between his legs so that the lower left hand corner of the back may fall into the hollow of the left knee and the weight of the instrument be borne on the calf of the left leg, the foot being turned outwards. If, on the contrary, the left knee were placed in the concave part of the side, it would impede the free passage of the bow when playing the first string.[1]

The French cellist Andrien Francois Servais (1807 - 1866) is said to have been the first cellist to use a tailpin, as he had grown so fat in his old age he could no longer clutch the cello between his knees. For outdoor performances of serenades, divertimenti, etc, the absence of the tailpin was not entirely regrettable as this made the instrument more portable. To enhance this portability, holes were made in the back of the cello through which a cord was inserted; this could then be tied over the player's shoulder, enabling him to play the instrument while stationary or mobile.

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1. F.A. Clarkson, "The Influence of the Viol Technique on the Violin Family", The Strad, July, 1970, p.105.

The back of this Tecchler cello made in 1709[1] shows clearly the small black plug covering what was originally the gripping point for a shoulder strap. The circular marks above the plug may indicate the original existence of a small plate to keep the cello steady whilst the player marched in procession.

Despite the improvements in dimension and tone production of the cello during the early-eighteenth century it still had very little outlet in solo or chamber music. Apart from Franciscello there were few contemporary cellists of note, and even performers of modest ability were the exception rather than the rule when Haydn began writing his string quartets.

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1. belonging to Mr. Joe Sack of Johannesburg.

## HAYDN'S RÔLE IN THE EVOLUTION OF THE QUARTET.

The quartet style grew naturally out of the life and surroundings of the eighteenth century, and its evolution was inextricably bound up with Haydn's own musical development and his involvement in the social structure of his epoch.

Music was the crowning glory of all the arts in the eighteenth century and was radically involved with the resolution of the eighteenth-century conflict between reason and emotion, between the abstract concept of enlightenment and the realities of human existence. It is no accident that sonata form emerged during this period, epitomising the desire to give musical expression to the resolution of this philisophical conflict. Its large-scale architectural design, capable of great expansion (especially as expressed in the solo sonata, string quartet and symphony) evolved as the most characteristic feature of eighteenth-century musical classicism, pervading all forms of instrumental music. Although chamber music and orchestral music became separated, each with its own artistic purpose and sphere, the structures and devices employed were very similar in both.

Haydn's commitment to the musical ethos of his period had a strong ethnic basis. He considered himself a German, born in Austria, but living in an area of the country where Hungarians and Croats had settled; and it was the latter's folk cultures which were ingrained in his musical consciousness as a young boy. Haydn, atypically, had no artistic or highly intellectual ancestors on either side of his family. His forbears were craftsmen or farm labourers, certainly men who worked with their hands, highly religious, honest, hardworking and down-to-earth. His attitude to music was non-intellectual and unpretentious. He had inherited a strong sense of pride in craftsmanship, counterbalanced with a sense of humility in the light of his talents. He was neither a philosopher nor a man of the world, but was keenly aware of the correspondence between craftsmanship and practical musicianship. He regarded himself as an instrument of God and acknowledged any form of inspiration as emanating from God. This is witnessed by the fact that almost every string quartet was dedicated to the glory of God. Selected examples of such dedications are as follows:

| | | |
|---|---|---|
| Op. 17 | : | Laus Deo. |
| Op. 20 / 2 | : | Laus omnip. Deo sic fugit amicus amicum. |
| Op. 20/ 4 | : | Gloria in Excelsis Deo. |
| Op. 20/ 6 | : | Laus Deo et Beatissima Virgini Maria. |

He said that he wrote his music in order that "the weary and worn or the men burdened with affairs might enjoy a few moments of solace and refreshment"[1]

A great deal of Haydn's music was written to give pleasure to people who believed that aesthetic diversion was important. He took trouble to offer music of a high quality to his patron, whose interests and demands he accepted unquestioningly. In this sense he was a man of his age, a truly rococo composer. But it was his interest in human relationships and his tremendous sympathy for his fellow human beings, as well as his love of God, which transported his music out of the art of mere elegance into the realms of greatness, and made him one of the foremost agents in the achievement of the eighteenth-century balance between abstraction and reality.

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Of the three great architectural musical forms which were the fruits of the eighteenth century, the string quartet is the almost single-handed creation of Haydn himself

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1. Kenneth Clark, Civilisation, p.238.

and it was his genius which established the genre as a standard work of four movements for two violins, viola and cello.

The antecedents of this genre have roots, all slightly different, in Italy, France, Austria, Northern and Southern Germany.[1] The origins are found in works entitled "sinfonia, concerto, sonata, sonata a quatro, trio sonata, sonata da chiesa, sonata da camera, divertimento and cassation". But even these works entitled "sonata a quatro" were not really quartets in the subsequent meaning of the term. The chief difference between these works and Haydn's first real quartets was that they could, and often did, include a keyboard instrument.

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1. The background to the string quartet has been explored by numerous scholars, including the following:

   i) E.J. Dent, "The Earliest String Quartet", The Monthly Musical Record, vol. XXXIII, 1903, pp. 77-87.

   ii) A.E. Hull, "On the Origins of the String Quartet", Musical Quarterly, vol. XV, 1929, pp. 72 - 76.

   iii) Marc Pincherle, "On the Origins of the String Quartet", Musical Quarterly, vol. XV, 1929, pp. 77 - 87.

   iv) Rosemary Hughes, Haydn's String Quartets, pp. 5 - 6.

   v) Arthur Hutchings, The Baroque Concerto, passim.

Ensemble music before Haydn's string quartets had been limited by the shortcomings of the keyboard instrument with which it was usually associated. One of the reasons for the satisfaction in performing a true string quartet is the sense of key-tension, experienced by both performers and listeners. This is only possible in chamber music performed without a keyboard instrument, which, from the time of J.S. Bach, had been tuned to equal temperament. A string quartet playing, for example, a composition in D major would naturally sharpen the F and C-sharps and in a composition in D minor the F and B-flat would be flatter and the C-sharp sharper than the corresponding notes on a keyboard instrument. Until the keyboard was abandoned, the intonation of the string players would have been subject to the keyboard, and hence less satisfactory to the performers.

Thus the first true string quartet only emerged when the basso continuo was abandoned and the viola and cello joined the two violins to form a group of four solo instruments.

There is one point on which all commentators seem to agree, and that is that Haydn in his early quartets surpassed any works previously written for this combination of instruments. The works written before the Haydn quartets

are perhaps better described as ad libitum music which could be performed satisfactorily by instruments other than the four instruments of the string quartet, and works which could include the keyboard. There is little room for doubt that Haydn "did invent the string quartet as we know it today"[1]

The string quartet did not emerge as a form without criticism. In an article in the Encyclopaedia des Sciences, published in 1777, it is stated that

> while there might be a real quartet for four solo parts, each with its own tune, it would be so confused that the most practised ear would have much difficulty in distinguishing each voice. The best way to make a real quartet is to put it in the form of a fugue or canon.[2]

Haydn indeed used these devices in many of his quartets, in conjunction with dance forms, arias, sonata form and theme and variations. It was his originality in using all possible harmonic and contrapuntal textures and devices with the four instruments which brought this form to life.

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1. Barrett-Ayres, R. Haydn and the String Quartet, p.1.
2. Taylor, E. "Rousseau's Conception of Music". Music & Letters, Vol. XXX 1949. p. 231.

# CHAPTER I.

## THE HISTORICAL AND SOCIOLOGICAL PERSPECTIVE OF THE EARLY STRING QUARTETS.

Having been summarily dismissed at the age of seventeen from St. Stephen's Cathedral, Vienna, Haydn was given temporary shelter by a friend and singer, Johann Spangler, in the Altes Michaelerhaus. Amongst others living in the house were Niccolo Porpora, Metastasio and the dowager Princess Eszterhazy, whose sons were to employ Haydn for nearly thirty years of his life. Haydn was employed as Porpora's valet and accompanist, and added to his small income by fulfilling engagements as an instrumentalist and teacher. Amongst his pupils were Karl Joseph and Eleonor, the children of Baron Johann Karl von Fürnberg.

When Haydn moved to new lodgings in Seilerstätte, he found that the Fürnberg family were near neighbours, and their close proximity cemented an association between Haydn and Karl Joseph that was of vital consequence to the early history of the string quartet.

The history of the Von Fürnberg family is interesting, but sketchy. They are first mentioned in 823, but in subsequent centuries their aristocratic rank had never been

confirmed. According to Dworschak it was only in 1730 that Johann Karl von Fürnberg and his brother applied for official recognition of their position in the aristocracy, even though they could not produce documentary evidence substantiating their claim.[1] Because Johann Karl, who was a doctor of both medicine and philosophy, had served in the Turkish war in a medical capacity and was held in high regard in medical circles, it seems most likely that he supported his application with references of his personal achievements. The Fürnberg's request was granted in 1738 when Charles VI admitted Johann Karl and his brother Ignatius Frederich to membership of the new order of aristocracy. Ten years later, in 1748, they were accepted into the old order, realizing at last their keen social ambition. The possessions of the Fürnberg house in the middle of the eighteenth century represented a small kingdom but were later broken up, due to financial difficulties. The Baron was forced to sell most of his estates to the Emperor Franz II, leaving the Fürnberg family with only Weinzierl Castle and their town residence in Vienna.

Johann Karl von Fürnberg died in 1750 and the title was inherited by his son Karl Joseph Weber von Fürnberg. Karl Joseph, unlike his ancestors, was a cultured, contemplative man, philosophic and not at all materialistic. He was a patron of the arts, as were the majority of men

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1. F. Dworschak, "Joseph Haydn und Karl Joseph von Fürnberg", Unsere Heimat, vol. V, p.191.

of his social standing.[1] He loved music but was not in a financial position to keep up with his wealthier peers such as the Eszterhazy family. He did not have a large regular musical staff to give orchestral and operatic performances and so made do with performances of chamber music.

Karl Joseph's friendship with Haydn, which began when he was Haydn's pupil continued with Haydn's regular visits to the Baron's country estate, Weinzierl, where he was treated as a friend rather than a hired musician. The Fürnberg family would have spent part of the summer at their country home and one presumes that Haydn also played music with the Baron when he was residing in his town house in Vienna.

On a specific occasion, the date of which is unknown, the Baron invited a small audience for a performance of chamber music. Amongst the guests were his priest, Johann Joseph Fromiller, his estate manager, Matthias Leonhard Pensinger (both capable violinists) Haydn, and a cellist named Albrechtsberger. The Baron then asked Haydn to write a composition for this group of men. The young composer, encouraged by the possibility of four players making music together, started writing his first

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1. Very little else seems to be known about him, other than the fact that he drove the carriage for the bride of Emperor Joseph II when she arrived in Austria, and that he was related to Johann Tost.

string quartets in the intimate and friendly atmosphere of Weinzierl. This quartet group must have been, or become, close associates in a face-to-face, gemeinschaft environment, playing chamber music with that rapport which is so vital an ingredient in music-making of this kind.

Some controversy exists regarding the identity of the cellist named Albrechtsberger. According to some sources he was the brother of the theoretician Georg Albrechtsberger, who was Beethoven's teacher. Dworschak on the other hand states that the cellist was the well-known composer himself.[1] As Georg Albrechtsberger had been a choir boy at the Monastery at nearby Melk, and from 1757 to April 1759 was the country chapel organist at Weinzierl, it seems possible that he was in the area at the time of the first performance, which would lend some weight to Dworschak's theory. Carpani, however, states that the cellist was the village priest, this being the only definite contradictory source.[2] H.C. Robbins Landon confirms that Albrechtsberger did in fact have a brother, but does not give any other information.[3]

Disregarding the actual identity of Albrechtsberger, there is no doubt that the person for whom Haydn wrote the cello

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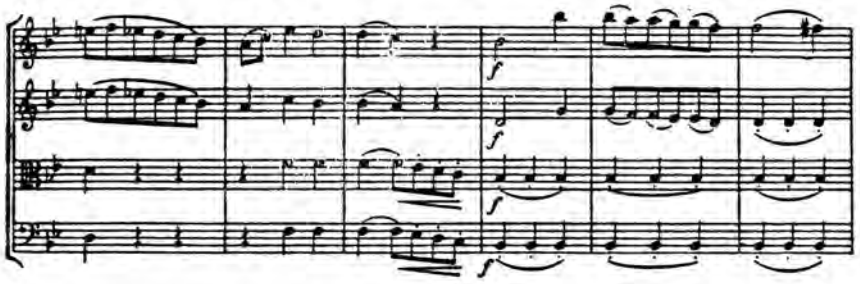
1. Dworschak, Op. cit. p.198.
2. Quoted by Georg Feder in Haydn, Werke, XII, vol. I, Preface, p.viii.
3. Robbins Landon, Haydn, vol. II, p.316,fn.

part was not a virtuoso. Although it is known Albrechtsberger was able to play the cello, it seems he was capable of performing simple continuo parts but lacked experience in more complicated passages.[1] It is also known that Haydn adjusted his original score in accordance with the technical expertise of the player.

> A scrutiny of the hand-written copies held in the monastery at Melk and at Kremsmünster, reveals a number of simplifications in the cello part; trills are often omitted and ornaments are simplified and some difficult passages are watered down.[2]

An interesting feature, which possibly indicates one of the ways in which Haydn adjusted the cello part to suit the player is found in a device he used in all the early quartets. It is the doubling of a short linking phrase, with the viola playing an octave higher.



Op. 1/1-ii
b.22 - 27.

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1. Dworschak, Ibid.
2. Barrett-Ayres, Haydn and the String Quartet, p.1.

Even in later works of this set, Haydn never leaves the cellist to execute this kind of cadential phrase alone, but always doubles it with the viola part - the part which he himself played at the first performances. One can only presume that the composer lacked confidence in the cellist's intonation and technical ability, and by doubling the part an octave higher would have been able to guide and support him.

This example typifies the way in which Haydn moulded his music to suit the practical circumstances. He was in the position of having to make the very best of the material available, taking into account not only the differing musical ability of the various men for whom he wrote and the different stage of their technical expertise, but also the compass and tone qualities of the instruments for which he was writing.

Thus, from the very beginning, it was the external forces of life which prompted Haydn to experiment with the string quartet and to explore its possibilities. To Haydn, genius was simply craftsmanship. His philosophy was to do the job to the best of his ability, for the pleasure of his friends and the glory of God - and this facet of his character is obvious from the beginning to the end of his life.

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Although the first ten string quartets of Joseph Haydn are known as the Fürnberg quartets, the earliest surviving manuscripts bearing the library seal of the Fürnberg family are only Op. 1 nos. 1, 2, 3, 4 and 6 and Op. 2 no. 6. Presumably some of these were written at Weinzierl Castle and, although it is doubtful if all the early works were written there, Haydn's love of nature certainly permeates some of them, with the euphoric mood of hot summer days, wine and the peace of the countryside. Stendahl goes so far as to consider Haydn the first landscape painter in music, capturing the same atmosphere as the artist Jacob Alt, in the paintings he did in the same area.[1]

Haydn's association with the Fürnberg family did not end with the early string quartets. In the famous autobiographical sketch sent to Mademoiselle Leonore on 6th July, 1776, he wrote:

> ... finally, by the recommendation of the late Herr Von Fürnberg, (from whom I received many marks of favour), I was engaged as Directeur at Herr Count von Morzin's and from there as Capellmeister of His Highness, the Prince (Eszterhazy) in whose service I wish to live and die.[2]

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1. "Stendahl" was a pseudonym used by Marie-Henri Beyle, who in 1814 published a plagiarized version of Carpani's Le Haydine under the title Lettres écrites de Vienne, en Autriche, sur le célèbre compositeur, Joseph Haydn. (Geiringer, Haydn, p.32, fn.)

2. Haydn, Correspondence, p. 19.

According to standard editions the early quartets are numbered as follows:

Op. 1. nos. 1, 2, 3, 4, 0 and 6.

Op. 2. nos. 1, 2, 4 and 6.

These works, not originally written in the conventional sets of six, were so grouped by the publishers and included a symphony, Op. 1. no. 5 in B flat, and two sextets with horns, Op. 2. nos. 3 and 5, thus creating two sets of six works. Op. 1. no. 0 was later discovered by Marion Scott and Karl Geiringer in 1931 bringing the number of genuine early quartets to ten.

Musicologists have been unable to agree on precise dating of these compositions, speculations varying between 1750 and 1760:

| | |
|---|---|
| Dworschak | 1757. |
| Eugene Sauzay | 1752. |
| Pohl | 1760. |
| Ulrech | 1755 or 1756. |
| Griesinger | 1750. |
| Einstein | 1755. |
| R. Hughes | In the 1750's. |
| R. Barrett-Ayres | In the last half of the 1750's. |
| H.C. Robbins Landon | In the last half of the 1750's. |

Dworschak informs us that the early works were greatly acclaimed, encouraging the 18-year old Haydn to persevere in this genre.[1] The fact that these works were so important

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1. Dworschak, Op. cit. p.195.

to Haydn is evident from his affectionate reference to them as "his children" - new, vulnerable creations in need of cherishing, and requiring very personal attention.

Whether it was the encouragement of Haydn's immediate circle or his own personal sense of achievement that inspired him to build on the foundations that he had established in the Fürnberg quartets we do not know, but it is obvious that he felt sufficiently optimistic about this new genre to channel his energies into writing quartets rather than reverting to piano trios.

The ten early quartets were indiscriminately entitled Notturni, Cassatio or Divertimento, since at this stage precise descriptions were obviously quite immaterial to Haydn. It was only in 1789 when they were published in England by Preston and Son that they become officially designated 'quartets'. Nevertheless, despite the apparently indifferent use of titles in these early quartets, and the fact that they have roots in the divertimento style, the struggle to establish a new genre - the string quartet - is apparent in both the structure and the style of some of the movements, and is also evident in much of the instrumental writing.

One of the chief distinguishing features between the early quartets and contemporary symphonies is the flexibility and airiness of the spacing of the instruments and in particular of the style of the cello part. It is rarely pedestrian in the baroque sense with prolonged passages of repeated notes. It is not technically difficult but is rhythmically lively and full of rests, so that it seems to give the overall texture a dance-like character. These features possibly reveal the key to genuine string quartet style, as opposed to baroque continuo-homophony or pre-classical symphonic styles.

All ten quartets have five movements, the second and fourth movements being in minuet and trio form. Their chronological arrangement in the General Edition[1] of Haydn's works is as follows, the position of the minuets being given only in the first work, since these remain constant as movements 2 and 4.

Op. 1 no. 1.

1. Presto.
2. Menuetto.
3. Adagio.
4. Menuetto.
5. Finale : Presto.

Op. 1 no. 2.

1. Allegro molto.
3. Adagio.
5. Presto.

Op. 1 no. 3.

1. Adagio.
3. Presto.
5. Presto.

Op. 1 no. 4.

1. Presto.
3. Adagio.
5. Presto.

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1. Joseph Haydn : Werke, J.P. Larsen and others, Henle. Munich. 1958.

Op. 1 no. 0.

1. Presto.
3. Adagio.
5. Presto.

Op. 1 no. 6.

1. Presto assai.
3. Adagio.
5. Presto.

Op. 2 no. 1.

1. Allegro.
3. Poco adagio.
5. Allegro molto.

Op. 2 no. 2.

1. Allegro.
3. Adagio.
5. Presto.

Op. 2 no. 4.

1. Presto
3. Adagio non troppo.
5. Allegro.

Op. 2 no. 6.

1. Adagio (Andante).
3. Presto.
5. Presto.

# CHAPTER II.

## THE DEVELOPMENT OF ELEMENTARY CELLO TECHNIQUE IN OPP. 1 AND 2.

Formal and stylistic topics in connection with the Haydn string quartets have been discussed by numerous authors, but there has been no specific study in the field of the development of cello technique in these works as far as can be ascertained. A growing familiarity with the quartets from the cellist's point of view reveals fascinating results which bear not only on the development of cello technique in the eighteenth century, but also on the evolution of a true quartet style, inextricably linked as this is with the qualities and characteristics of the bass line.

There is a noticeable development in the technique demanded of the cellist through the Fürnberg quartets, extending his capabilities in each work. Furthermore, it would be perfectly feasible in an ideal teaching situation to extend a cellist's technique from the most elementary stages to virtuosity through the study of the Haydn quartets.

The purpose of this chapter is therefore twofold: firstly to analyse the cello technique in Opp. 1 and 2, and, secondly, to examine the possible implications for

teaching from both academic and practical viewpoints.[1]

From a detailed scrutiny of technical progress in the cello part of the Fürnberg quartets, two main points emerge: firstly, that although Haydn's purpose may not have been deliberately didactic, it is obvious that it was the player himself (rather than the audience, if there originally was one) who benefited from the gradually improving standard, and therefore status ,of the cello part. Secondly, it is now possible to rearrange the order of the first ten quartets in a manner which reflects the increasing ability of the cellist or progress of the cellist's technique. Thus the new order would be:

1. Op. 1 no. 6 in C major.
2. Op. 1 no. 3 in D major.
3. Op. 2 no. 6 in B flat major.
4. Op. 1 no. 1 in B flat major.
5. Op. 1 no. 0 in E flat major.
6. Op. 1 no. 4 in G major.
7. Op. 1 no. 2 in E flat major.
8. Op. 2 no. 4 in F major.
9. Op. 2 no. 1 in A major.
10. Op. 2 no. 2 in E major.

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1. This task is all the more interesting when one takes into account the various cellists with whom the quartets were originally associated, and whose varying standards of expertise are inevitably reflected in the music.

In following the cellist's progress from numbers one to ten it emerges that the cellist need have mastered only the most elementary of techniques in order to participate in performance of the works.

Therefore, the cello technique evinced in the ten Fürnberg quartets, will be considered under the following three basic categories:

1. The development of bowing technique.
2. The development of left-hand technique.
3. The use of specific keys.

## BOWING TECHNIQUE.

The action of drawing the bow across the string excites perpendicular vibrations to the line of the string. To execute the most perfect bowing, the player and bow should be "as one", the bow being merely an extension of the player's fingers, hand and arm.[1]

It is generally agreed that in the bow grip the thumb is opposite the second and third fingers, somewhat closer to the second than the third; the fingers are naturally

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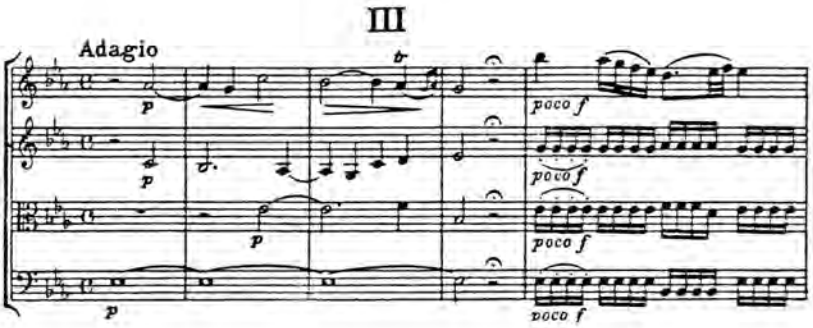
1. String players speak of their bowing arm rather than their right arm.

spaced as they are when the arm hangs loosely from the shoulder, with a little more space between the first and second finger than between the others. The thumb should be curved, never locked, forming a circle with each finger. The fingers are always active, especially during the change of bow stroke when they ensure that the bow is always in motion, even at the moment of reversal of direction.

In order to achieve good bow control, the player must bear in mind that this implies control of the three angles of the bow;

i. the right angle,
ii. the angle of the bow to a specific string; and
iii. the hair angle, especially at the change of strokes.

i) To get a firm, warm tone, the bow should always be at right angles to the string or parallel to the bridge and the end of the fingerboard. Until recently, when the Suzuki-Sato method was devised, legato bowing was the first concept taught to a beginner cellist. However, as the weight of the arm varies at different angles and consequently the tone quality and volume varies, this is the most difficult bowing technique for the inexperienced cellist. Haydn uses this technique only once in the entire early quartets, in the Adagio movement of Op. 1 no. 1.




Op. 1/1-iii
b. 1 - 3.

ii) To obtain a clear, uninterrupted tone the bow should move sufficiently away from either neighbouring strings so as not to cause them to vibrate. The angle of the bow to the strings is particularly important when moving from one string to another.

The volume of sound produced depends on three variables: speed of the bow, pressure of the bow on the string and position of the bow between the fingerboard and bridge, these three variables being inter-dependent. The closer the bow is to the bridge, the more pressure is needed to obtain a full-bodied sound, whereas less pressure closer to the fingerboard causes a decrease in volume. The player should think of drawing the sound out of the string by a sweeping motion, rather than of forcing the sound through pressure. With a fast bow it is easier to produce an agreeable sound near the fingerboard than near the bridge. Generally speaking, the bow travels more slowly and with increased pressure when it is nearer to the bridge than

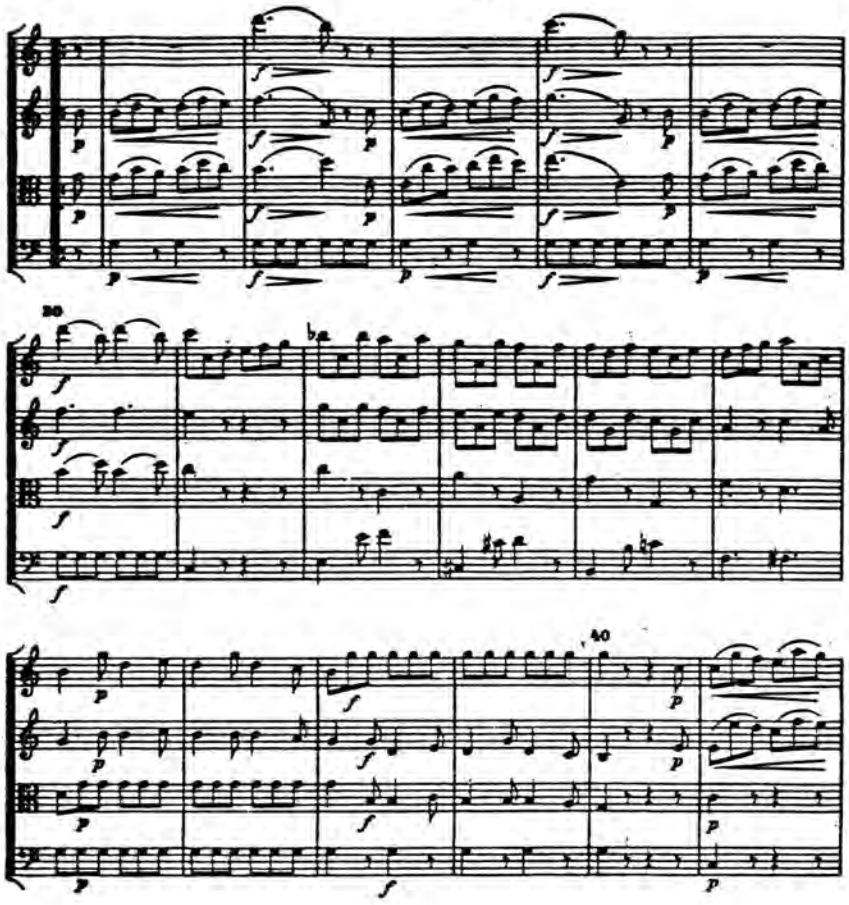
the fingerboard; and a sound produced by speed rather than by pressure is more attractive.

iii) Changing the angle of the bow hair to the string naturally changes the volume of tone produced. Contrary to the violinist's bowing technique, the hair closest to the thumb side of the bow is used for a restrained or pianissimo effect. As the cellist rotates his hand to increase the amount of hair used the tone will be proportionally greater. Full bow hair is therefore used for a rich warm tone.

The most common bowing technique in the first ten quartets is the short middle stroke, using at the most between fifteen to twenty centimetres of bow hair. This type of bowing is found in all the quick movements for notes which are occasionally detached, but not staccato. This detached bowing entails an abrupt stop to the movement of the bow without lifting it.

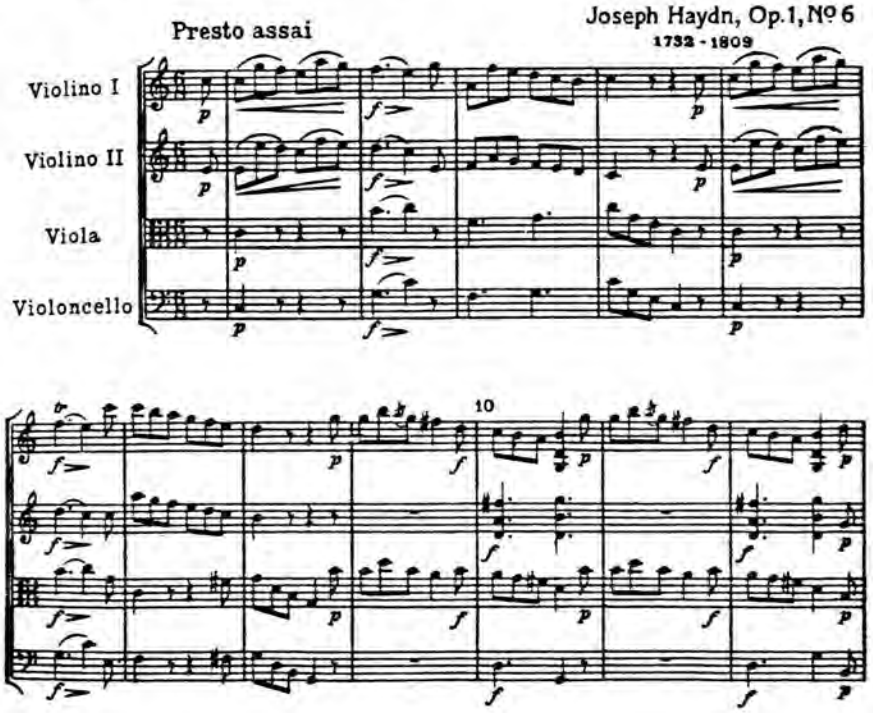
All these basic considerations connected with bowing are found in the five movements of Op. 1 / 6. Moreover, there are no instances in the entire work where the cellist has to play more than one note to a bow.

Most of the bowing in the first movement is the short bow-stroke technique, a bouncing relaxed stroke, which is the simplest to execute.



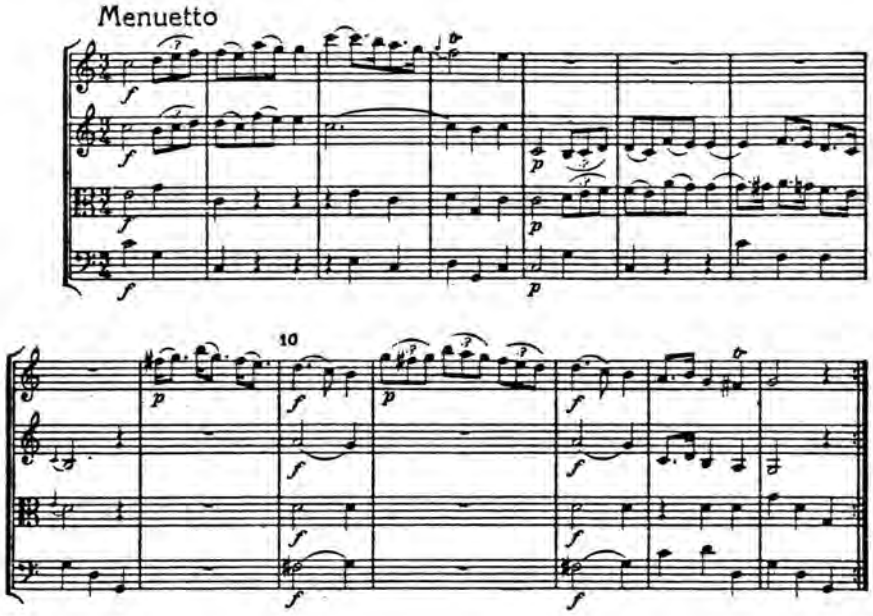
Ex. 1. Op. 1 / 6 - i b.24 - 41.

In bars 2 and 10, although the length of the note is a dotted crotchet, the initial pressure which causes the string to vibrate is the only effort demanded, as the tone should then fade almost immediately, using a minimum amount of bow.




Ex. 2. Op. 1 / 6 - i b.1 - 12.

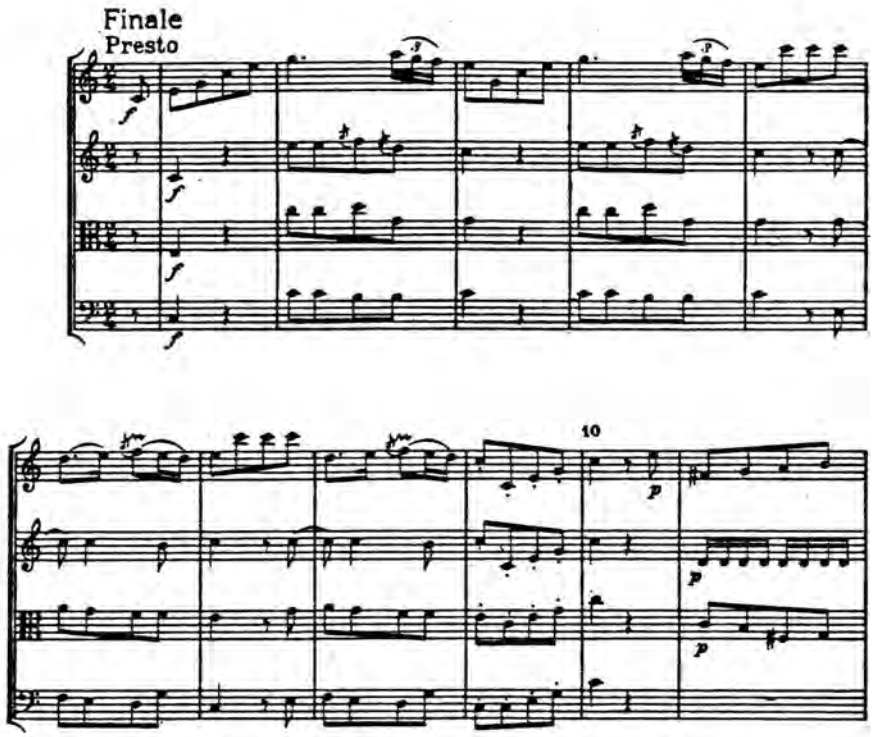
The second movement, minuet and trio, requires a slightly more definite stroke - not an intense tone but more bold and in keeping with the sturdy dance rhythm of the music. The bow strokes would use, at the most, no more than half the bow. The same technique suffices for the second minuet.




Ex. 3. Op. 1 / 6 - ii b.1 - 14.

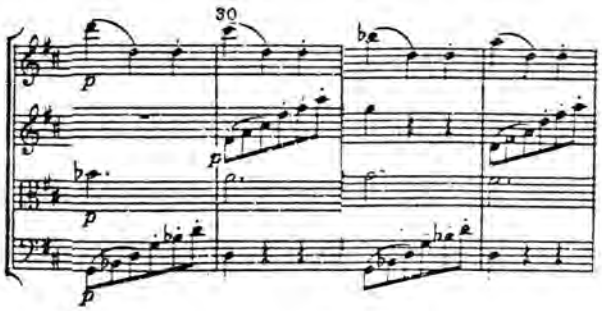
The slow movement of this quartet, a beautiful aria for the violin, is accompanied by pizzicato in the three lower strings - removing a large part of the hazards of string playing.

A similar technique to that in the first movement is needed in the finale : light, short bow strokes.



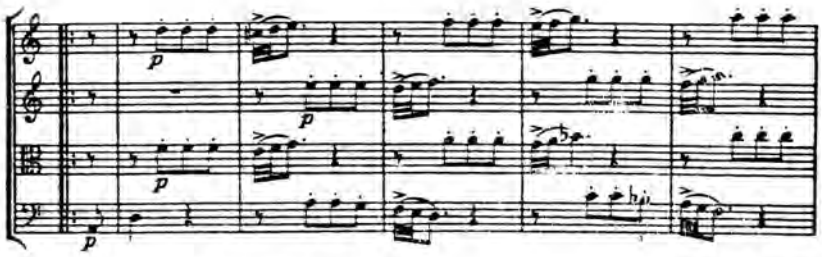

Ex. 4. Op. 1 / 6 - v b.1 - 11.

The first step in the development of bowing technique occurs in bars 29 and 31 of Op. 1/ 3 - ii where the cellist has to play three arpeggio quavers in one bow.



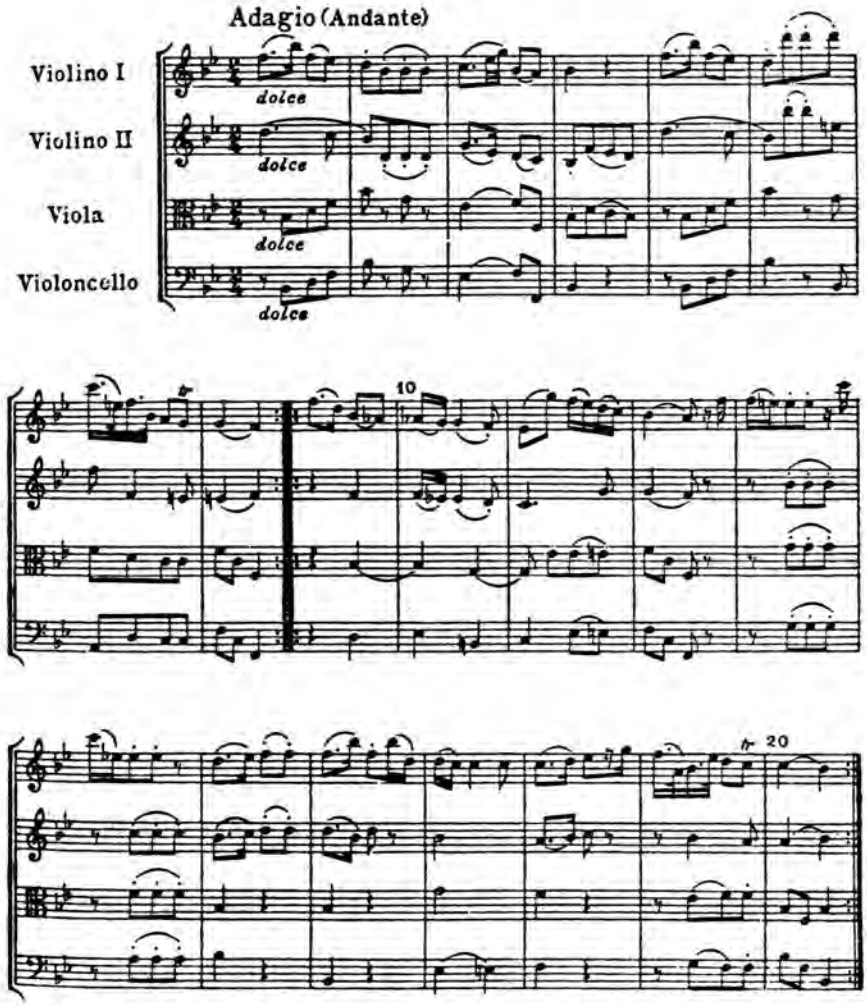

Ex. 5. Op. 1 / 3 - ii b.29 - 31.

The ornaments in bars 27, 29 and elsewhere would also be played in one bow; this in fact is easier than playing them with separate bows, especially at a presto speed.



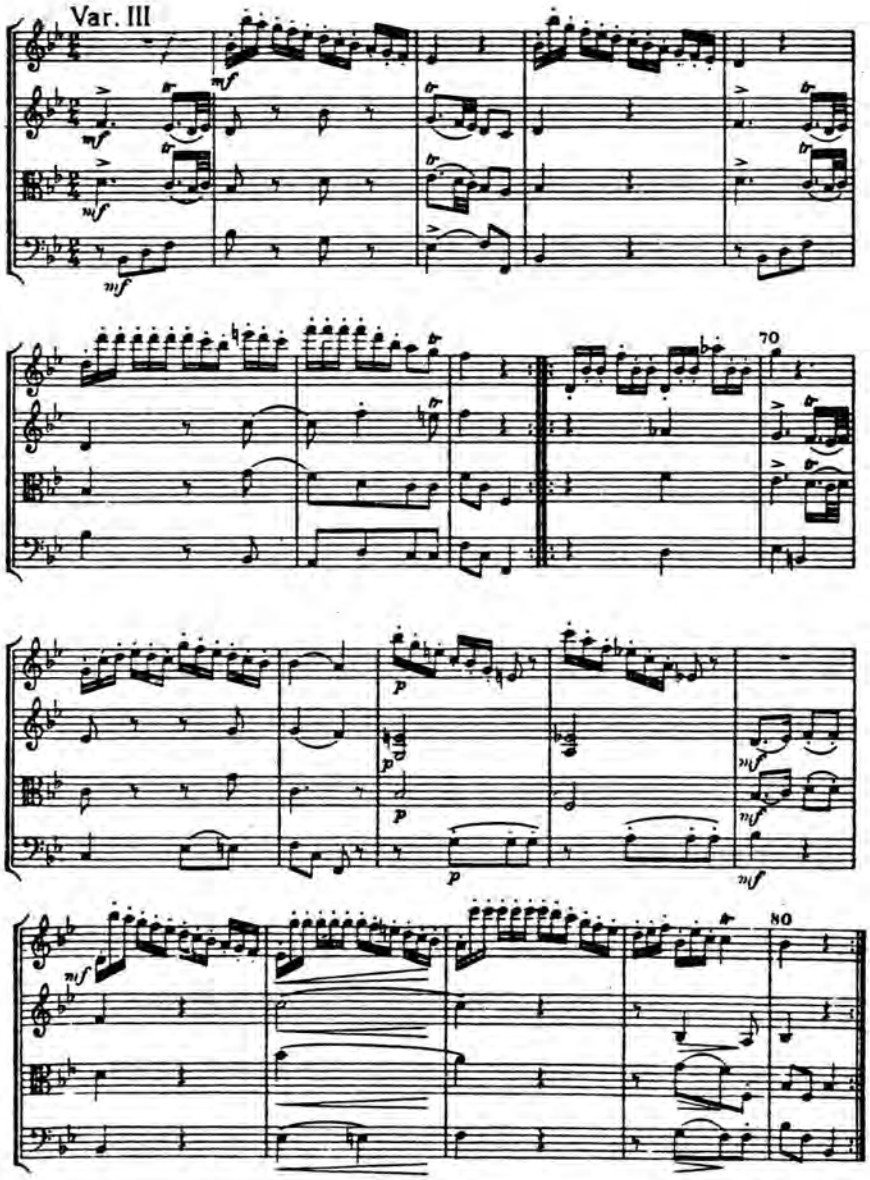
Ex. 6. Op. 1 / 3 - iii b.24 - 29

Smooth bow strokes are indispensible in Op. 2 / 6 - i where the quality and variety of tone for each variation shows a great advancement in the cello writing. The part marked dolce requires a gentle, persuasive touch and the first variation, although piano, would necessitate a more definitely articulated stroke. Here, again, there are instances of more than one note in a bow.



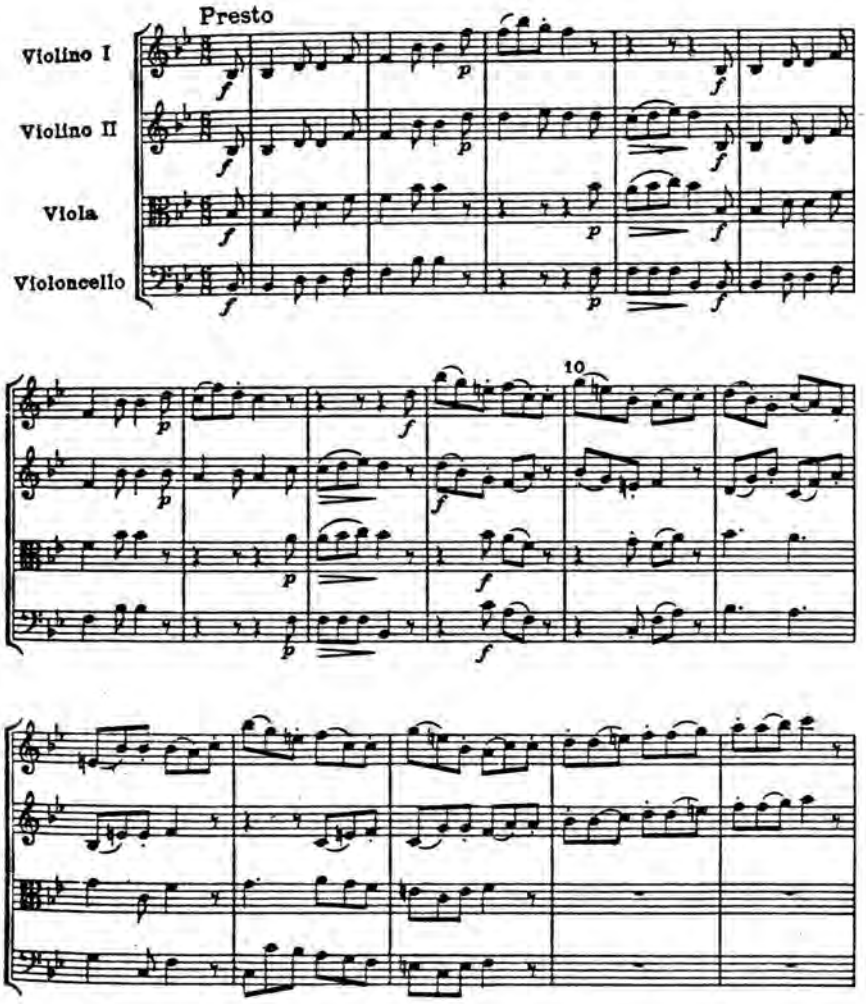

Ex. 7. Op. 2 / 6 - i b.1 - 20.

A firm, bold tone is needed in Variation II to create the important contrast between the third and fourth variation. Var. III should have a slightly accented rhythmical bow stroke and the latter a more lyrical quality; the more so as the cello part in these variations is identical.



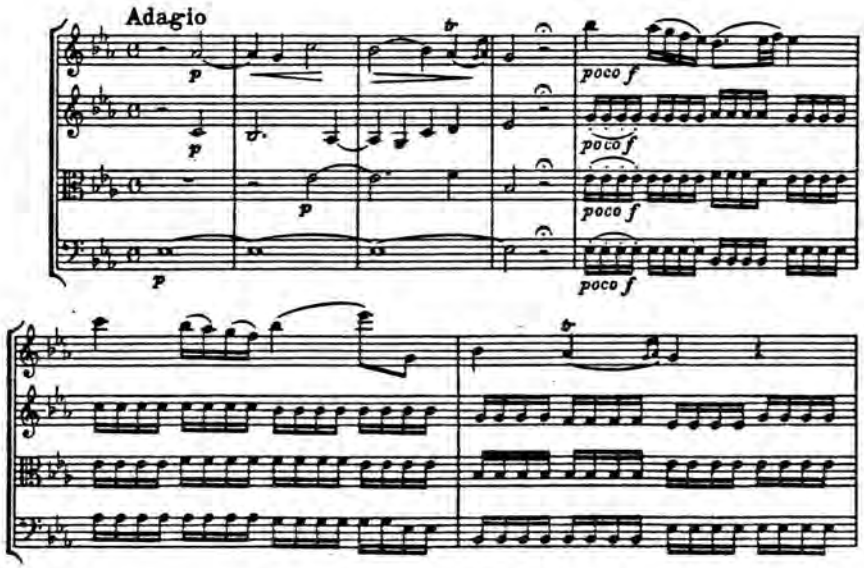

Ex. 8. Op. 2 / 6 - i b.61 - 80.

In Op. 1 / 1 - i a firmer tone is needed than in any of the previous quartets, This would be obtained by more arm weight.



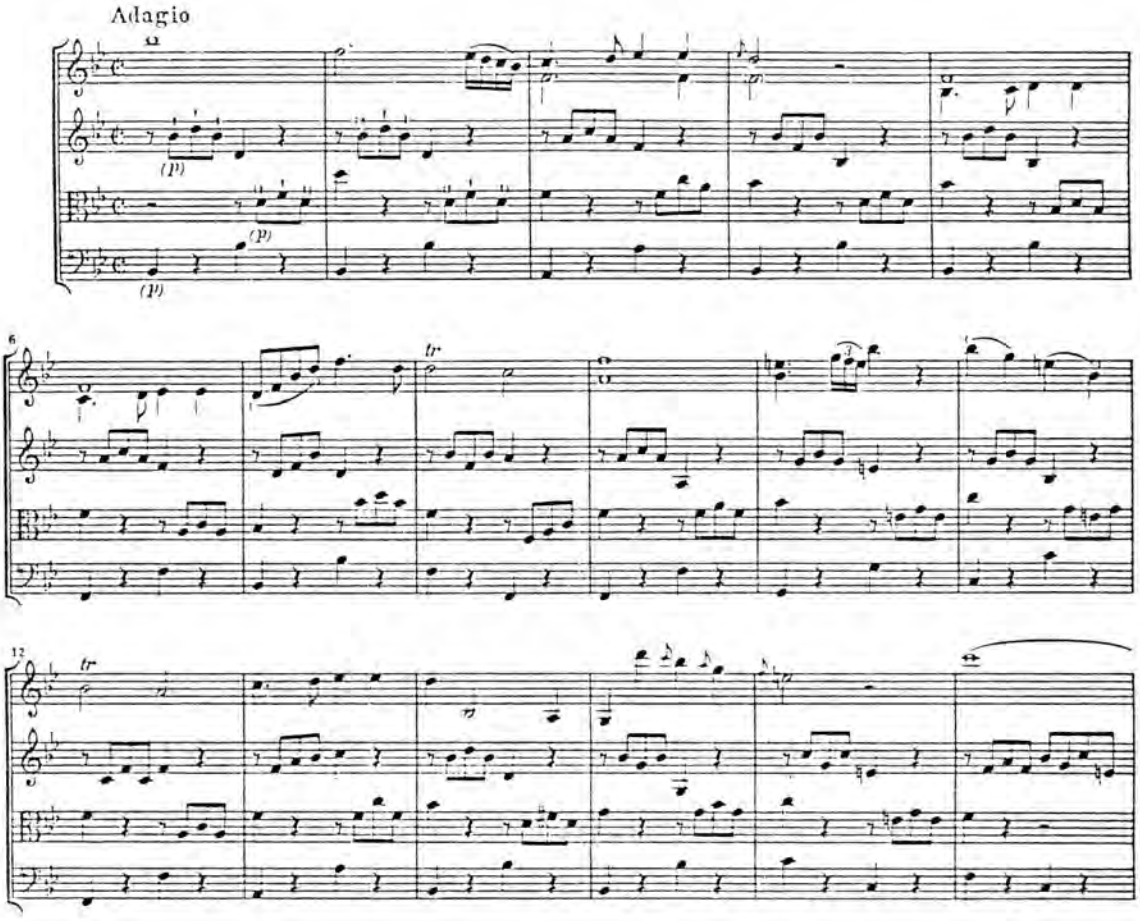

Ex. 9. Op. 1 / 1 - i b. 1 - 16.

The Adagio of the same quartet opens with a long sustained note marked piano. This calls for the ability to keep the tone even, at either end of the bow, which in turn entails greater control than the short strokes used hitherto.



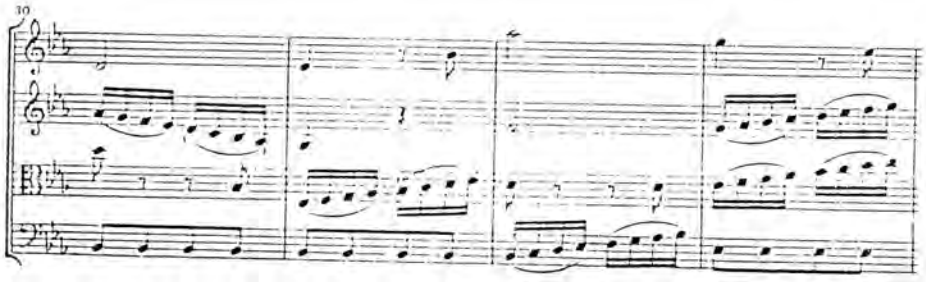

Ex. 10. Op. 1 / 1 - iii b. 1 - 15.

A gently-fading bow stroke is necessary to accompany the first and second violins in Op. 1 / 0 - iii. This accompaniment, written almost entirely in octaves, as simple as it is, forms part of one of the most beautiful movements in the early string quartets.



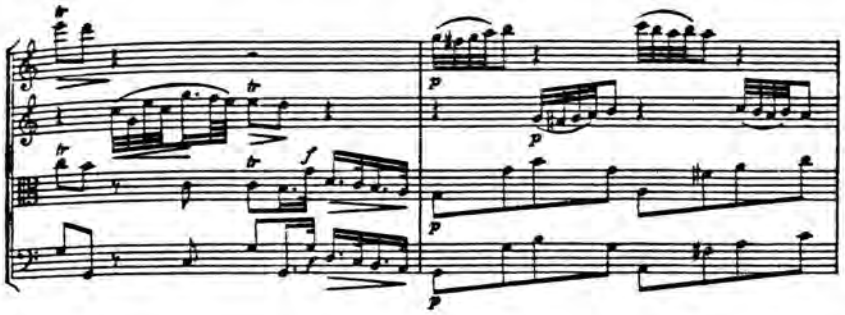

Ex. 11. Op. 1 / 0 - iii b. 1 - 17.

The demand on bow control suddenly increases where the cellist has to play four semiquavers in one bow, a phrasing found again at a faster speed in the presto finale bar 32. This is a more difficult technique for the inexperienced cellist who tends to accentuate each note with the bow, in sympathy with his left hand action.



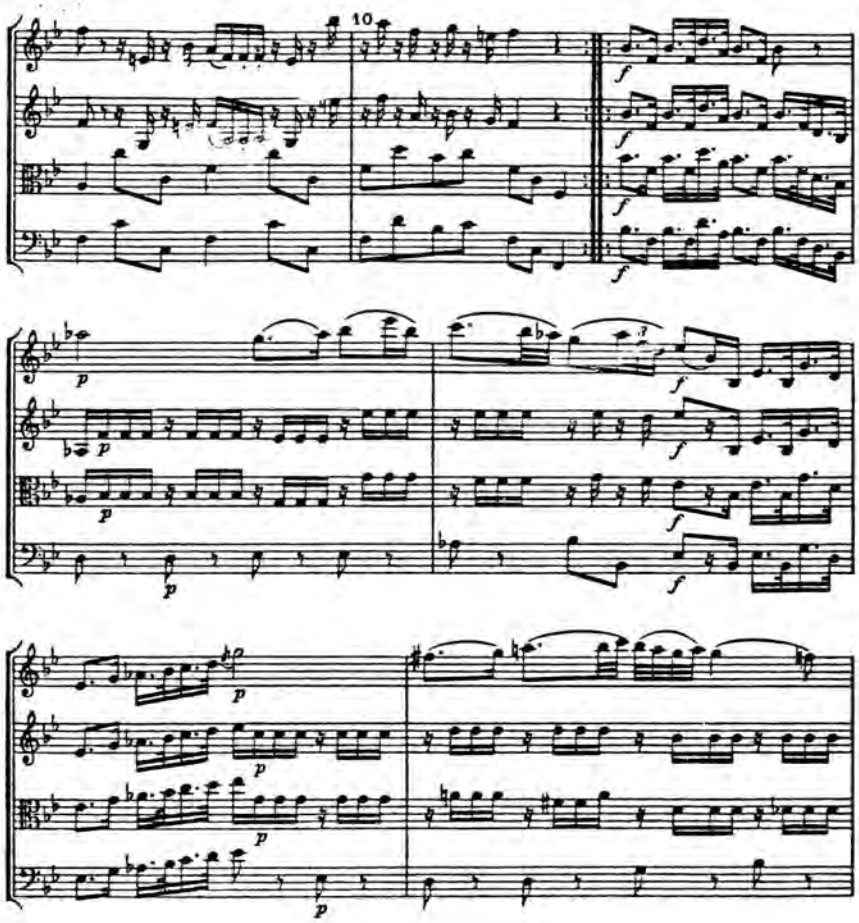
Ex. 12. Op. 1 / 0 - v b.30 - 34.

In Op. 1 / 4 - iii bar 6 (which is similar to many passages Haydn wrote in his early symphonies), needs a much bolder, dramatic tone to lend weight to the character of this style of writing -



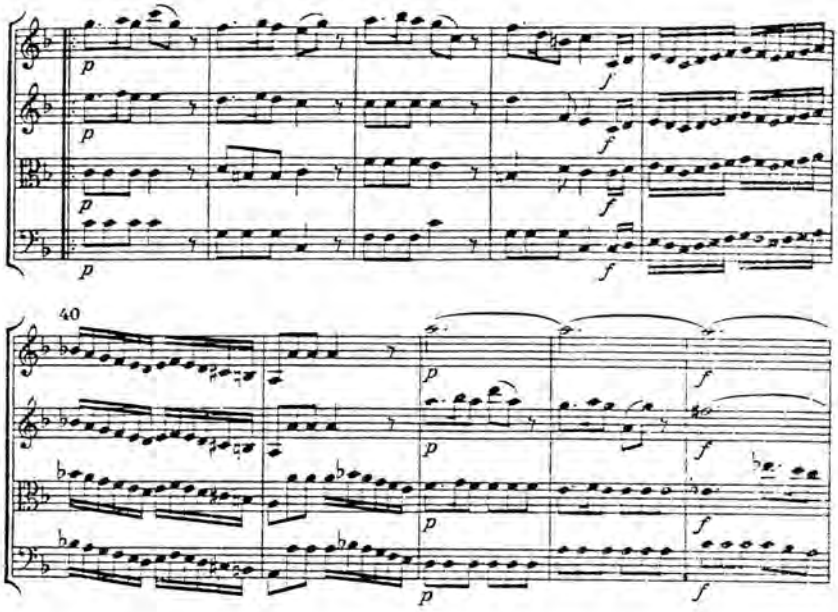
Ex. 13. Op. 1 / 4 - iii b. 6- 7.

and likewise, similar passages in Op. 1 / 2 - iii bars 11, 13 and 14.



Ex. 14. Op. 1/2 - iii b.9 - 15.

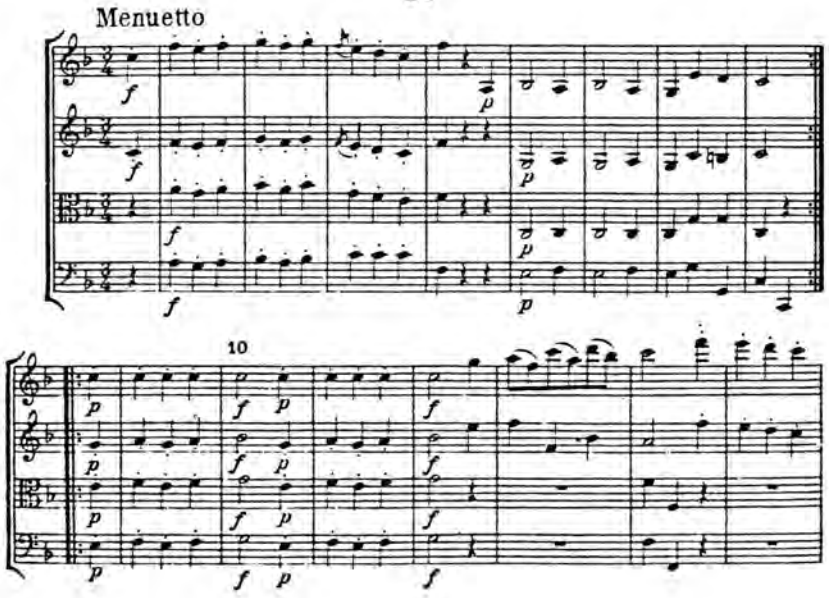
A vigorous bow stroke is required in both Op. 2 / 4 - i and Op. 2 / 4 - iv; the former contains semiquaver passages in bars 6, 10 and 39 to 40. The particular difficulty here is to maintain the pace for two bars. These phrases, where the three higher instruments play in unison and the cello an octave lower need a forte, but legato stroke near the heel.




Ex. 15. Op. 2 / 4 - i b.1 - 15.

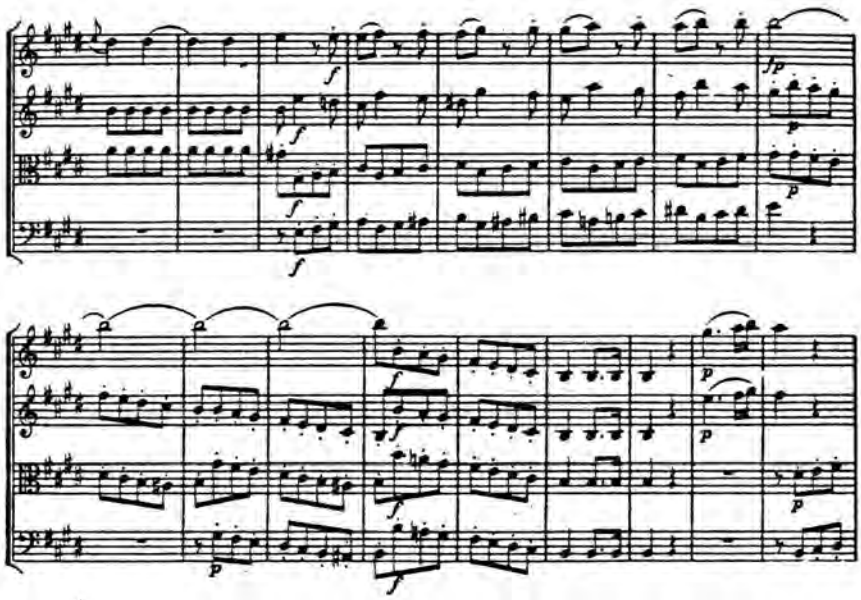
In the minuet an equally vigorous stroke is vital to the style of the forte passages.

IV




Ex. 16. Op. 2 / 4 - iv b. 1 - 15.

The scalic figures in Op. 2 / 2 - v necessitate numerous rapid shifts and for this reason the bowing becomes more problematic. This is paralleled by the difficulties of the left hand technique - the two facets together creating complications for the inexperienced cellist.



Ex. 17. Op. 2 / 2 - v b.63 - 79

The difficulty facing the performer is having to keep the bow in position while his left hand moves up and down the fingerboard changing positions. Here a controlled confident bowing technique is important.

## LEFT HAND TECHNIQUE.

In cello playing the left hand is responsible for:

i. Clean articulation;
ii. Fine intonation at any tempo,
iii. Rhythm,
iv. Tone colour.

"The primary functions of the left hand in string playing are to produce notes with the utmost purity of intonation, to link together the various registers as smoothly as possible, to enunciate the syllables in each musical phrase, and to supply intensity, vitality and colour through the vibrato. The fingers have their percussive qualities and can individualize every note and series of notes."[1]

Bearing all these things in mind the simple production of notes to an inexperienced cellist is, in itself, a major achievement. It is fascinating to study the increase in the number of notes the cellist was able to play and how this number is gradually added to in the cello part of the first ten quartets, as shown in the following table.

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1. Maurice Eisenberg, Cello Playing of Today, p. 11.

COLUMN I.

This shows the outer extremes of the compass, within which only diatonic notes are contained.

COLUMN II.

This shows those non-diatonic notes which occur within each movement.

1. Op. 1 / 6 C major.

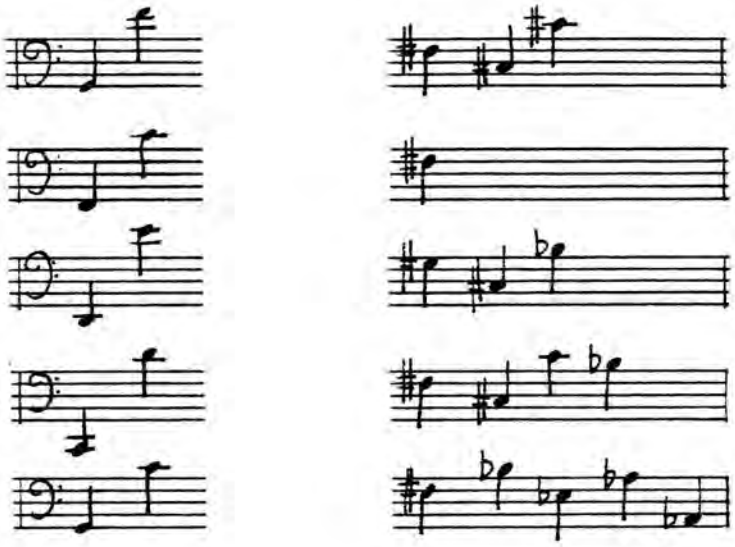
i. Presto assai.

ii. Minuet & Trio.

iii. Adagio.

iv. Minuet & Trio.

v. Presto.



2. Op. 1 / 3 D major.

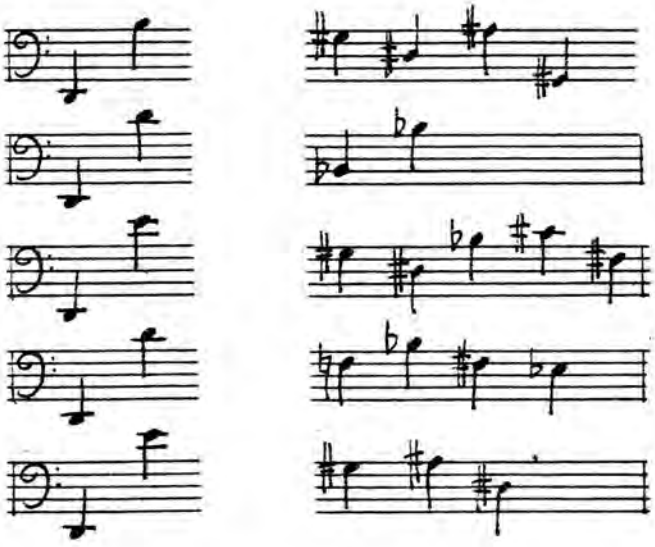
i. Adagio.

ii. Minuet & Trio.

iii. Scherzo Presto.

iv. Minuet & Trio.

v. Presto.



3. Op. 2 / 6 $B^{b}$ major.

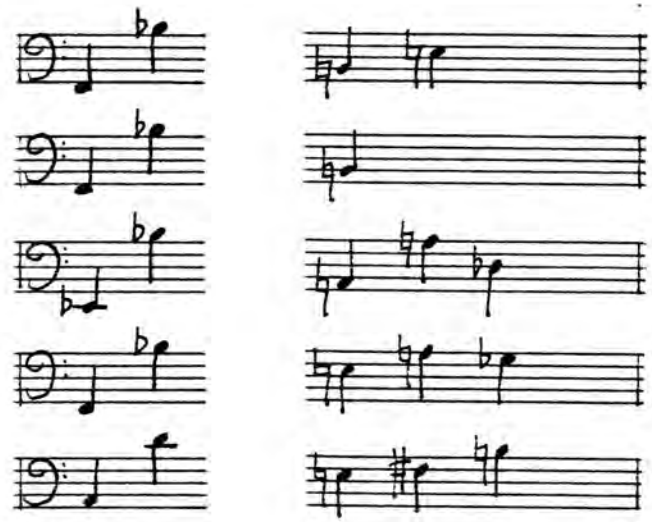
i. Adagio (Andante.)

ii. Minuet & Trio.

iii. Presto.

iv. Minuet & Trio.

v. Presto.



4. Op. 1 / 1 $B^{b}$ major.

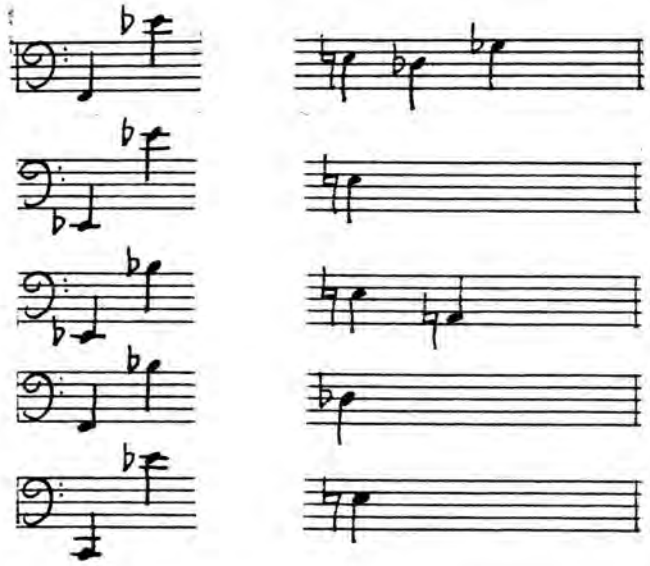
i. Presto.

ii. Minuet & Trio.

iii. Adagio.

iv. Minuet & Trio.

v. Presto.



5. Op. 1 / 0 $E^{b}$ major.

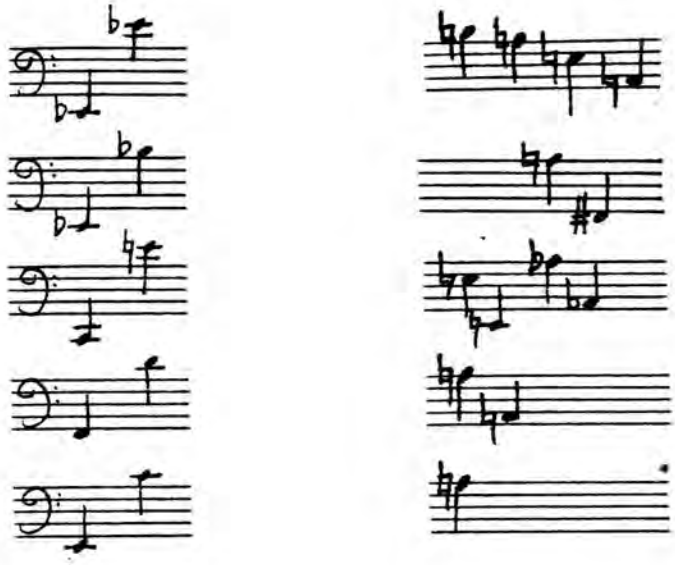
i. Presto.

ii. Minuet & Trio.

iii. Adagio.

iv. Minuet & Trio.

v. Presto.



6. Op. 1 / 4 G major.

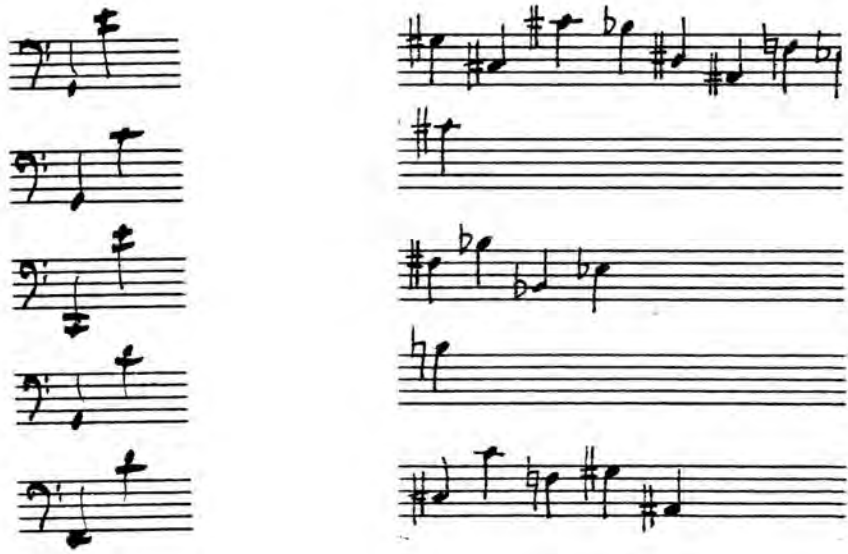
i. Presto.

ii. Minuet & Trio.

iii. Adagio.

iv. Minuet & Trio.

v. Presto.



7. Op. 1 / 2 $E^b$ major.

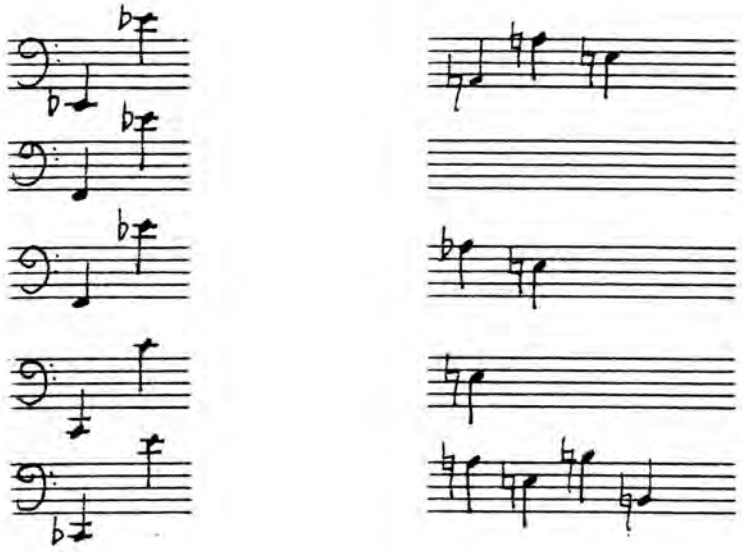
i. Allegro molto.

ii. Minuet & Trio.

iii. Adagio.

iv. Minuet & Trio.

v. Presto.



8. Op. 2 / 4 F major.

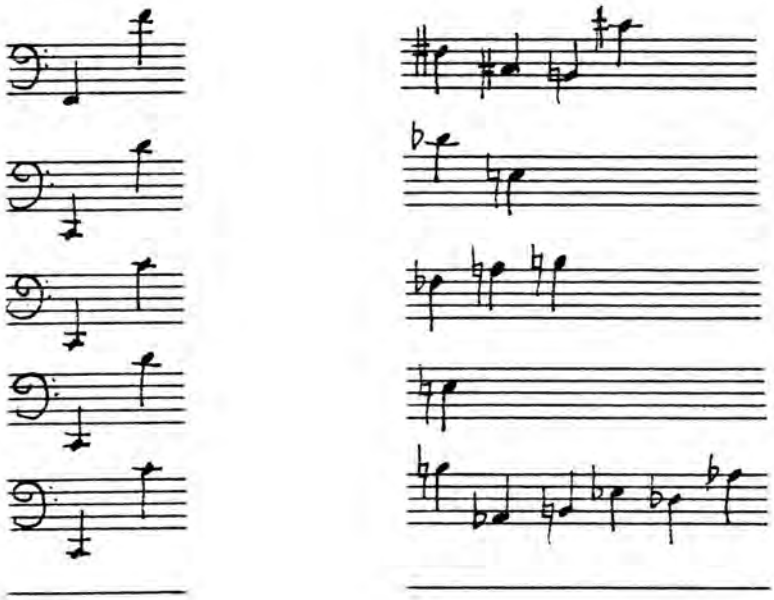
i. Presto.

ii. Minuet & Trio.

iii. Adagio.

iv. Minuet & Trio.

v. Allegro.



9. Op. 2 / 1 A major.

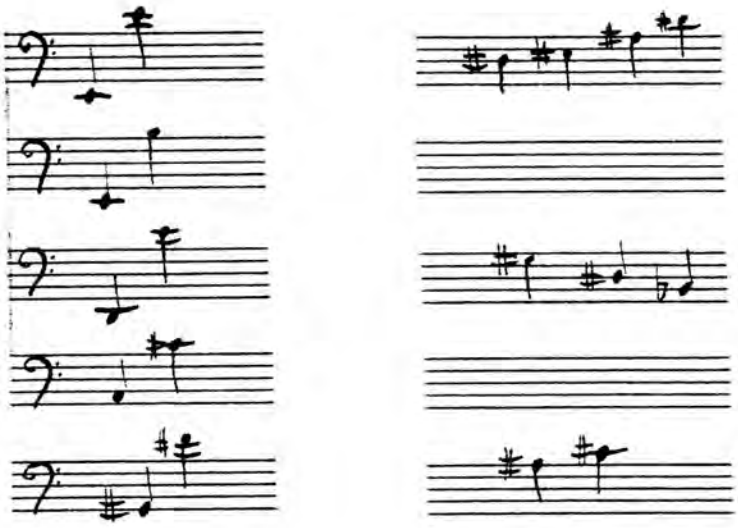
i. Allegro.

ii. Minuet & Trio.

iii. Adagio.

iv. Minuet & Trio.

v. Allegro molto.



10. Op. 2 / 2 E major.

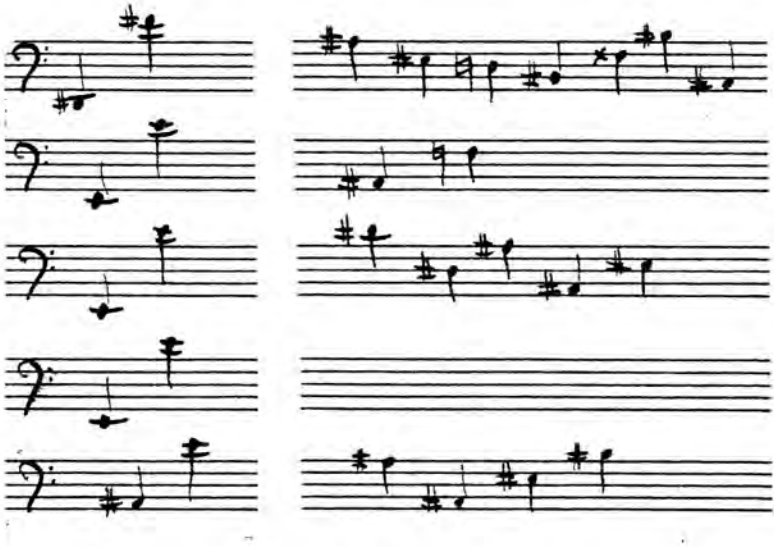
i. Allegro molto.

ii. Minuet & Trio.

iii. Adagio.

iv. Minuet & Trio.

v. Presto.



The production of these sounds requires a clean and assertive left hand action on the fingerboard, which articulates the note clearly and also sets the string in vibration, thus producing a ringing tone quality. This technique demands great finger strength but also depends on the relaxation of the muscles of the upper hand, which gives the player a bigger striking distance on to the fingerboard.

To achieve this technique in fairly quick passages, the arm and particularly the elbow (supported by the back muscles) should feel airborne and give support to the slightly arched wrist, allowing the hand to move freely and the fingers to strike the string in a vital but flexible movement.[1]

The left hand of the cellist expands and contracts according to lower and higher positions of the cello.

Of the four basic shapes of the hand which the cellist must know, only two are used in the early quartets[2]: firstly, the normal shape with one semitone space between each finger; secondly the extended shape with a whole-tone space between the first and second fingers and then a semitone between the second and third and a semitone between the

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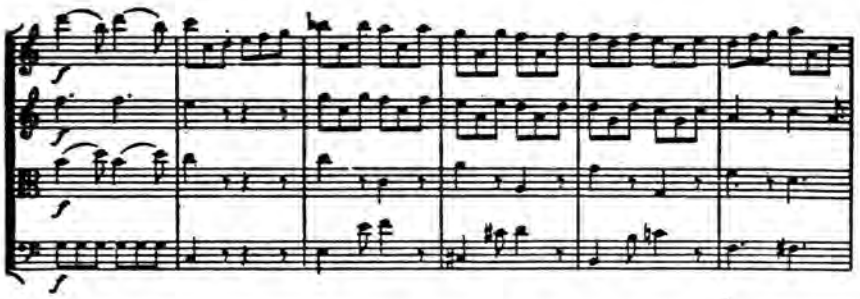
1. Although vibrato would, of course, be an added "attraction" in these early quartets, its use is not, strictly speaking, necessary until the Op. 20 quartets and an essential technical concept by the Op. 50.

2. The remaining two basic shapes, namely the octave shape and thumb position will be discussed at the appropriate time.

third and fourth fingers. The use of extended position is peculiar to cello playing and is not applicable to the violin or viola. In the forward extension, the hand extends towards the bridge while the tip of the first finger remains over the note in first position. The rest of the hand moves down the fingerboard a semitone and the thumb an equal distance down the neck. To assist this finger-hand movement, the arm moves forward and the elbow slightly higher; this movement being slightly exaggerated when the lower strings are used. These requirements are especially apparent in the quick movements of the Opp.1 and 2 quartets where a very small portion of the bow is used for each note and the rhythm is enunciated by the left hand technique.

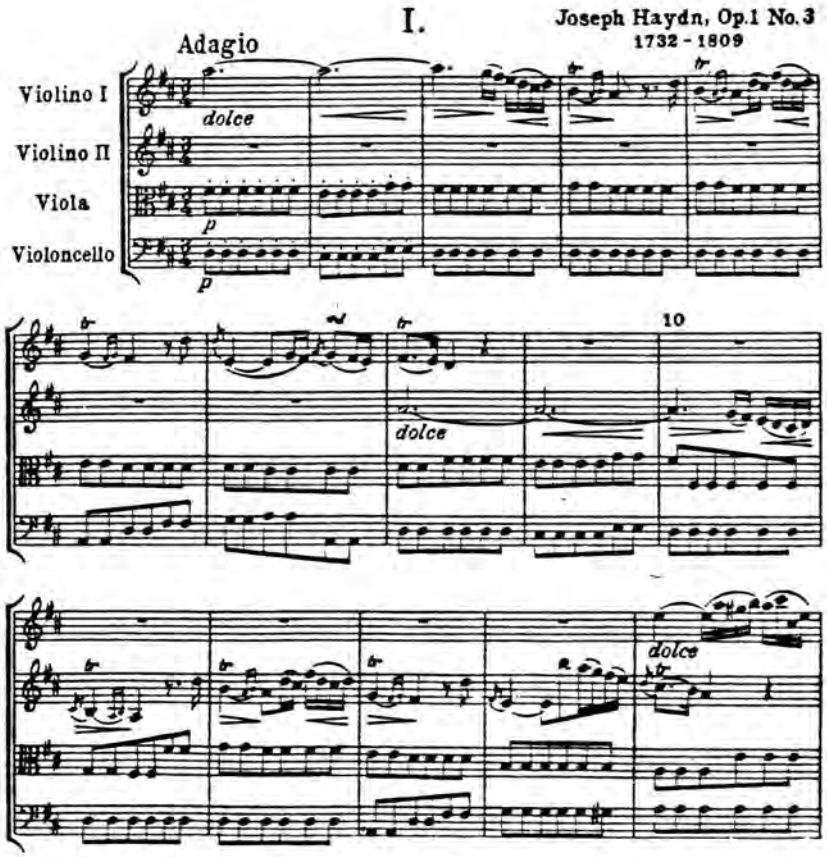
On the occasions when an open string is sounded immediately before using extended position the fingers are held above the string, with the tip of the first finger poised above its note. The thumb, anticipating the extension of the hand moves down the neck to be in position opposite the second finger, enabling it to support the hand in its new open position and allowing the fourth finger to stretch to the next note. Two examples of this finger extension are in bars 1 - 2 of Op. 1 / 3 - i and in bars 98 - 99 of Op. 2 / 1 - i.

To begin with the left hand technique is very simple, with the use of only first, second and third positions in Op. 1 / 6 in C major. With the percussive left hand the tone would be stronger and more buoyant, but apart from this there are no difficulties in the left hand technique and one can presume the cellist was capable of this standard of cello playing. There is one instance in the first movement where extended position would be used between the two C sharps:



Ex. 18. Op. 1 / 6 - i b.30 - 35.

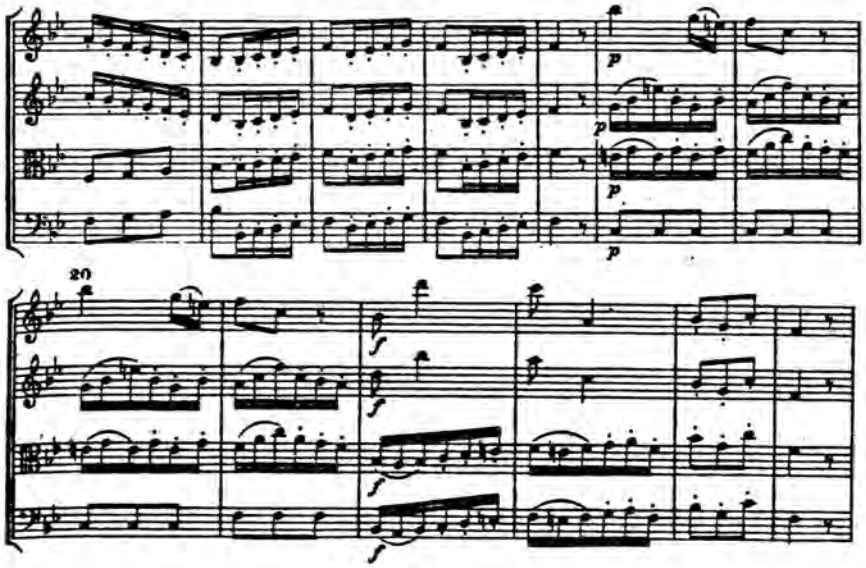
Equally uncomplicated is the bass part of Op. 1 / 3 - i, with its pulsating repeated notes. As open strings were used (rather than the same note stopped on the string below) there would be no need in this movement to move out of first and first extended positions.




Ex. 19. Op. 1 / 3 - i b. 1 - 15.

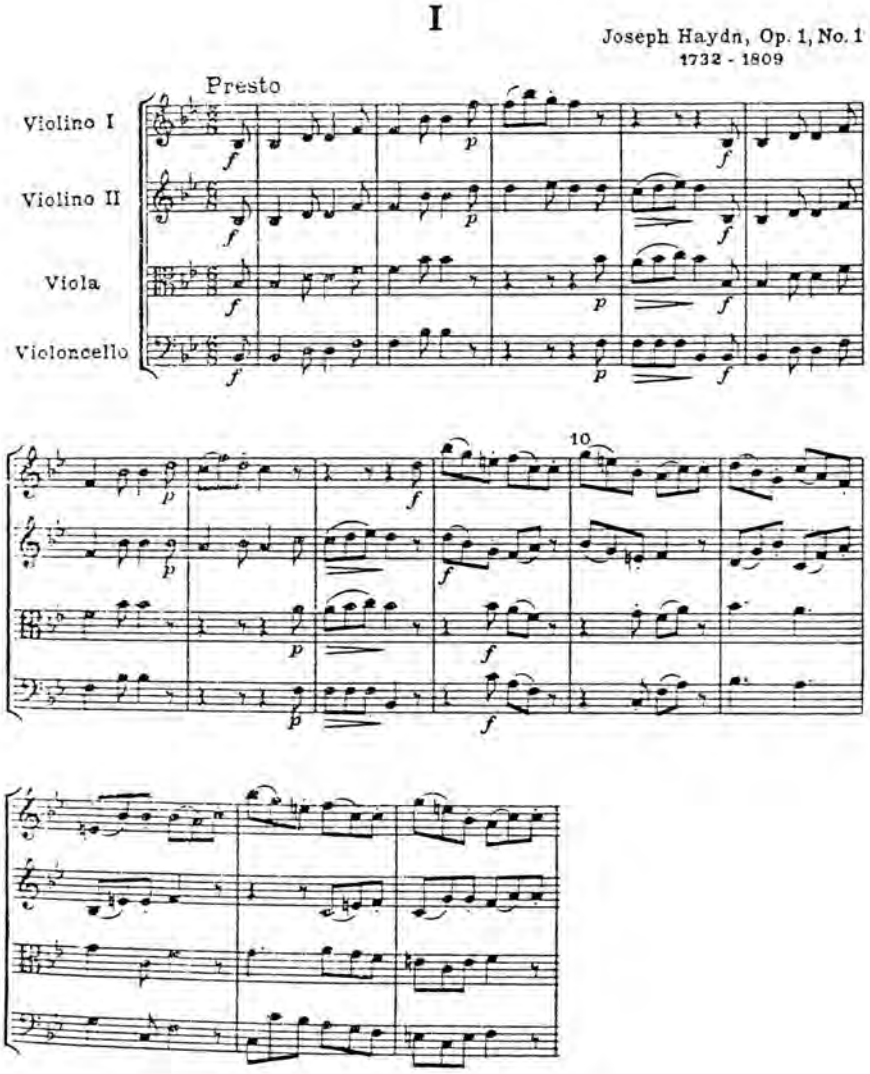
The Presto finale of Op. 2 / 6 brings to an end what one can call Haydn's very earliest stylistic experiments in this genre: his first (Op. 1 / 6) a boyish spontaneous work; the second (Op. 1 / 3 ) looking back to the old style and Op. 2 / 6 - looking forward to the classical.

Op. 2 / 6 - v bounces along on a cello line which in bars 14 - 16, 22 - 23 and 62 - 63 is given short semiquaver passages, all in first position, but adding a degree of agility to the technique.




Ex. 20. Op. 2 / 6 - v b.13 - 25.

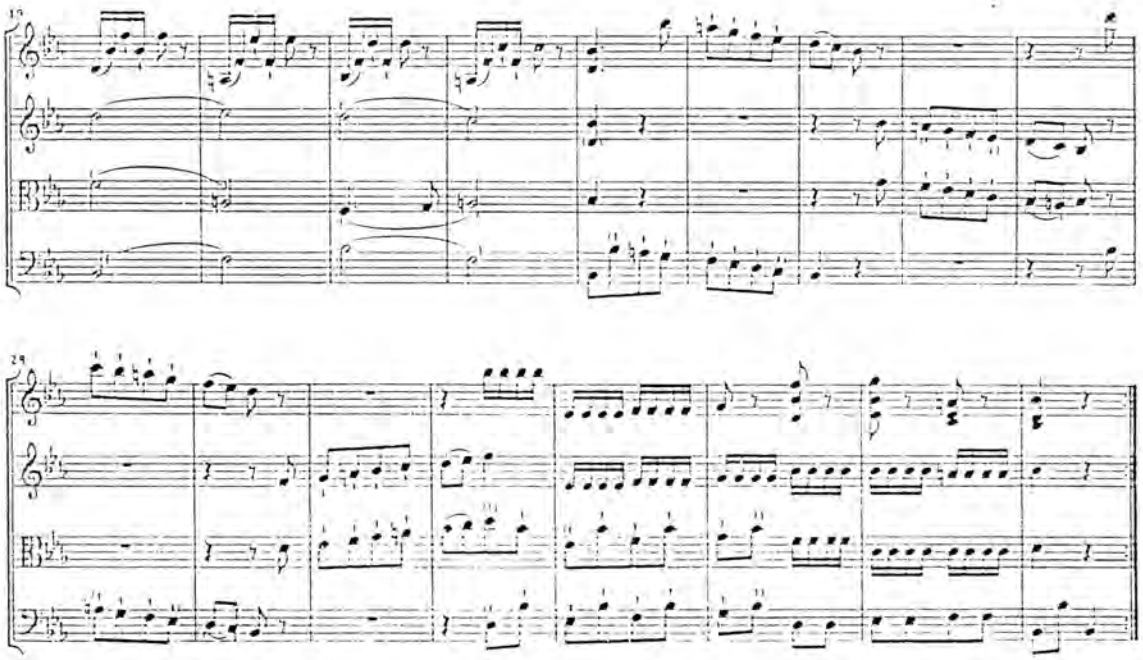
More use of simple broken chords and arpeggio motives occur in the next quartet, Op. 1 / 1.




Ex. 21. Op. 1 / 1 - i b.1 - 14.

The entire work is still simple for the left hand, apart from the Adagio previously mentioned.[1] The long-held note at the beginning of this movement would be executed today with an alive vibrato to keep the sustained note from fading but it is doubtful whether this technique would have been used at that time.

A typically percussive left hand is required in Op. 1 / 0 - i to create the crisp, bouncy tone.



Ex. 22. Op. 1 / 0 - i b.19 - 35.

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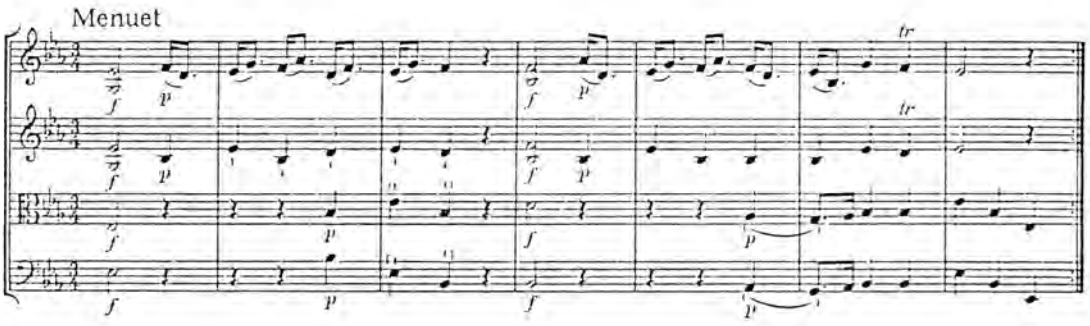
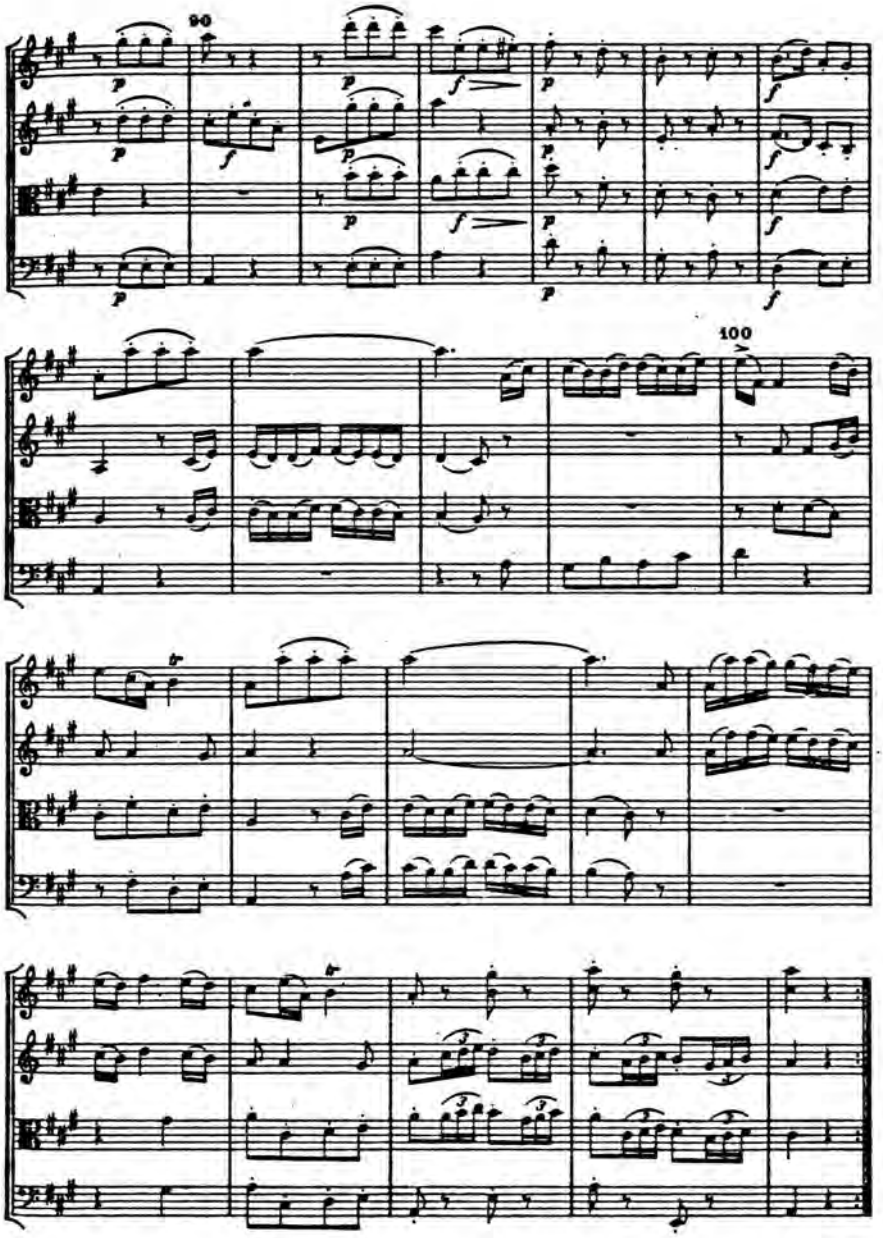
1. See page 46.

Rhythmical control, to guarantee precise articulation, is called for in the dotted rhythms of Op. 1 / 0 - ii. However, this difficulty is compensated for by the fact that the notes are simple to execute.



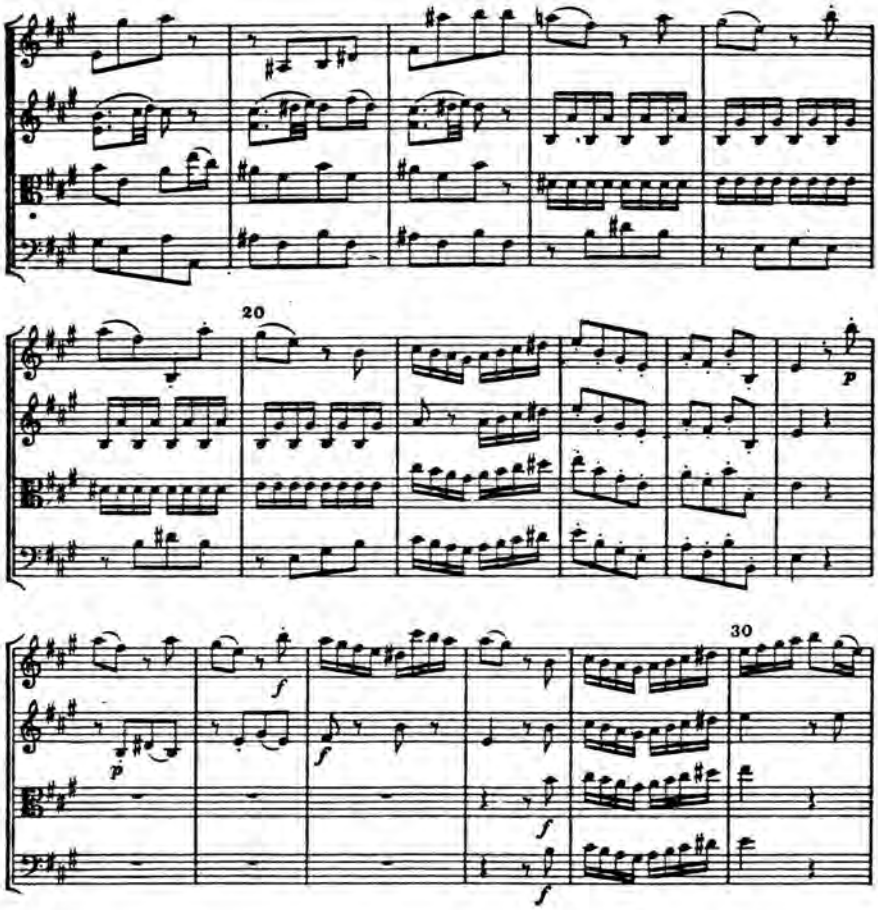

Ex. 23. Op. 1 / 0 - ii b.1 - 7.

Although the compass is not increased at all in Op. 2 / 1 - i, there is much left hand extension work partially conditioned by the use of the key of A major. This requires more percussive finger work without which the cello line would lack a vibrant quality.



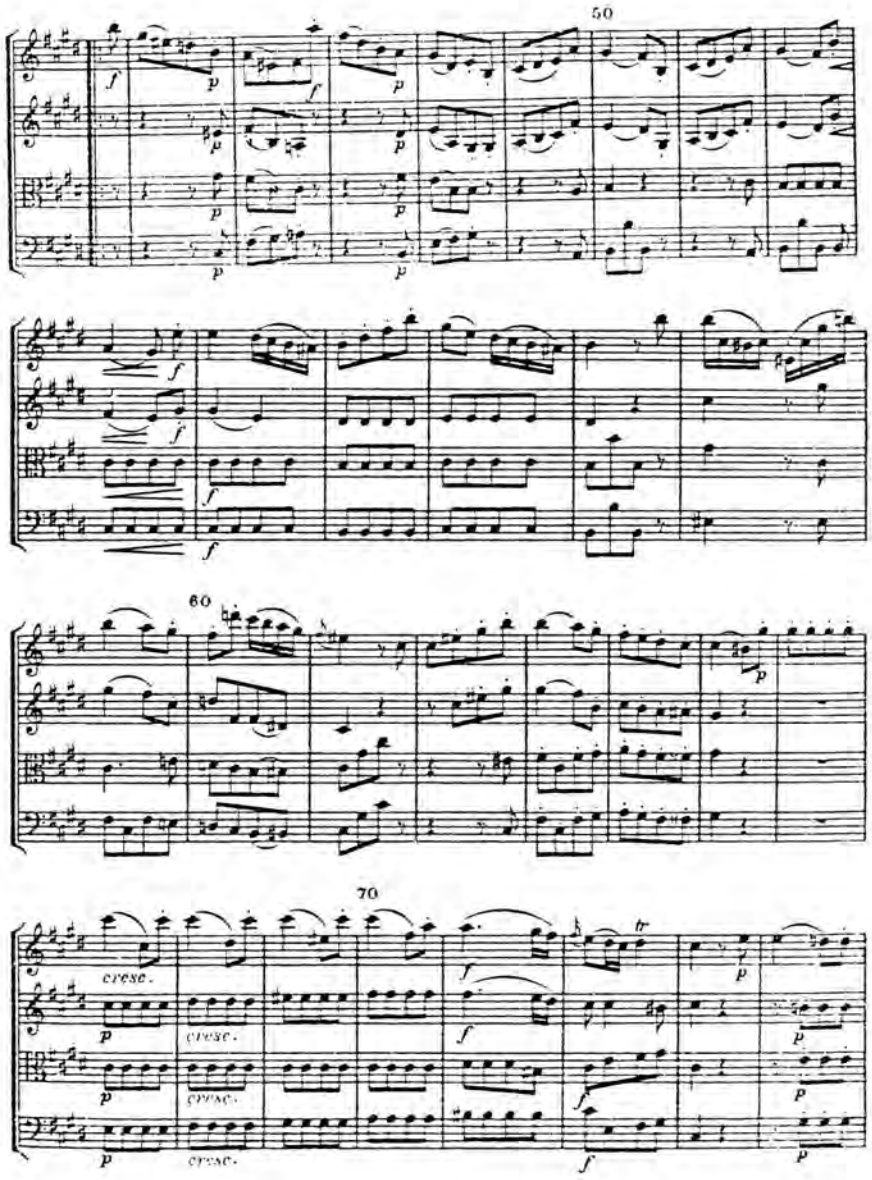

Ex. 24. Op. 2 / 1 - i b.89 - 110.

A great deal more is expected of the cellist in Op. 2 / 1 - v, where the modulation to E major necessitates the use of D sharp for the first time in these works. It first appears in an easy quaver passage in bar 17 and later in a scalic semiquaver one. Presumably the cellist in the first performance managed his part well as the next quartet is written in this key.

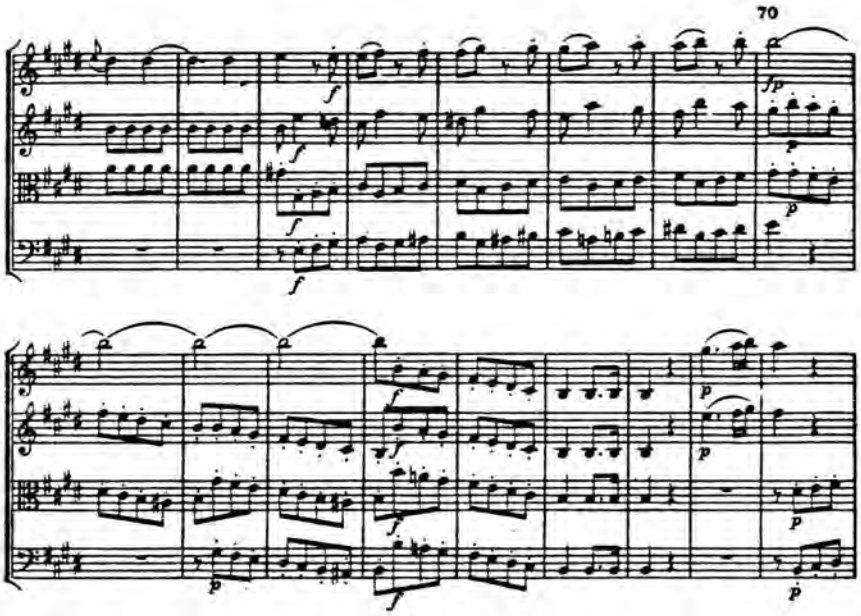



Ex. 25. Op. 2 / 1 - v b.14 - 30.

The bouncy, well-spaced, crisp first movement of Op. 2 / 2 is occasion for the use of notes not previously included in the compass and demands greater agility in getting around the fingerboard.




Ex. 26. Op. 2 / 2 - i b. 44 - 74.




Ex. 27. Op. 2 / 2 - v b.63 - 79.

The passage in bars 66 to 71 of the finale entails tricky shifts and crossing of strings at great speed, a technique which proves beyond doubt that the cellist of the early string quartets had improved tremendously.

## THE USE OF SPECIFIC KEYS.

Any composer writing for strings alone obviously bears in mind the key centres which are most advantageous for the instruments. In violin-dominated works of the seventeenth and eighteenth centuries the keys of D A and E were preferred. With regard to the elementary cellist, the most appropriate keys are those in which there is the maximum opportunity for using the open strings for the most important notes in any given keys, these being the tonic, sub-dominant and dominant.

In the keys of C G F and B flat four open strings are available for crucial key-notes, making these the easiest keys for the cellist. In D and E flat majors, three open strings are available; in A and A flat major two and in E and D flat major one, while in F sharp and B all strings would have to be stopped.

The development of the cellist's technique would be paralleled by the increasing ability to play in the more difficult keys.

Since Haydn's primary concern in writing his early quartets was to create music suitable to the performers as well as to the occasion, he would obviously keep these key difficulties in mind. This is not to state simply that he chose his key centres with the cellist's problems

foremost, but it does seem that the works display a certain concern with this basic practical consideration in regard to their key structure.

A table showing the main keys of all quartets and their five movements follows:

| | I.<br>Op. 1/6. | II.<br>Op. 1/3. | III.<br>Op. 2/6. | IV.<br>Op. 1/1. | V.<br>Op. 1/0. |
|---|---|---|---|---|---|
| i | C major. | D major. | B flat major. | B flat major. | E flat major. |
| ii | C major. | D major. | B flat major. | B flat major. | E flat major. |
| iib | F major. | G major. | E flat major. | E flat major. | C minor. |
| iii | V.<br>G major. | I.<br>D major. | IV.<br>E flat major. | IV.<br>E flat major. | V.<br>B flat major. |
| iv | C major. | D major. | B flat major. | B flat major. | E flat major. |
| ivb | C minor. | D minor. | B flat major and minor. | B flat major. | E flat major. |
| v | C major. | D major. | B flat major. | B flat major. | E flat major. |

| | VI.<br>Op. 1/4. | VII.<br>Op. 1/2. | VIII.<br>Op. 2/4. | IX.<br>Op. 2/1. | X.<br>Op. 2/2. |
|---|---|---|---|---|---|
| | G major. | E flat major. | F major. | A major. | E major. |
| | G major. | E flat major. | F major. | A major. | E major. |
| | G minor. | B flat major. | B flat major. | A minor. | E minor. |
| | IV.<br>C major. | V.<br>B flat major. | I.<br>F minor. | IV.<br>D major. | IV.<br>A major. |
| | G major. | E flat major. | F major. | A major. | E major. |
| | G minor. | C minor. | B flat major. | A major. | E minor. |
| | G major. | E flat major. | F major. | A major. | E major. |

The choice of key for the quartet as a whole obviously affects the key choice for its related movements. Whereas the normal relationship between movements would be tonic - dominant, tonic - tonic minor, tonic - relative minor,[1] Haydn deviates from this norm when these relationships become inconvenient for the elementary cellist.

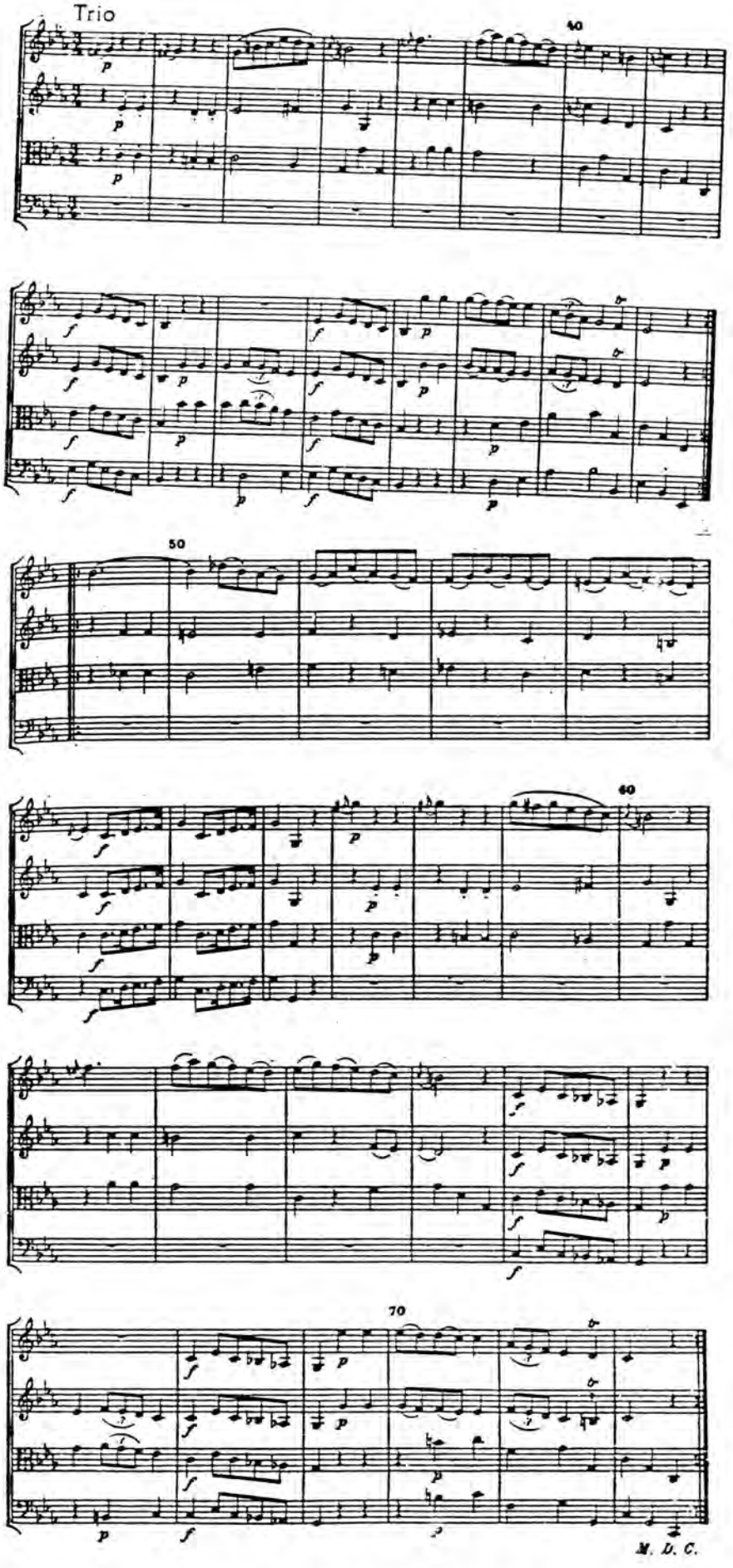
Consequently, and contrary to Haydn's normal custom,[2] a surprising number of slow movements (Op. 1 / 1, Op. 1 / 4, Op. 2 / 1, Op. 2 / 2 and Op. 2 / 6) are in the sub-dominant as all these keys would be easier than the dominant. On the other hand, in numbers 3 and 4 which are both in B flat major the dominant F would be an easier choice. Nevertheless Haydn again uses the sub-dominant E flat major but, attempting to obviate difficulties, the cello part carefully eschews the more inaccessable notes and only notes requiring first, second and third position are used.

By the same token Haydn sometimes uses surprisingly difficult keys in his trio movements but here again the notes chosen for the cellist are carefully adapted to his capabilities, in addition to which his part is usually liberally spaced with rests. The most striking example of this is the C minor trio in Op. 1 / 6 - iv where, during the modulation to F minor, the bass line is allocated to the viola, while the cello part remains silent.

---

1. The entire set of ten quartets have the major key as their main tonality.

2. It is interesting to compare at this point the keys used by Haydn in his early keyboard sonatas. In these three movement works the contrasting key is rarely used for the central movement and the sub-dominant key never occurs.




Ex. 28. Op. 1 / 6 - iv b.34 - 72.

In the only other instance of F minor tonality (the slow movement of no. 8) the cello part is almost entirely written in bars of repeated quavers. Therefore, when it is necessary to change position this can be achieved thus.


Ex. 29.Op. 2 / 4 - iii b.1 - 3.

Within individual movements the traditional tonal relationships of sonata form (tonic - dominant) are maintained with additional modulations to other closely related keys. However, in these modulations the keys are only briefly established for a few bars and it is therefore possible to limit the notes played by the cellist to those which are most manageable; for example when there is a modulation from G to its dominant the cellist for the most part plays only A, D and the occasional C sharp. This careful choice of notes within modulations occurs most frequently in the quick first and last movements.

## CHAPTER III.

## HISTORICAL AND SOCIOLOGICAL BACKGROUND TO OPP. 9 and 17.

Between the Opp. 2 and 9 quartets there is a gap of nearly ten years, during which period Haydn began his long association with the Esterhazy family. From the contracts he signed, firstly when taken into service with Prince Anton Esterhazy in 1761 and, secondly, with Prince Nicholas (when the latter succeeded to the title in 1762) it is clear that Haydn now had to write on demand, to fulfil the exacting requirements of his new patrons. However, Haydn was able to accept without question - indeed with the utmost conviction - the attitudes of his times and felt great affection for Prince Nicholas. The latter being an excellent baryton player, Haydn composed 72 baryton trios for him between 1762 and 1769. These works were written for baryton, viola and cello and the experience Haydn gained from writing for these three instruments, coupled with the fact that he wrote about 38 symphonies between 1759 and 1768, gave him greater fluency of technique (not least in his writing for the cello) when he started composing the Op. 9 quartets in 1768.

His motive in writing them was to satisfy his own creative instincts and the potential of his performers. The pleasure of playing these "elitist" works with his

most intimate friends was his first consideration; and, although they were possibly performed before a group of Haydn's friends or members of the Esterhazy family, this would have been secondary. Nowak likens Haydn's writing in the Opp. 9 and 17 quartets to that of a visionary of the sociological and political changes which were to take place in Europe. Here "democracy in the musical art work" with each part having its fair share (and requiring the same high standard of musicianship from the players) manifests itself for the first time.[1]

However, the influence of more immediate external forces is once again of great importance and appears here in the person of Luigi Tomasini who was a violinist of great ability, a sound musician, and available to perform the works which Haydn wrote. All the quartets from Op. 9 until the Salomon quartets (Op. 71/74) were written expressly with Tomasini in mind. He had been "discovered" by Prince Paul Anton in Italy and brought to Eisenstadt in 1757. In 1759 the Prince sent him back to Italy to further his studies and in 1761, aged 20, he returned to the court, in the same year in which Haydn obtained his post. Tomasini remained in this employ as Konzertmeister, until his death in 1808. He was a very close and dear friend of Haydn's, the latter being godfather to his second son, and in evidence of their close collaboration Haydn is quoted as saying "no one plays my quartets like Luigi".

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1. L. Nowak, Joseph Haydn, p. 214.

In addition to the influence on instrumental independence effected by Tomasini in Opp. 9 and 17 (which cannot be stressed too strongly) there is a divergence between the development of cello technique in the early string quartets and the Opp. 9 and 17 quartets. From Op. 9 / 1 there is an added vigour and a more assertive tone quality, giving a new dimension to the cello part and new responsibility to the performer. Presumably this is due to the fact that the playing of Joseph Weigl, the cellist of the baryton trios enabled Haydn to explore new possibilities for the instrument, and also increased his confidence in the rôle of the cello.

Joseph Weigl had been engaged as a cellist in the Esterhaza orchestra in May 1761 on Haydn's recommendation. He is described as an intimate friend of Haydn's and a fine musician for whom the beautiful and taxing cello solos in three of the composer's symphonies were written.[1] The friendly intimacy between composer and performer can be seen from the fact that Haydn and his wife were godparents to Weigl's eldest son Joseph who was born in 1766.[2]

Haydn wrote to his godson in 1794 when the latter was already an established conductor and composer :

> Dearest godson! When I took you in my arms after your birth, and had the pleasure of becoming your godfather, I im-

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1. E. Van Der Straeten, History of the Violoncello, p.188.
2. Robbins Landon, Haydn, vol. II, p.197.

> plored Omnipotent Providence to endow you with the highest degree of musical talent. My fervent request has been heard : - it has been a long time since I felt such enthusiasm for any music as for your "La principessa d' Amalfi" yesterday: It is full of ideas, it has grandeur, it is expressive; in short - a masterpiece. I heartily participated in the well-deserved applause with which it was received. Continue, my dearest godson, to write in this genuine style, so that you may once again convince the foreigners of that which a German can accomplish. Meanwhile, keep a place in your memory for an old fellow like myself, I love you affectionately and am, dearest Weigl, your bosom friend and servant, Joseph Haydn.[1]

Weigl senior remained in the Esterhazy service for eight years and then joined the opera orchestra in Vienna where he remained for the rest of his career. It is apparent, however, that the friendship with Haydn did not cease when he left for Vienna and, in fact, he was the cellist in the quartet that gave the first noteworthy performance of the Haydn Op. 33 quartets on Christmas Day 1781, in the Countess von Norden's apartments.

The cellist in the first performance of the Op. 17 quartets was Franz Xaver Hammer, a German violist, violoncellist and composer, who entered the Esterhazy service as Xavier (or Haverius) Marteau (Mortau or Marton).[2] His service as a cellist with the Esterhazys began in March, 1771,

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1. Robbins Landon, Correspondence, p. 143.

2. He himself spelt his surname as Marteau and his first name as Xavjer.

and in view of his large commencing salary of 412 gulden, 30 kr. and the subsequent increases, he must have had considerable ability.

On the 24th of June, 1771 he was involved in a "dreadful affair" in the Esterhazy Castle Tavern in which the oboist in the orchestra, Zacharia Pohl, who had been in service since June 1769 lost his right eye.[1] Haydn apparently acted as some sort of mediator although the eventual settlement took some six months to finalise. In a written agreement signed in the presence of Haydn, Pohl agreed to accept a payment of 49 gulden, 13 kreutzers in settlement of his claim for the damages suffered by him. This figure was to cover the cost of medical treatment. Pohl was, according to the Deed of Settlement, not entirely blameless. Having regard to the place where the incident occurred and the fact that Marteau did not purposely strike Pohl in the eye with the ring on his hand, one could probably fairly safely assume that the two gentlemen involved were not fully in their sound and sober senses when the brawl occurred.

Haydn's intervention in the matter could only have been to prevent the dismissal of both the culprits and it appears reasonable to assume that his prime motivation was to retain the services of Marteau as a cellist in the orchestra. His service was obviously more important than

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1. Robbins Landon, Haydn, vol. II, pp. 172 - 3.

Pohl's as the latter's commencing salary in 1769 was 240 gulden and was raised in 1772 to 343 florins 25 kr., whereas by October of 1771 Marteau was already earning a basic salary of 462 gulden.[1]

As regards the other instrumentalists in the early performances of Opp. 9 and 17, it is known that Haydn himself played the viola part in the intimate chamber music gatherings, but from the material available it cannot be ascertained who the second violinist was in these quartets.

In Opp. 9 and 17 we find a more mature Haydn, who had greater experience of both life and music. The greater emotional depth of these works is manifest in:

i) the use of minor keys (in Opp. 9 / 4 and 17 / 4).
ii) significant changes in melodic structure,
iii) more expressive and substantial minuet movements,
iv) more specific instructions as to tempo and expression and
v) an increase in the use of theme and variation movements (two in Opp. 9 / 5 and 17 / 3, as opposed to only one in Opp. 1 and 2).

In these works there is a development in all aspects of style and structure in comparison with Opp. 1 and 2.

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1. Robbins Landon, Haydn, vol. II, p. 173.

Indeed, Haydn, in later years was said to have referred to the Op. 9 quartets as his first works in this genre.[1]

This has, however, not prevented them from being subsequently unjustificably dismissed as works which are "more important historically than ... winning musically"[1a] with "more promise than real achievement"[1b] The construction of these quartets is entirely new as they are all in four movements. In withdrawing the second minuet and trio and thereby breaking away from the Viennese divertimento, Haydn was confronted with the need to reconsider the overall balance between movements, a problem he was able to grapple with through inside experience and practical involvement. However, due to the fact that the remaining minuet always stays in second place, it seems probable that the works were not necessarily influenced by the symphonies Haydn had been writing, where the minuet and trio had assumed third place. The new design necessitated a shift in the centre of gravity away from the slow movement which in Opp.1 and 2 had been the pivotal point of the work, bolstered on either side by minuets. Now, after the Italian style, Haydn shifts this centre towards the first movement giving it a more expansive character, often enhanced by slower speed (Moderato) and bigger dimensions, especially in Op. 17. In turn, this changed balance also puts the

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1. Barrett-Ayres, Haydn and the String Quartet, p.40.

1a. Robbins Landon, Haydn, vol. II, p. 318.

1b. Geiringer, Haydn, p. 260.

ensuing minuet into a more prominent position. Consequently, the minuets of Op. 9 and 17 become more expressive than before, partly due to the influence of C.P.E. Bach, and their style is no longer rococo but often assumes the character of an Austrian rustic dance. The slow movements retain, in essence, the same character as those of the earlier works. However, apart from the fact that they are more spacious, an added dimension of instrumental virtuosity is apparent in the first violin part, undoubtedly due to the influence of Tomasini.[1]

The finales remain a lightweight conclusion with instances of exuberant imitative writing. The last movement of Op. 17 / 6 is the most substantial found in these sets.

The Op. 17 works were written in 1771 and published the following year. They represented the culmination of the ground-work established in Opp. 1, 2 and 9, so much so that one can only say that in Op. 17 a milestone in the history of the string quartet was reached. These quartets were written for four independent solo instruments and any instrumental duplication or substitution would be unthinkable.

In neither Op. 9 nor Op. 17 is the total emancipation of the cello achieved, although there are definite moves in that direction, and the technical superiority of Weigl

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1. They are sometimes referred to as the Tomasini Quartets, see, Nowak, Haydn, p. 214.

over Albrechtsberger must be partly responsible for this. However, the full use of the different registers in the cello's compass are still not in evidence.

Technical consideration, however important, was still subservient to evolution of style, and, of course, it would be far too simplistic an equation to explain everything that happened in the bass-line in terms of purely practical, external considerations. Haydn obviously had an eye on both style and performance.

The order of the movements of Opp. 9 and 17 are as follows, with the newly-introduced tempo specifications underlined.

Op. 9. no. 1.

1. Moderato.
2. Menuetto. Poco Allegretto.
3. Adagio.
4. Finale. Presto.

Op. 9 no. 2.

1. Moderato.
2. Menuetto.
3. Adagio.
4. Allegro molto.

Op. 9 no. 3.

1. Allegro moderato.
2. Menuetto. Allegretto.
3. Largo.
4. Finale. Presto.

Op. 9 no. 4.

1. Allegro moderato.
2. Menuetto.
3. Adagio cantabile.
4. Presto.

Op. 9 no. 5.

1. Poco. Adagio.
2. Menuetto - Allegretto.
3. Largo cantabile.
4. Presto.

Op. 9 no. 6.

1. Presto.
2. Menuetto.
3. Adagio.
4. Allegro.

Op. 17 no. 1.

1. Moderato.
2. Menuetto - Allegretto.
3. Adagio.
4. Presto.

Op. 17 no. 2.

1. Moderato.
2. Menuetto - Allegretto.
3. Adagio.
4. Allegro di molto.

Op. 17 no. 3.

1. Andante grazioso.
2. Menuetto. Allegretto.
3. Adagio.
4. Allegro molto.

Op. 17 no. 4.

1. Moderato.
2. Menuetto.
3. Adagio cantabile.
4. Allegro.

Op. 17 no. 5.

1. Moderato.
2. Menuetto.
3. Adagio.
4. Presto.

Op. 17 no. 6.

1. Presto.
2. Menuetto.
3. Largo.
4. Presto.

## CHAPTER IV.

## THE MATURING CELLO TECHNIQUE IN OPP. 9 AND 17 AND THE FUNCTION OF THE CELLO IN THE EVOLUTION OF QUARTET STYLE.

### LEFT HAND TECHNIQUE.

The most obvious advance in left hand technique in Opp. 9 and 17 is the introduction of fourth position, necessitated by the increase in the upper compass of the instrument to g' in Op. 9 / 1 - iii and to a' in Op. 17 / 1 - iv. The following table indicates the registers used in each quartet.

OP. 9.

No. 1. 

No. 4. 

No. 2. 

No. 5. 

No. 3. 

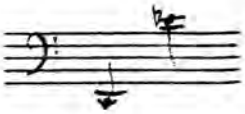
No. 6. 

OP. 17.

No. 1. 

No. 2. 

No. 3. 

No. 4. 

No. 5. 

No. 6. 

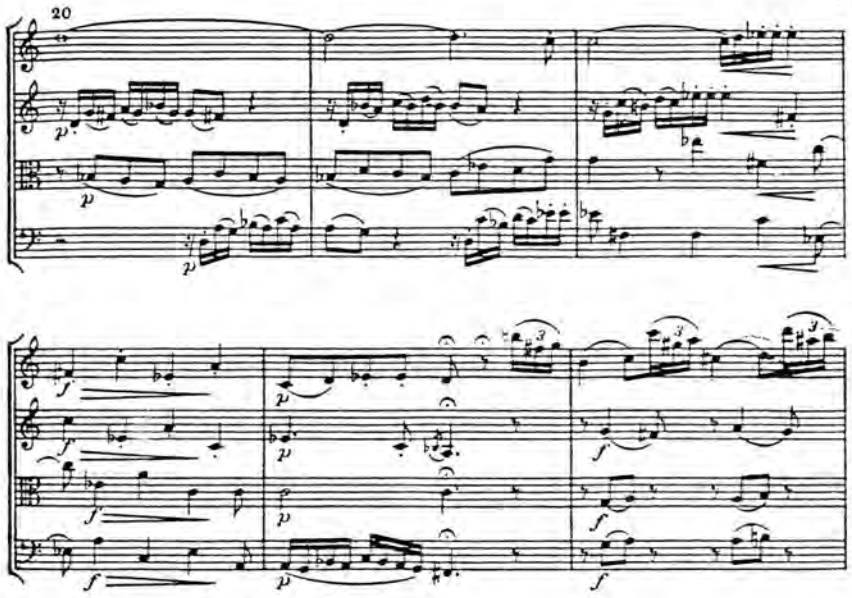
Apart from the increase in the compass an extra dimension of agility in the execution of left hand technique is found in these works. This aspect will be analysed under the following headings:

i) Percussive left hand.
ii) The use of shifts.
iii) The use of leaps.
iv) The use of scales and arpeggios.

i) Percussive left hand.

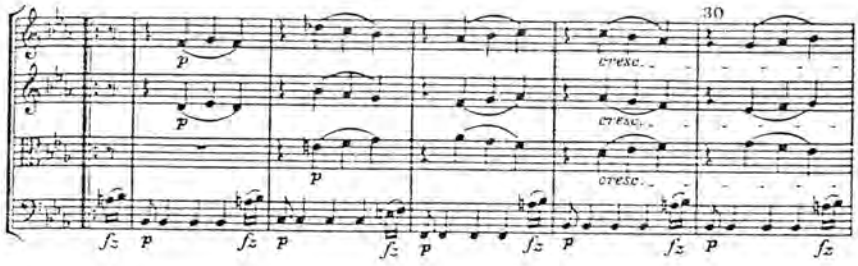
A percussive left-hand finger action is imperative throughout the Opp. 9 and 17 sets, where the strength of finger-contact with the string on the fingerboard would produce the necessary rhythmic vitality.

The first example of this technique is found in Op. 9 / 1 - i, bars 20 - 24. These cello phrases, marked piano, need a percussive quality from the left-hand fingers to enunciate the note with rhythmical precision.




Ex. 1. Op. 9 / 1 - i b.20-25.

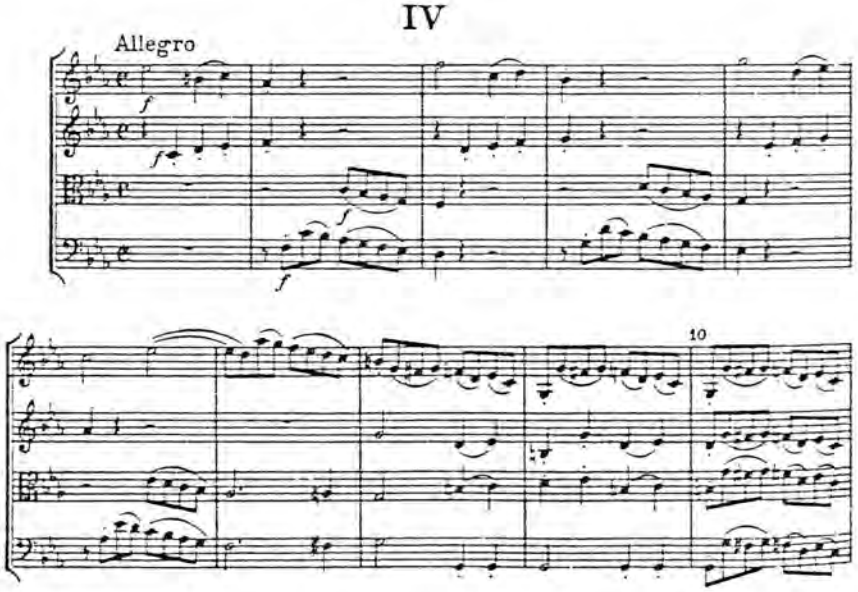
Another example is the cello's exposed entry in the argument section of Op. 9 / 2 - iv, where a strong left hand is essential to add rhythmic direction in the syncopated passage marked piano.




Ex. 2. Op. 9 / 2 - iv b.25 - 30

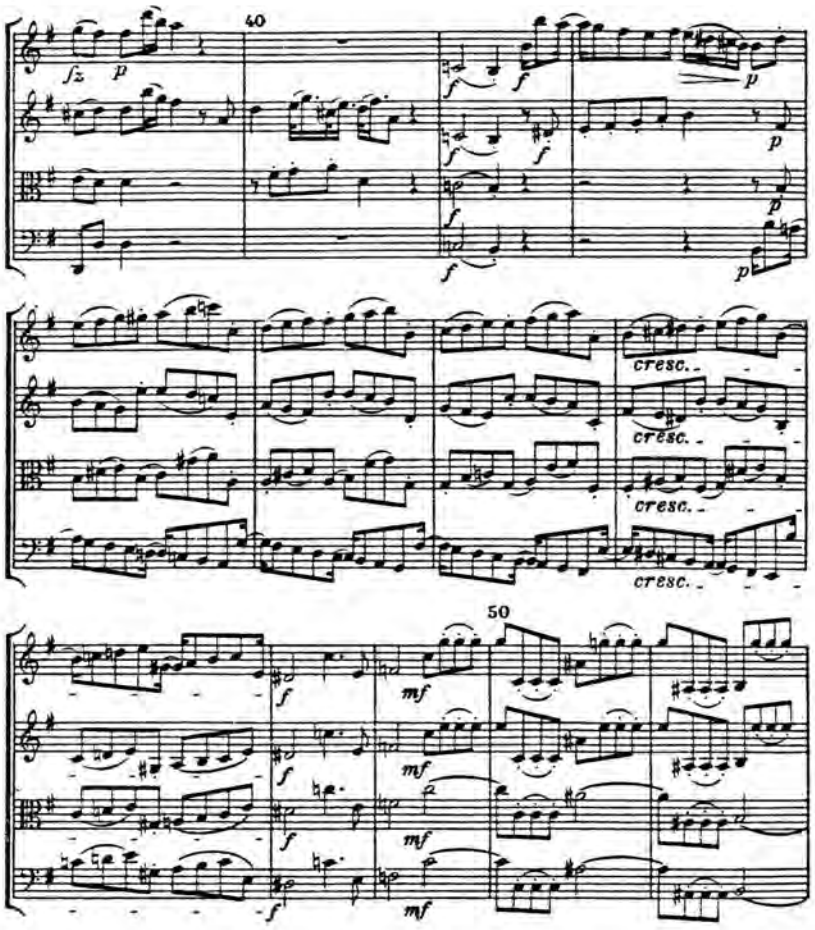
An exact left-hand precision in bars 2 - 6 of Op. 17 / 4 - iv is necessary in order to accentuate the cello's entry on the second quaver. The following six quavers which are firstly bowed in a group of two and then four, would be given their rhythmic declamation by the left hand.

IV




Ex. 3. Op. 17 / 4 - iv b.1 - 10.

In Op. 17 / 5 - i the syncopated passage in bar 17 necessitates the same percussive technique in conjunction with an added responsibility from the bowing technique. An extended form of this passage is found in bars 42 to 46.

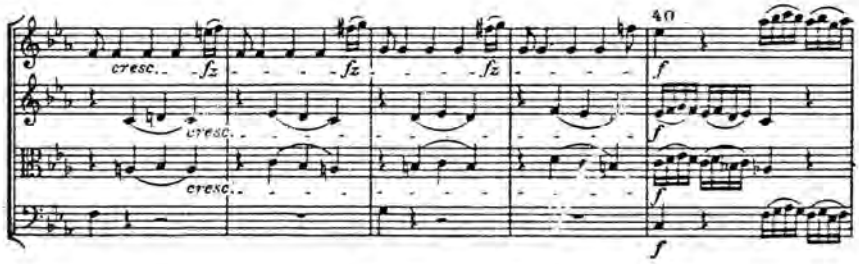



Ex. 4 Op.17 / 5 - i b.39 - 51.

ii) The use of shifts.

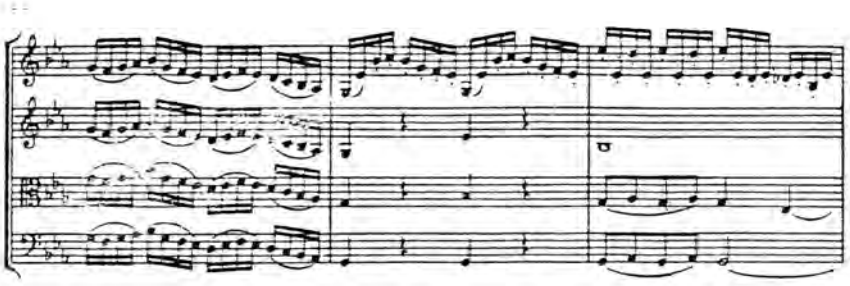
There are many phrases in which shifts in hand positions occur in these sets, but the few examples given below will adequately illustrate the fact that there is greater development in these two sets of works than encountered in the ten early quartets. The first instance is found in Op. 9 / 2 - iv where in bar 40, and again in bar 44, scalic passages make it essential to use shifts in the left hand.

In bar 40, playing the first semiquaver in second position would require a shift to first position on the sixth semiquaver of that bar.



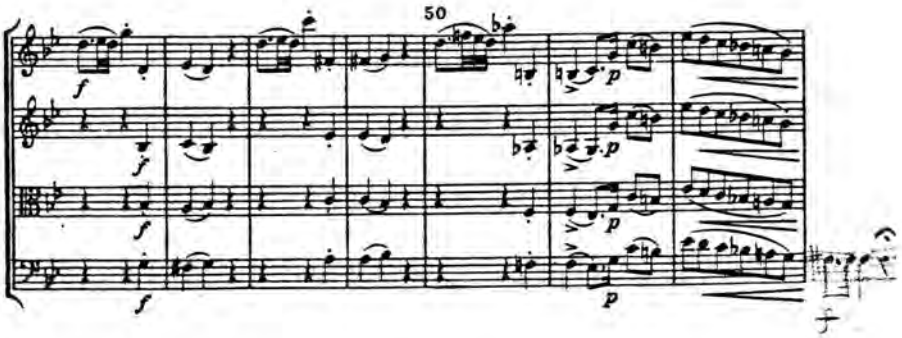

Ex. 5. Op. 9 / 2 - iv b.36 - 40.

Again, starting in second position in bar 44 it would be necessary on the third semiquaver to move to third position and back to first position on the seventh semiquaver of the bar.



Ex. 6. Op. 9 / 2 - iv b. 44-46.

In bars 50 - 53 of Op. 17 / 5 - iii, marked piano, the left hand would have to make numerous shifts to enunciate this phrase clearly.



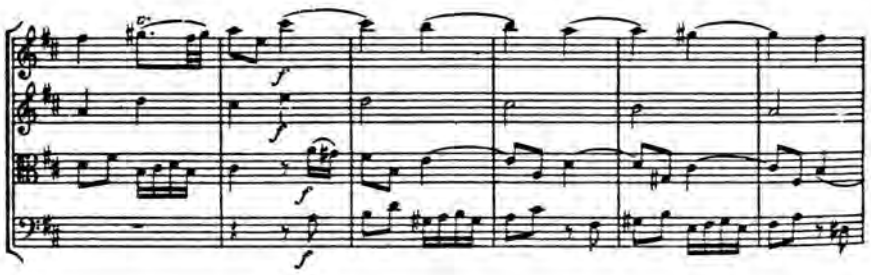

Ex. 7. Op. 17 / 5 - iii b.46 - 53.

Starting in first position on the last beat of bar 50 (the note repeated in bar 51) a backward extension to e flat is necessitated. From this point a forward extension to the g is followed by the last two quavers in first position. The hand then shifts up a semitone to second position, enabling the cellist to play the e' flat with the fourth finger, and the following two notes in the de-

scending scale in that position. The best way of playing the last three notes in bar 52 would be to move down the fingerboard a tone into third position, and cross to the d string to play b flat, a and g. The first note of bar 53 would then involve another shift-back to first position.

The forte passage in Op. 17 / 6 - iv,b.14 ff, necessitates the use of numerous shifts. The requirements to execute this apparently simple phrase are:

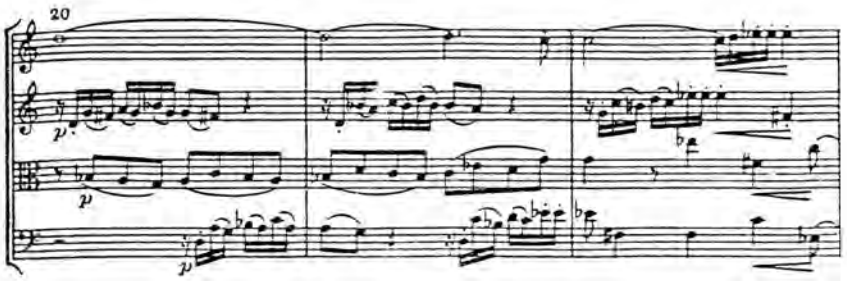
i) Starting in extended third position for a and b;
ii) Crossing the string and playing d' with the first finger;
iii) Playing the g sharp and a with the second finger which requires a semitone shift;
iv) Remaining in that position until the first note of the next bar, where a shift to fourth position would be necessary to play c sharp.



Ex. 8. Op. 17 / 6 - iv b.12 - 17

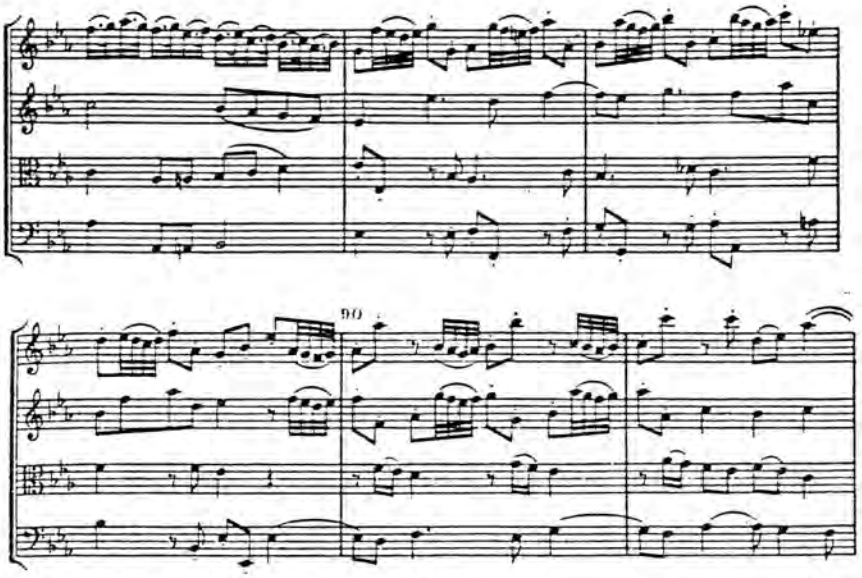
iii) The use of leaps.

Haydn made more use of a mobile cello line in these sets of quartets, the first example appearing in bar 21 of Op. 9 / 1 - i, from d to c', and in bar 22 from e' flat to f sharp. In these instances the cellist is constantly required to play leaps of both diatonic and chromatic intervals.



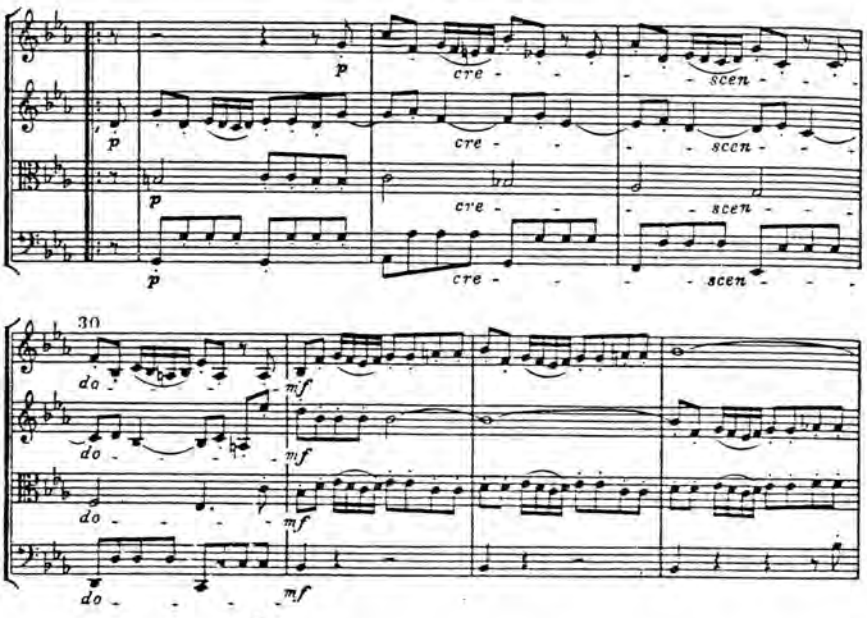

Ex. 9 Op. 9 / 1 - i b.20 -22.

There are many occasions where the cello part has octave leaps, for example in Op. 9 / 2 - i from bars 87 - 89. Here the left hand technique requires the use of the octave hand-shape. This encompasses the stretch of a tone and a semitone between the first and second fingers, a semitone each between the second and third, and third and fourth fingers. The first finger has to be placed on the lower string and the second to fourth fingers on the next, creating the octave interval.



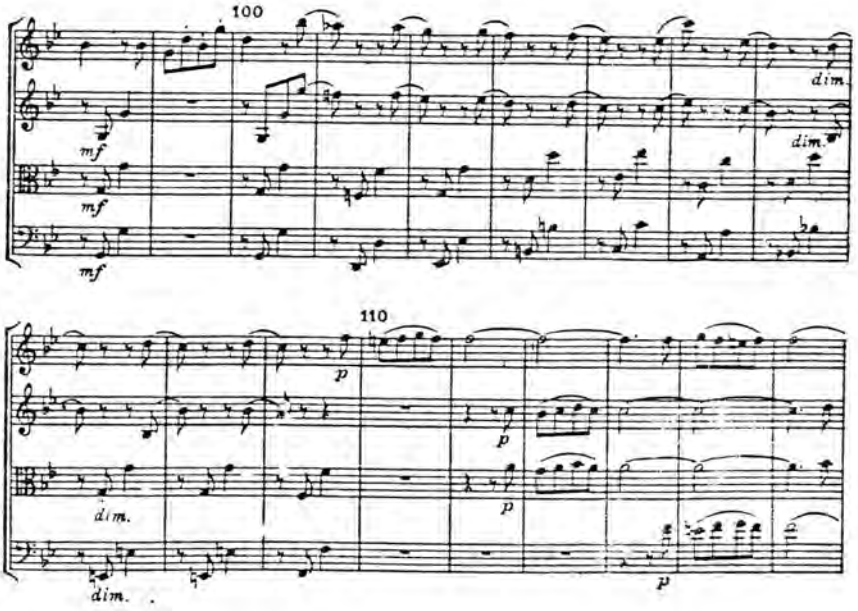

Ex. 10 Op. 9 / 2 - i b.86 - 91.

An identical situation is found in Op. 17 / 3 - iv;



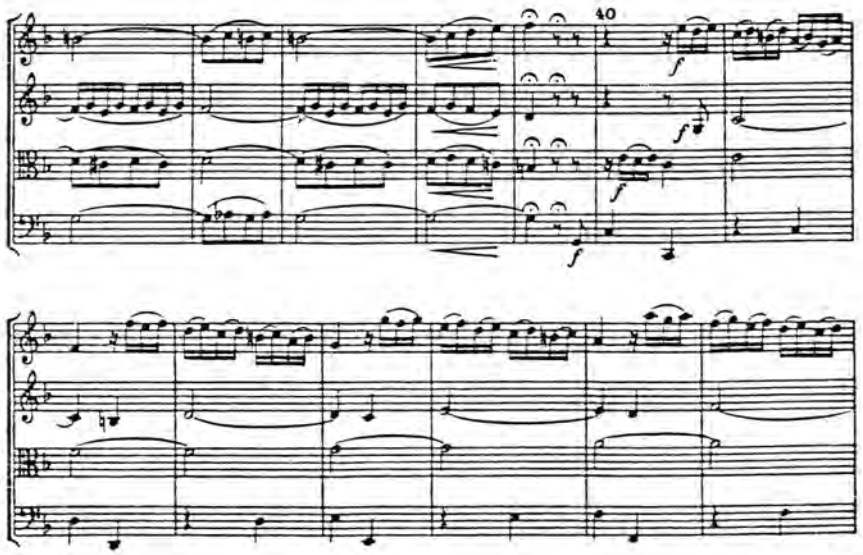

Ex. 11 Op. 17 / 3 -iv b. 26 - 33

and similar examples occur in Op. 9 / 5 - iv, from bars 100 to 109,



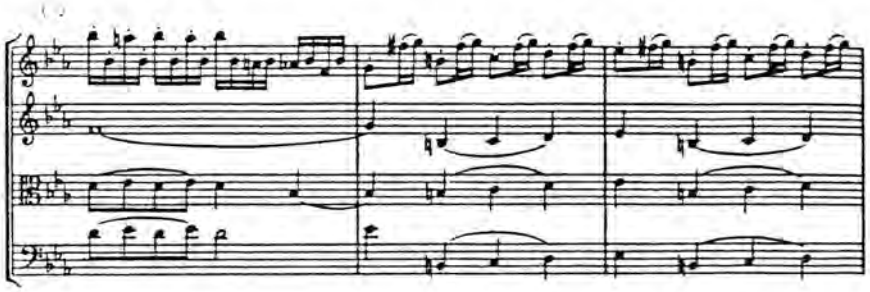

Ex. 12. Op. 9 / 5- iv b.98 - 115.

and in Op. 17 / 2 - iv, using a different rhythm.



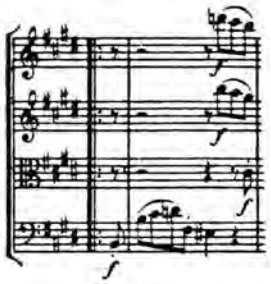

Ex. 13. Op. 17 / 2 - iv b.35 - 47.

In Op. 9 / 2 - iv, bar 15, the cello continues in a lower range after having descended an eleventh from e' flat to B natural.



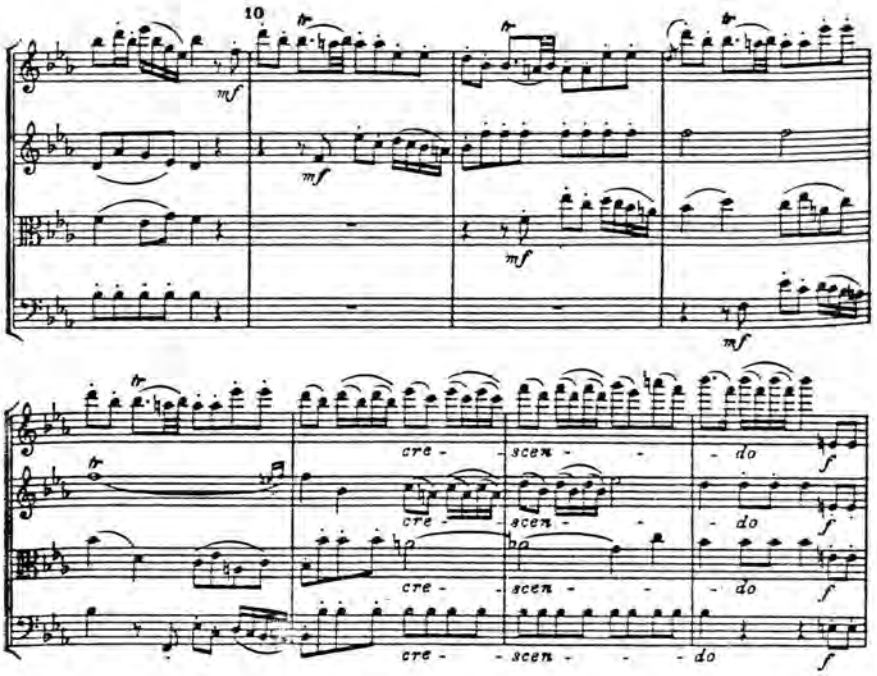
Ex. 14. Op. 9 / 2 - iv b.14 - 16

An exposed octave·leap between bar 43 and 44 of Op. 17 / 1 -i is followed by a leap of a descending sixth.



Ex. 15. Op. 17 / 1 - i b.43 - 44.

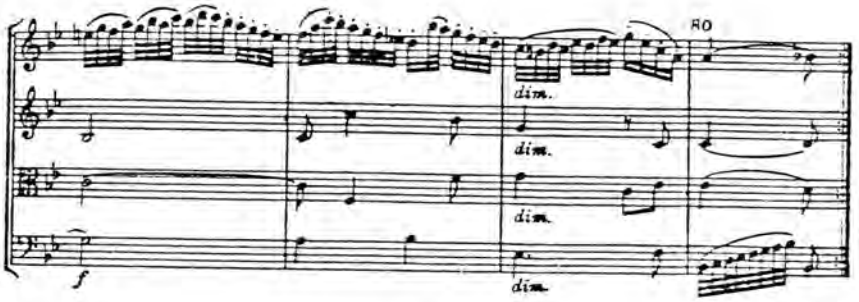
A leap of a seventh opens the motive which Haydn uses a great deal in the fourth movement of Op. 17 / 3, from bar 12 onwards.




Ex. 16. Op. 17 / 3 - iv b.9 - 16.

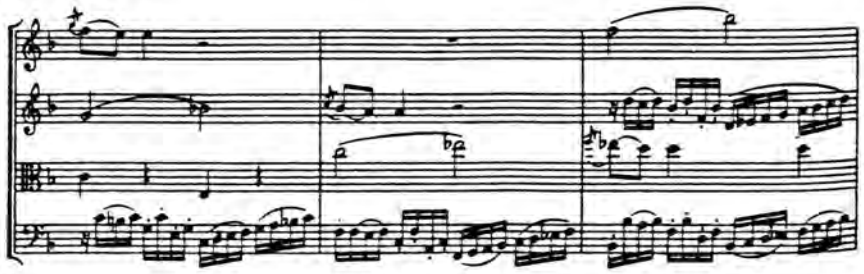
iv) <u>The use of scales and arpeggios</u>.

The execution of scale passages in these two sets needs greater dexterity. Evidence of this is found in the fast demisemiquaver passages of Op. 9 / 5 - i, bars 68, 72 and 80, all of which call for a fleeting left hand technique.



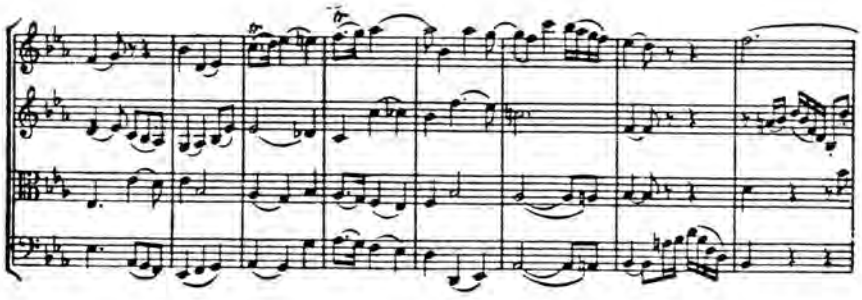

Ex. 17. Op.9 / 5 - i b.77 - 80.

The ability to move quickly around the fingerboard is expected of the performer in the scalic and arpeggiated passages of Op.17 / 2 - i, bars 46 - 48.



Ex. 18. Op. 17 / 2 - i b.46 - 48.

The performance of leaps, arpeggios and scales abounds in Op. 9 / 5 - iii, especially in bars 7 - 14. In bar 13 at the end of the cadence on B flat the cello line leaps up a major seventh and is followed by an arpeggiated phrase in semiquavers returning to the original note.



Ex. 19. Op. 9 / 5 - iii b.7 - 14.

BOWING TECHNIQUE.

The preliminaries of bowing technique in the cello part already present in the early quartets acquire added dimensions of definition and articulation in Opp. 9 and 17. The basic bowing strokes will be isolated under the following four headings:

i) Legato.
ii) Detached.
iii) Staccato.
iv) Martelé.

There will then be a discussion of these diverse bowing techniques as they appear in conjunction with each other, sometimes within the same phrase.

i) Legato.

Yehudi Menhuin, when listing the qualities of bowing, defines legato as an "infinite melodic extension, eternally, as if drawing on God's breath"[1] In order to achieve this quasi-poetic ideal in legato bow strokes, the whole length of the bow must be utilised, necessitating the use of the back muscles, shoulder, arm, hand and fingers. The weight of the arm should be evenly distributed to all parts of the hand, thus allowing each finger, and the thumb, to play

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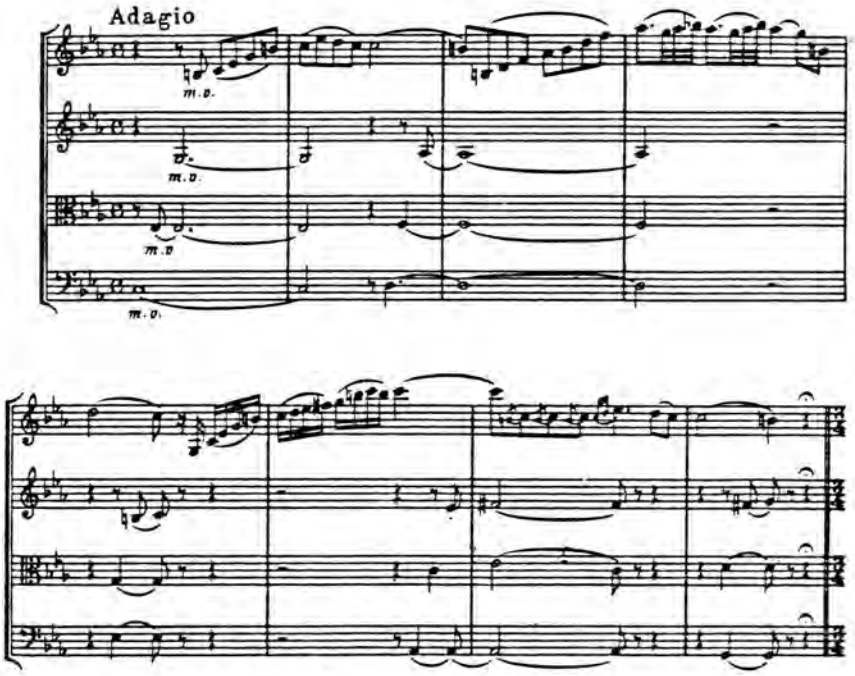
1. Menuhin & Primrose, Violin & Viola, p.69.

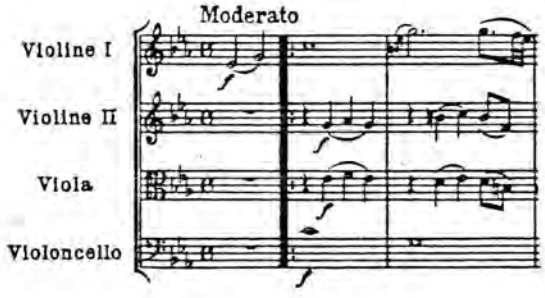
their important rôles in sustaining the notes. Finger control is especially needed when the bow changes direction, in order to safeguard against a break in the sound. This is far more difficult to do at the heel of the bow than at the point, and requires a lightening of the arm weight at the heel, in addition to a slight rolling of the bow stick to avoid any harsh sounds.

As the bow is heavier at the heel than at the point, the stroke has to gain speed towards the point to keep the intensity of the tone equal throughout. In addition, the bow stick, tilted towards the fingerboard at the beginning of a down-bow would gradually turn as the stroke moves from the heel to the point; this increases the contact of the hair with the string and together with the increasing bow speed, maintains an even tone. This technique is obviously subject to differences of tempo and context, as the following example from the opening of Op. 9 / 2 - iii illustrates:



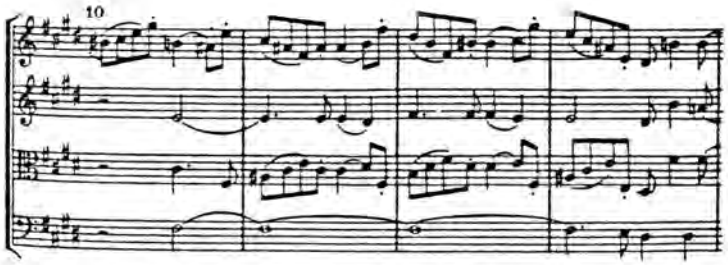

Ex. 20. Op. 9 / 2 - iii b.1 - 8.

The prolonged legato bowing in bars 1 - 8 necessitates the use of a very slow-moving stroke, whereas the long-held notes at the beginning of Op. 17 / 4 - i require a fast bow stroke, the difference between the two examples being caused by their respective speed and dynamics.



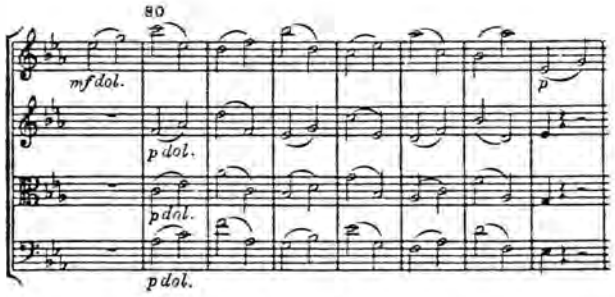

Ex. 21. Op. 17 / 4 - i b.1 - 3.

Long, fading notes appear throughout Op. 17 / 1 - i. To achieve the desired effect, immediately after applying the initial pressure to set the string in vibration the arm weight must gradually be decreased.



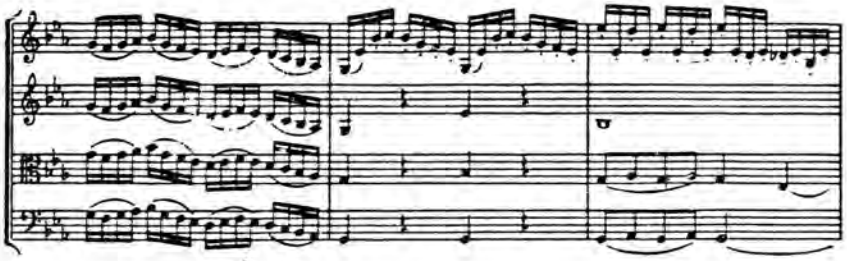

Ex. 22. Op. 17 / 1 - i b.10 - 13.

Notes of equal value and dynamics need a carefully measured stroke. In bars 80 - 85 of Op. 17 / 4 - i the minims, two to a bow, do not need an intense stroke, as the speed of the bow would be quite fast. However, the cellist would have to anticipate each string-crossing by raising or lowering the arm to give a smooth rendering of this passage.



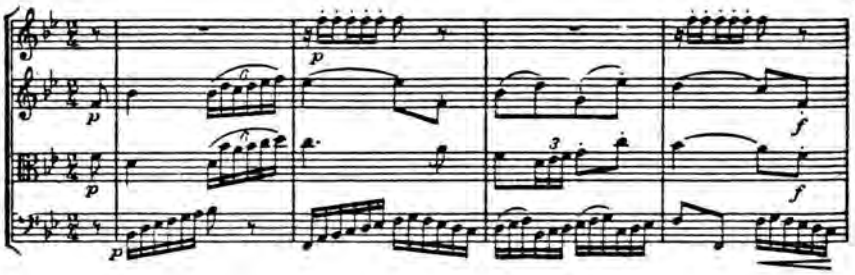

Ex. 23. Op. 17 / 4 - i b.79 - 86.

The legato stroke is found in a quite different context in the last movement of Op. 9 / 2, where groups of four semiquavers are to be played in one bow. A smooth bow change, executed by lightening the arm weight at each end of the bow is imperative to keep the sustained quality throughout this phrase.



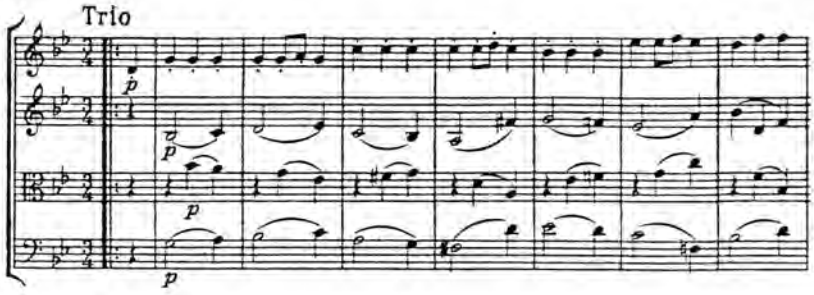
Ex. 24. Op. 9 / 2 - iv b. 44 - 46.

In Op. 9 / 5 - i the groups of legato sextuplets require a smooth bow. Due to the number of notes to be played in one stroke an extremely accurate measure of bow has to be apportioned to each note to ensure that the group of notes can be phrased correctly.




Ex. 25. Op. 9 / 5 - i b.40 - 44.

Notes of different lengths played in one bow are found in Op. 17 / 5 - ii, calling for the use of a carefully measured bow for the minim-crotchet rhythm.




Ex. 26. Op. 17 / 5 - ii b.32 - 39.

ii) Detached Bowing.

> No matter how much vitality is brought to a performance by the left hand, it will only be carried over if the right acts in complete accord at every point. The functions of bowing are complex and numerous; the fundamental acts of drawing the bow backward and forwards over the string to achieve continuity of tone ... represents only one of its major roles. Others consist of giving colour, variety and character to the interpretation through helping in the articulation, accentuation, punctuation and inflexion, and in executing specific feats.[1]

The final remarks in this quotation are particularly pertinent to detached bowing, of which there are two chief varieties; the first has no perceptible cessation of sound between the notes, and occurs frequently in ordinary unbowed passages; and the second involves a detached stroke ending with an abrupt cessation of movement, where a small portion of the bow is generally used for each note. The portion of bow used, of course, depends on the note values and tempo.

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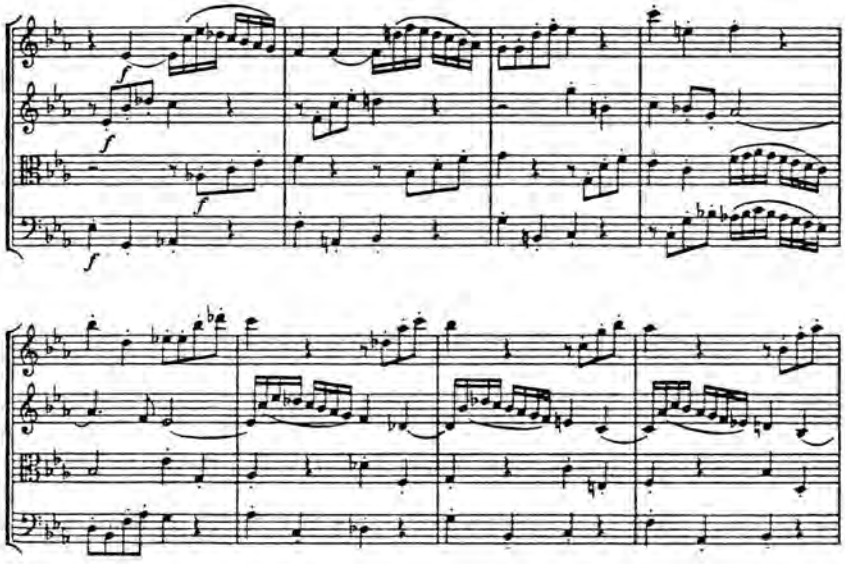
1. M. Eisenberg, Cello Playing of Today, p. 40.

The second type, where the cessation of bow movement is abrupt, is especially apparent in the middle-of-the-bow context, the predominant bowing technique of the Fürnberg quartets, and again its use is extremely widespread in Opp. 9 and 17.

A specific illustration of detached bowing, albeit not in the middle-of-the-bow, is found in Op. 9 / 2 - i b. 51 - 58 where it is required for the heavy staccato crotchets, marked forte. Here more arm-weight and an abrupt stop at the end of the stroke gives the required definition.



Ex. 27. Op. 9 / 2 - i b.51 - 58.

iii) Staccato.

> When deciding whether and to what extent the bow should leave the string, each case has to be considered individually from many standpoints, including that of the accoustical effect.[1]

Staccato is executed by placing the bow on the string, applying pressure to the bow, and releasing it while making the stroke. As the pressure is released, in contrast to the detached stroke, the bow lifts slightly, or more definitely, depending on the context.

Genuine staccato (as opposed to detached bowing) needs a tighter bow grip, very little bow movement and a slight lift at the end of each stroke for the crisp, accurate and more pungent quality. This type prevails in all the finales of Opp. 9 and 17. The following extract illustrates the typical rhythmic vitality these movements require.

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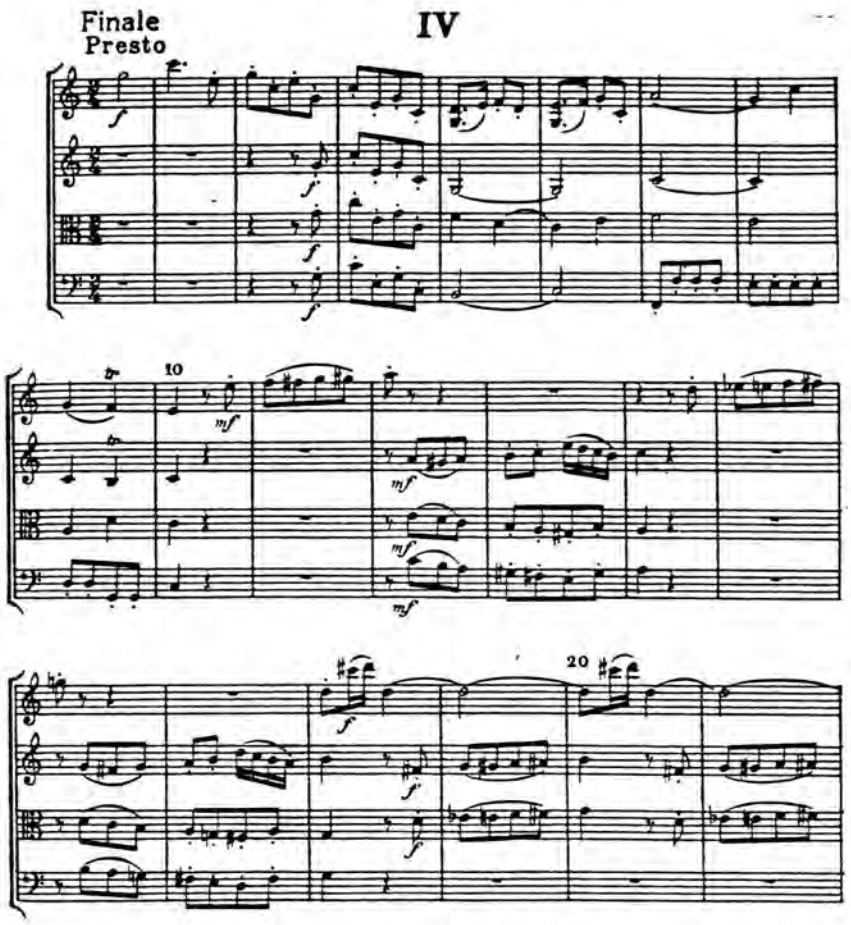
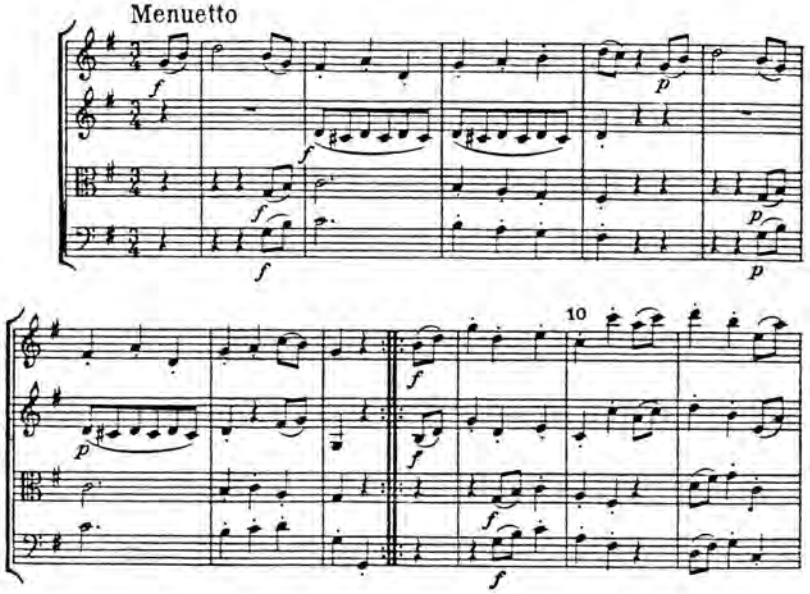
1. M. Eisenberg, Op. cit., p.45.



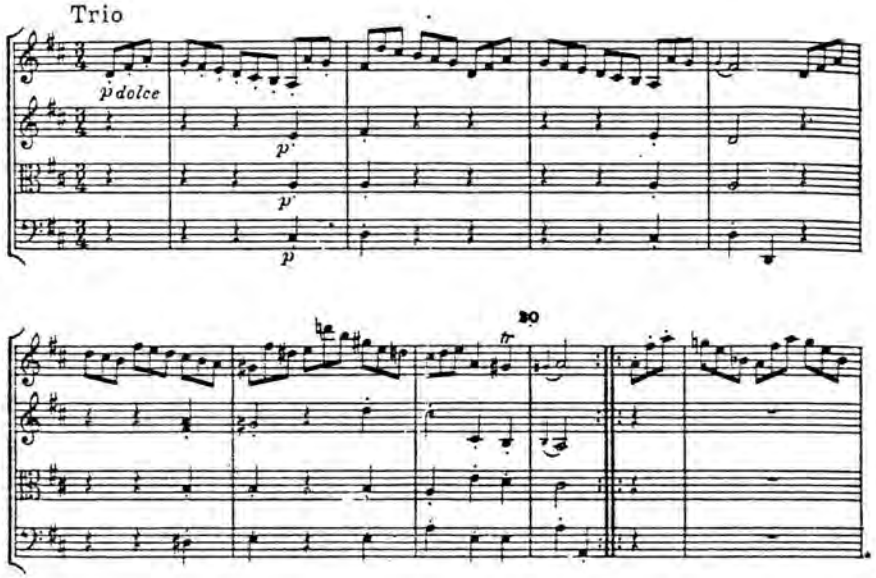

Ex. 28 Op. 9 / 1 - iv. b.1 - 21.

A similar stroke would be used in Op. 17 / 5 - ii, bars 3 - 4, followed by a gently lifting stroke in the seventh and eighth bars - these contrasts being dictated by the dynamic markings.



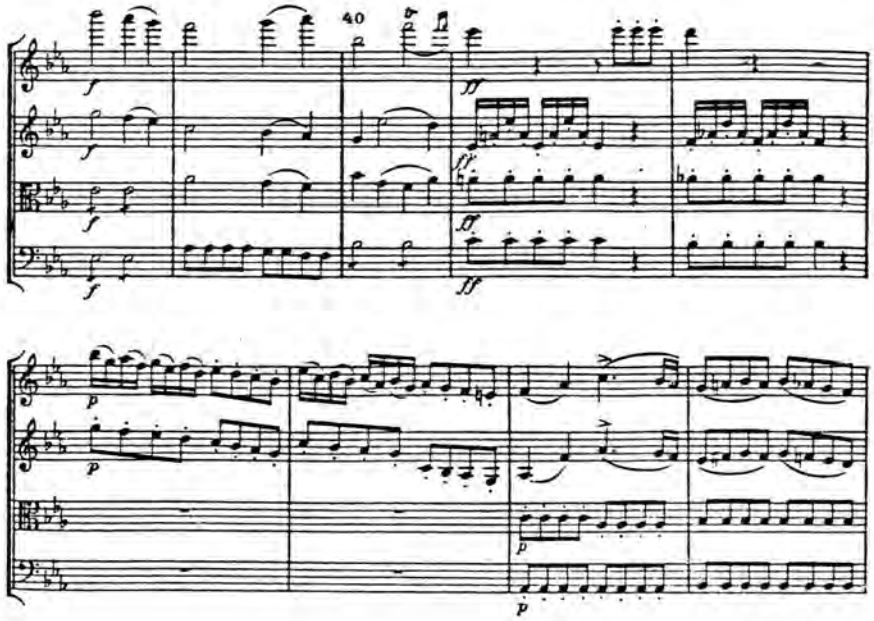

Ex. 29. Op. 17 / 5 - ii b. 1 - 11.

In the sparsely-accompanied trio of Op. 17 / 6 - ii the piano dynamic calls for a stroke with a fair amount of arm movement, making gentle contact with the string but using a minimum amount of bow hair.



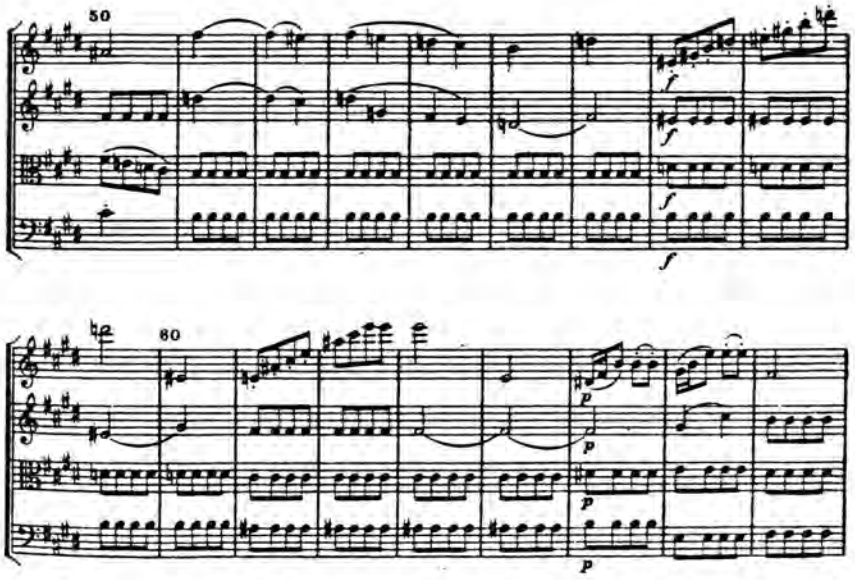

Ex. 30. Op. 17 / 6 - ii b.22 - 31.

A similar use of the bow is required in Op. 17 / 4 - i. If the detached middle-of-the-bow technique were used here, without the lift to each bow stroke, the bass line would be far too heavy in character.



Ex. 31. Op. 17 / 4 - i b.38 - 46.

As the modern interpretation of Presto is faster than in Haydn's time it would be necessary today to use spiccato in Op. 17 / 1 - iv. However, the repeated quavers, taken at a slightly less hectic speed, simply require a light staccato.



Ex. 32 Op. 17 / 1 - iv. b.50 - 67.

Leopold Mozart describes the execution of this type of light staccato thus: "merry and playful passages must be played with light, short and lifted strokes, happily and rapidly"[1] and Robert Donnington expands upon this by adding: "It is neither what we now call detaché ... nor spiccato ...At moderate tempo it can be described as 'sprung detache'' (the bow perceptably rebounding but not quite clear of the string)"[2]

The following example calls for a short,sweeping stroke, lifting at the end of each note, to give the airily-spaced

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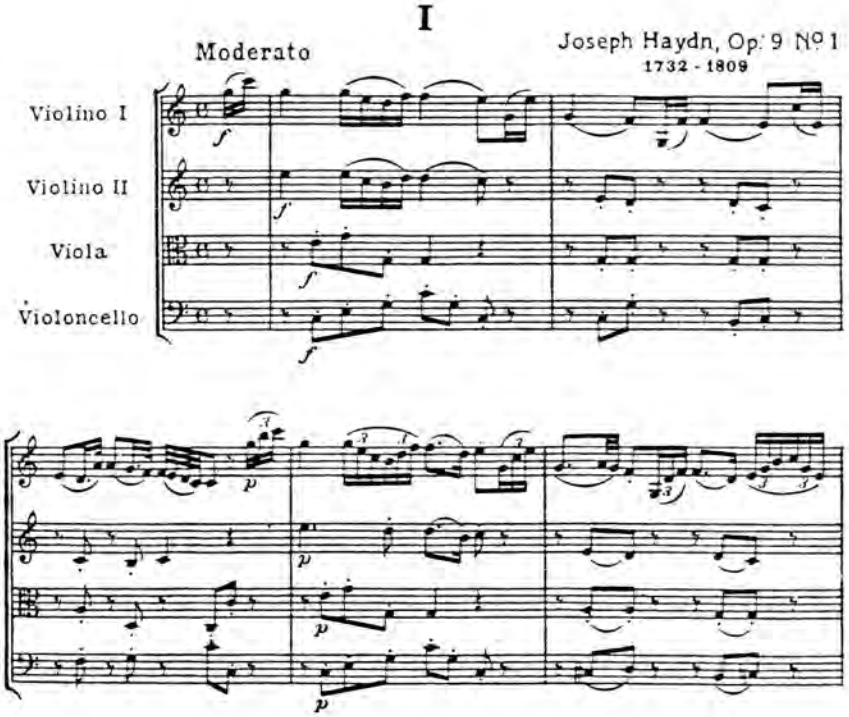
1. L. Mozart, Violin Playing, p.223.
2. R. Donnington, "Violin Playing", Groves, vol. 8, p.818.

bass line a lighter character.

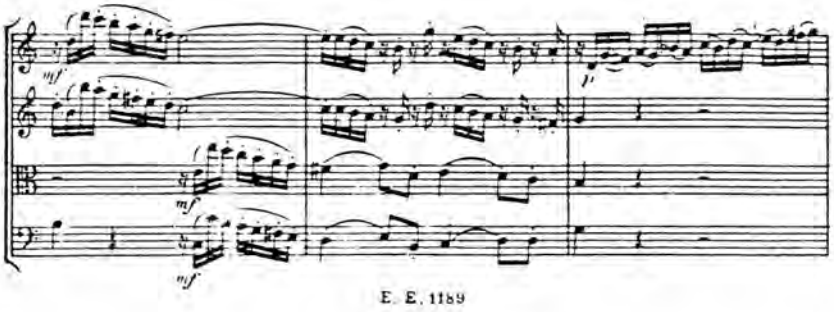



Ex. 33. Op. 9 / 1 - i b.1 - 5.

Bowed staccato is rather more difficult, since it necessitates the use of a continuous arm movement whilst the fingers, hand and wrist add pressure to enunciate each note. As the pressure is taken off the stick the bow lifts slightly, thus creating the technique of bowed staccato.

In bar 17 of Op. 9 / 1 - i the first example of bowed staccato is encountered. Here, in the cello's descending

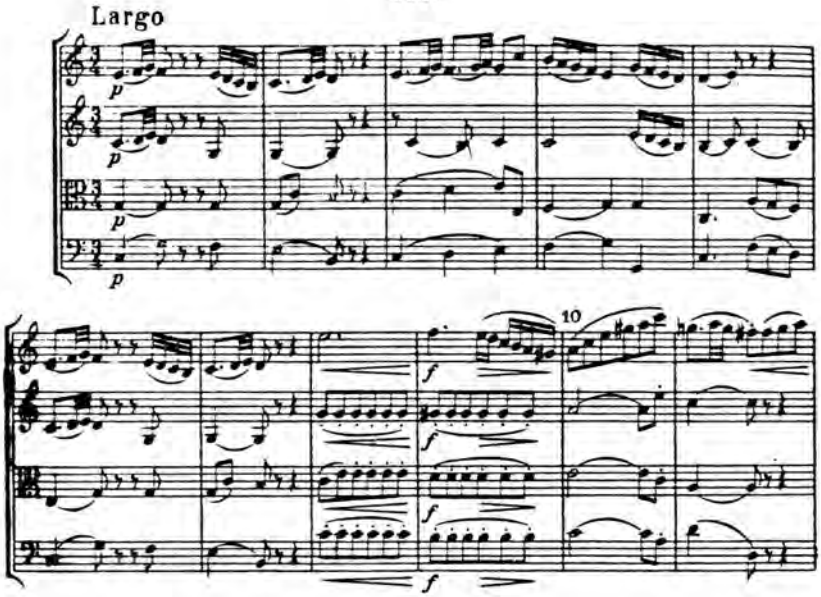
scale, the cessation of bow movement between each note is executed by tensing and relaxing the bow hand and finger muscles at an even pace.




Ex. 34. Op. 9 / 1 - i b.17 - 19.

Another example of bowed staccato, but at a considerably slower tempo, is found in Op. 9 / 3 - iii. In this kind of semi-staccato, which is termed <u>portato</u>, the bow is kept in motion while the fingers on the stick give an added pressure for the firm articulation of each note. As these two bars are marked crescendo - forte - decrescendo, the cellist would have to use the minimum amount of bow at bar 8, thus enabling him to use gradually lengthening portions of the hair to create the increasing volume of sound towards the end of the bar. In bar 9, marked forte, the first note would use a comparatively longer portion of bow, and to facilitate the decrescendo successively shorter bows would be used. The slow tempo marking, necessitating more control than a quick movement, together with the dynamic markings would obviously make these two bars more difficult to execute than the previous example.

III.




Ex. 35. Op. 9 / 3 - iii b. 1 - 11.

iv) Martelé.

Menhuin describes the execution of this technique as follows:

> The beginnings of martelé should always start piano and not forte. The attack should simply be the minimum grip of the bow on the string. The pull should consist first of the "beginning" of the stroke ... And in the martelé, that is immediately followed by the throwing action of the arm.[1]

Robert Donnington states that the term was not used in Haydn's time[2] and, although Leopold Mozart does not ac-

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1. Menhuin and Primrose, Violin and Viola, p. 71.
2. R. Donnington, Op. cit., p.818.

tually define martelé bowing, his description - "every tone, even the strongest attack, has a small, even if barely audible softness at the beginning of the stroke, for it would otherwise be no tone but only an unpleasant and unintelligible noise"[1] - is highly apposite.

This description is developed later when he writes :

> But when accenting a note strongly the bow must not be lifted from the string as some very clumsy people do, but must be continued in the stroke so that the tone may still be heard continuously although it gradually dies away.[2]

Martellato or martelé is a technical term possibly found more frequently in piano music than music for strings.[3] However, the term has a slightly different meaning in each case. The piano martellato simply means "hammered", implying a swift, percussive descent of the hand onto the keyboard. By contrast, when the cellist plays martelé he would place the bow on the string and gently set the string in vibration before forcefully pulling the bow at speed. The movement would accentuate the note, giving it the volume and intensity required.

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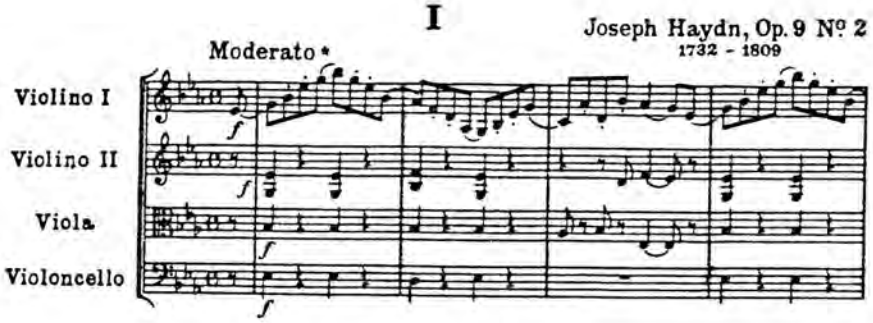
1. L. Mozart, Op. cit., p.97.

2. Ibid.

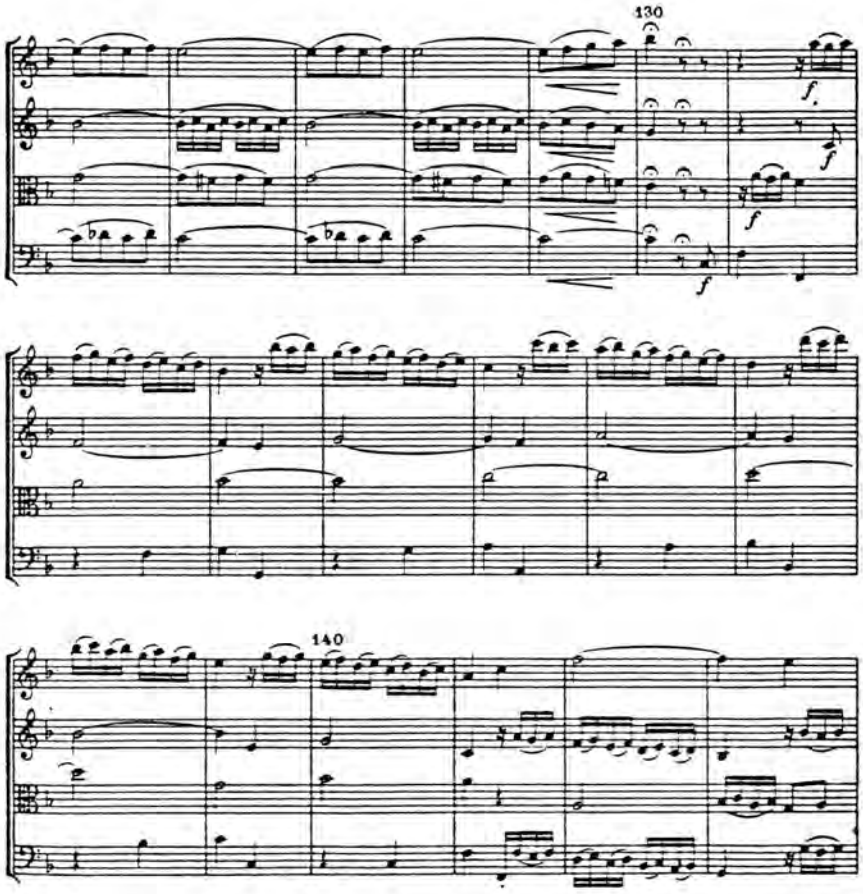
3. It is a curious but, nevertheless, prevalent feature of these two terms that the Italian word "martellato" is usually associated with piano music, whereas the French word "martelé" is normally used by string players.

An early example is found in Op. 9 / 2 - i.




Ex. 36. Op. 9 / 2 - i b. 1 - 4.

A similar force would be placed immediately after the beat in the three-note figure commencing in bar 130 of Op. 17 / 2 - iv.




Ex. 37. Op. 17 / 2 - iv b. 125 - 143.

## DIVERSITY OF BOWING TECHNIQUES WITHIN A PHRASE.

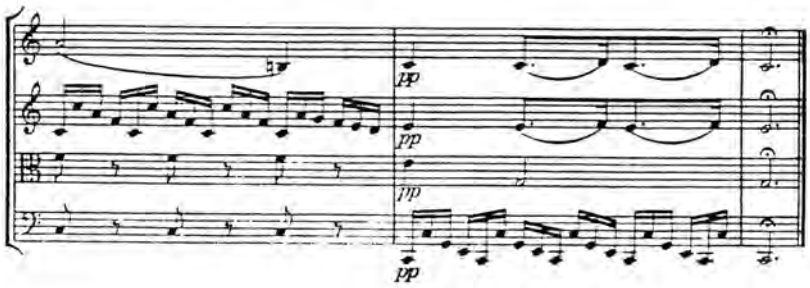
Whereas in the early quartets one and the same bowing technique is often used for almost an entire movement, the Opp. 9 and 17 sets include different bowing techniques within the framework of a short phrase.

Although forte and piano contrasts were encountered in Opp. 1 and 2, the nature of these passages did not require a conscious effort of changing the bow position between the fingerboard and bridge. However, in Opp. 9 and 17, a more subtle control of the bow is necessary and the cellist must have a flexible bow-arm, wrist and fingers to execute this advanced form of bowing and perform these phrases in a musical manner.

This more subtle control of the bow requires the following factors to be taken into consideration:

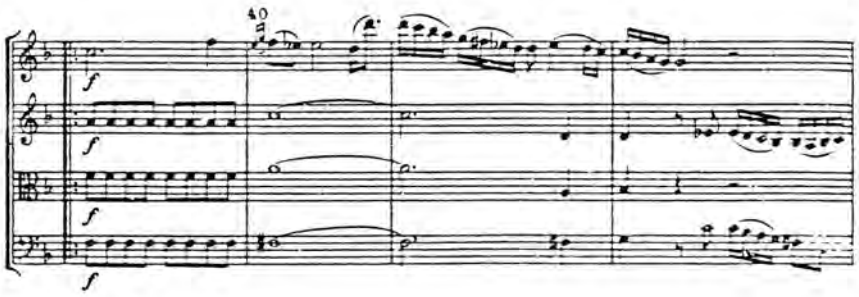
i) Varied position of the bow between the fingerboard and bridge.
ii) Variations of the pressure and speed of the bow.
iii) The smooth change of stroke.
iv) The smooth transition from one string to another.
v) The choice of the section of the bow which should be used for a certain passage.

In bar 72 of Op. 9 / 3 - iii an arpeggiated passage in piannisimo would necessitate the cellist playing this (on the C and G strings) using the minimum amount of bow hair, with the bow positioned over the fingerboard.



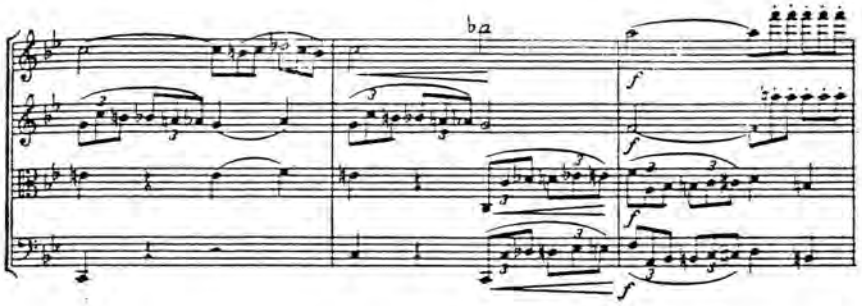

Ex. 38. Op. 9 / 3 - iii b.71 - 73.

Bar 48 of Op. 17 / 1 - i exemplifies the need for a slow-moving bow, getting maximum intensity of tone, with the bow positioned close to the bridge.




Ex. 39. Op. 17 / 2 - i b.39 - 42.

There are instances where a number of notes to be played in one bow stroke are encountered. The first of these examples, marked crescendo, shows two groups of triplets in one bow which would require a very carefully spaced control of the bow to enable the player to execute the dynamic markings, whilst the following groups of triplets, marked forte, would be quite evenly spaced:

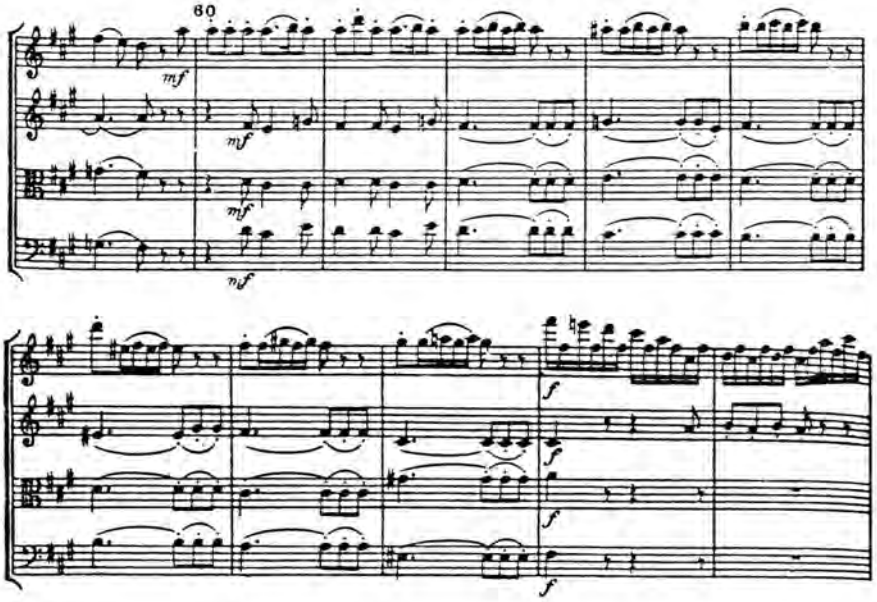


Ex. 40. Op. 17 / 2 - iii b.37 - 39.

This phrase would start with an up-bow close to the fingerboard, gradually moving towards the bridge for the forte in the next bar.

Variation of the pressure and speed of the bow would be needed in Op. 9 / 6 - i from bars 62 - 67 where the rhythmic pattern 

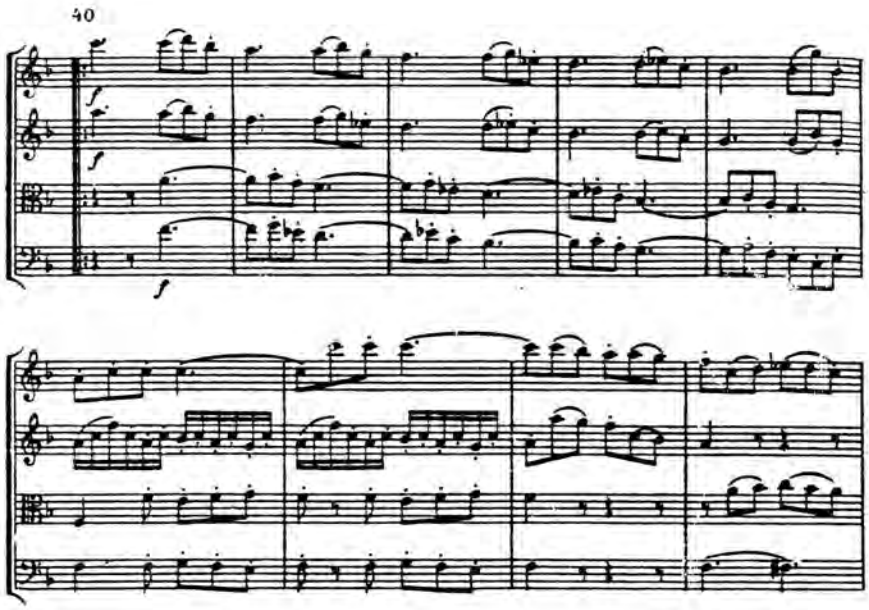
requires the use of alternating sustained notes and staccato quavers in one bow. The cellist has to use an amount of bow for the long note which still ensures enough bow hair to play the two quavers at the end of the bow. As this passage calls for a lyrical quality, usually executed by a swift bow action, minimum arm weight on the stick and a slow stroke would be apposite.




Ex. 41 Op. 9 / 6 - i b.59 - 69.

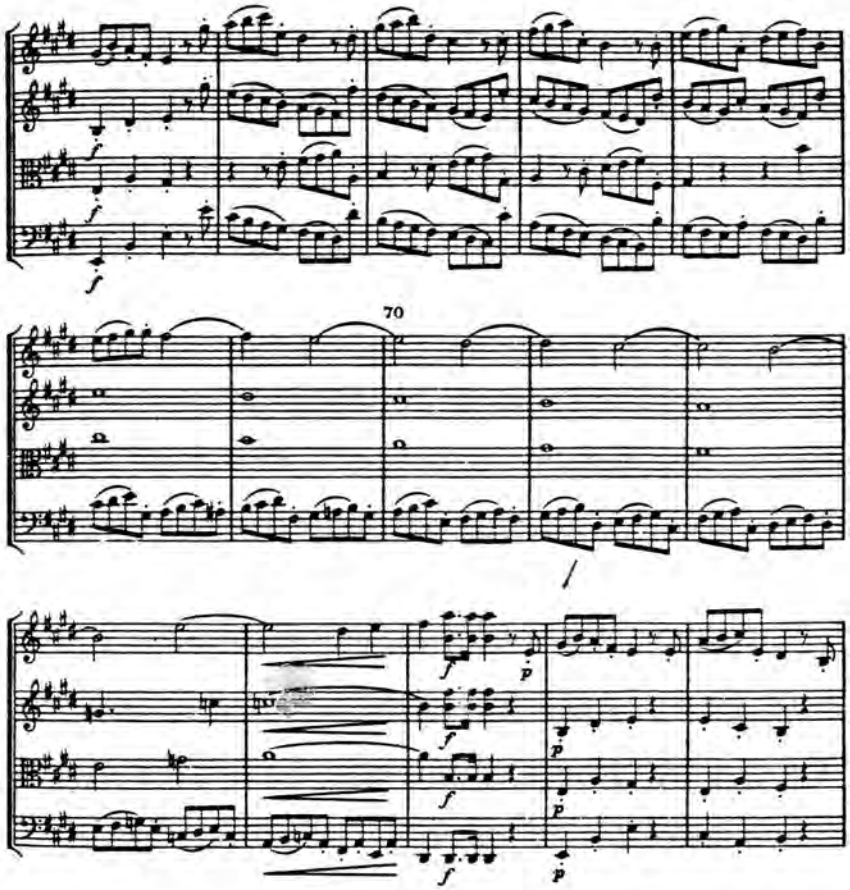
In the repeated pattern beginning at bars 40 - 44 of Op. 9 / 4 - iv the cellist would have to alternate between two kinds of bow stroke: firstly an intensive stroke needed to activate the string and to carry the forte tone

of the dotted crotchet through to the first quaver of the following bar; and secondly a suddenly much lighter stroke for the two staccato quavers - a technique which necessitates the sudden flexing and relaxing of all the muscles used for the bowing technique.




Ex. 42. Op. 9 / 4 - iv b.40 - 43.

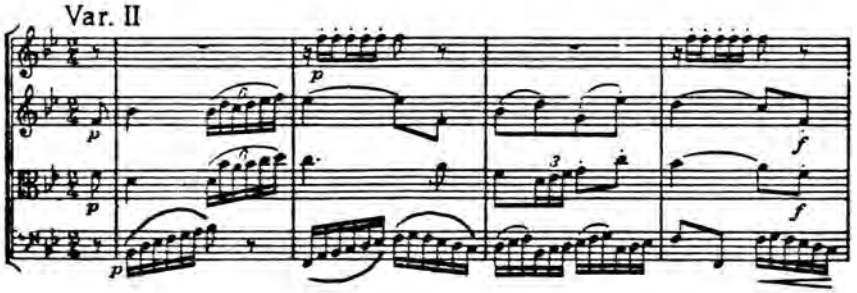
Numerous variations of pressure and speed of the stroke are required in the different quaver groupings used in Op. 17 / 1 - i from bar 63 onwards, where an upbeat staccato quaver is followed by two legato groups, one of four and one of three quavers. This pattern is repeated for another two bars, after which it changes to a shorter one omitting the four legato quavers.




Ex. 43. Op. 17 / 1 - i b.63 - 77.

In these passages the cellist has to move the bow at great speed when playing the single staccato quaver in order to ensure that enough bow-length is left to play the following groups.

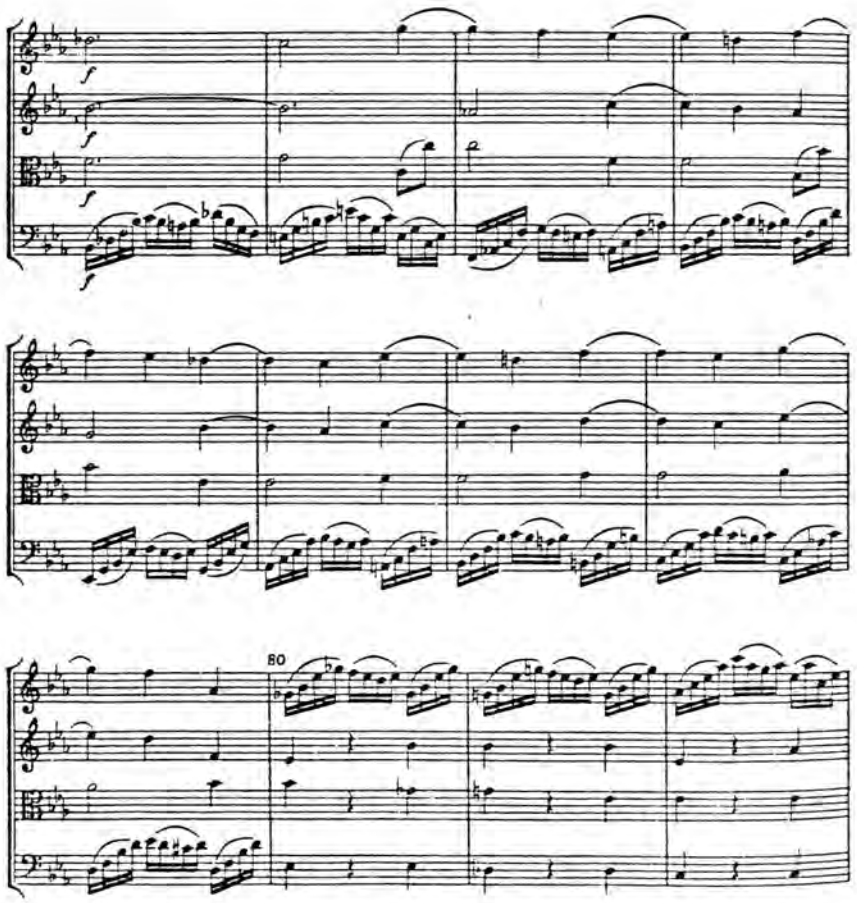
A smooth change of stroke showing a greater flexibility is called for in the second variation of Op. 9 / 5 - i.




Ex. 44. Op. 9 / 5 - i b.41 -44.

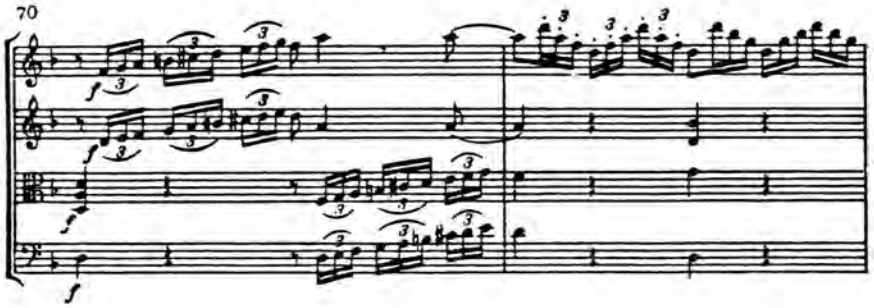
The semiquaver sextuplet ought to be played with an even tone. Thereafter, arm-weight has to be reduced for the next group of three semiquavers, bowed in one. This is followed by the use of wrist movement for the following three semiquavers, bowed separately.

In the forte passage from bars 71 - 79 of Op. 17 / 4 - iii smooth changes of the stroke would be required for the long-drawn bows, with an equal intensity of sound throughout each stroke.

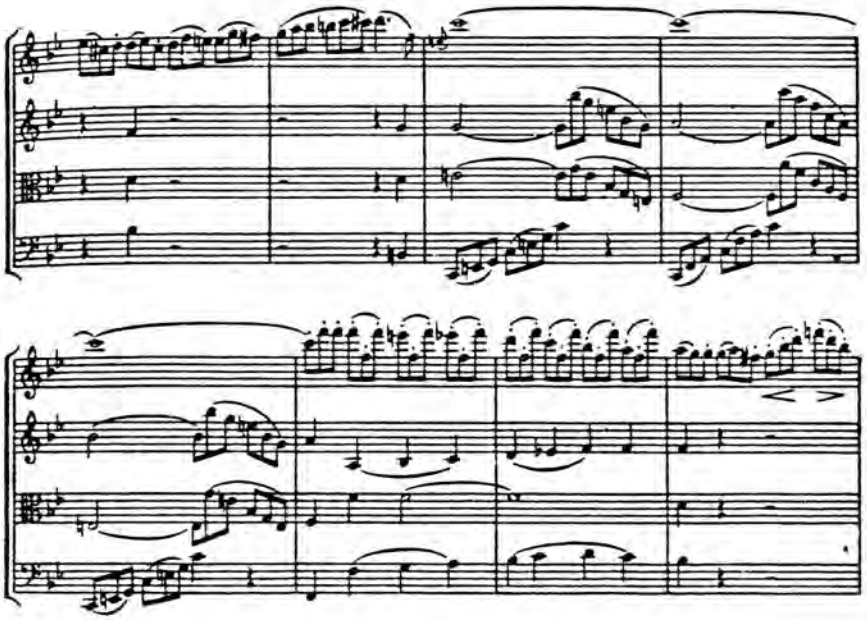



Ex. 45. Op. 17 / 4 - iii b.71 - 82.

A smooth transition from one string to another in the semiquaver triplets of Op. 9 / 4 - i and quaver triplets in Op. 9 / 4 - iii requires a legato stroke at a fast speed, which involves anticipating each note by raising the bow arm slightly to ensure a smooth crossing to the next string.

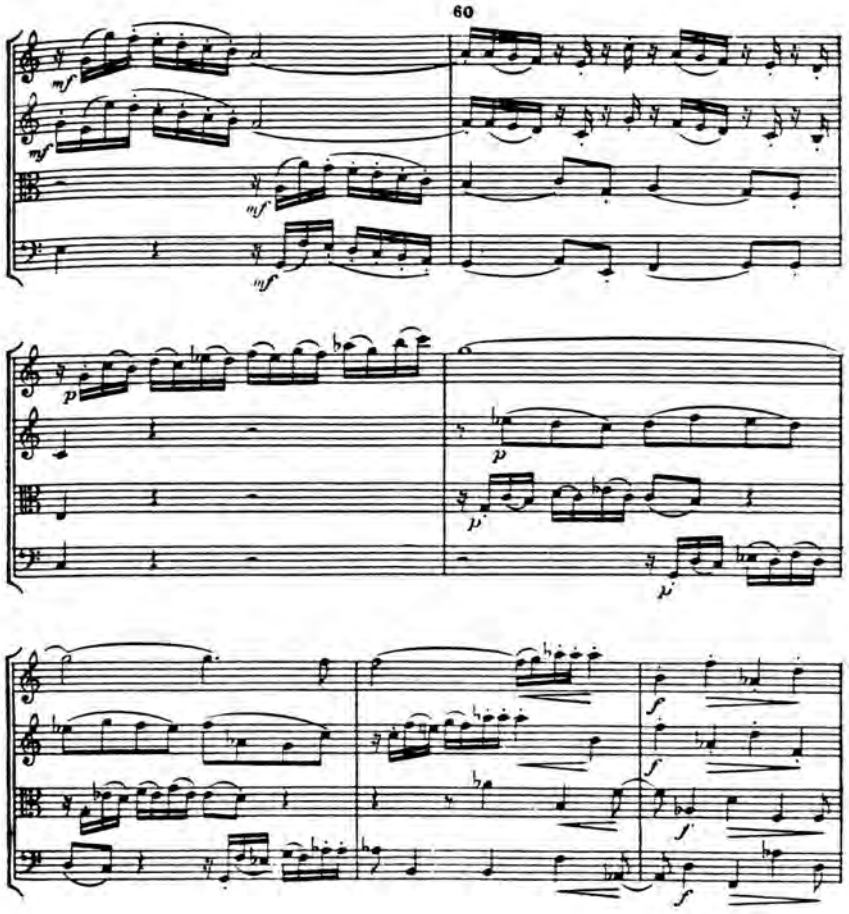



Ex. 46. Op. 9 / 4 - i b.70 - 71.



Ex. 47. Op. 9 / 4 - iii b.31 - 38.

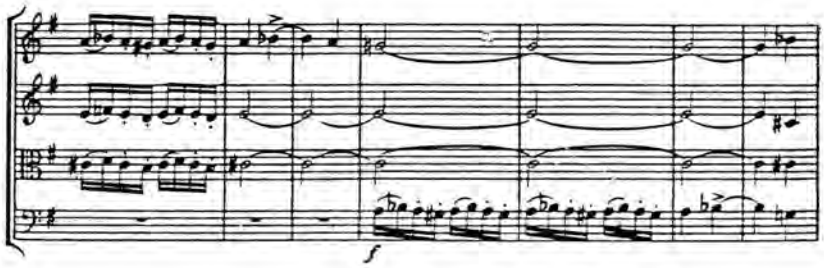
Although the first example in Op. 9 / 1 - i in the General Edition has no bowing marks, it would seem feasible that the cello bowing would follow that of the first violin as in the example below. Here, after the first two semiquavers in bar 59, there are five staccato semiquavers.




Ex. 48. Op. 9 / 1 - i b.59 - 65.

The variations of bowing in these bars would necessitate a greater development in the flexibility of the cellist's bowing technique. For instance, the first variation in bar 62 has the first of the seven semiquavers marked staccato, and the following six bowed in pairs; and the second variation in bar 63 is the same as that of the previous bar, with the exception of the last two semiquavers, which are staccato.

The short motif in Op. 9 / 3 - iv, bars 26 - 27 consists of two semiquavers bowed, followed by two separately bowed staccato semiquavers.



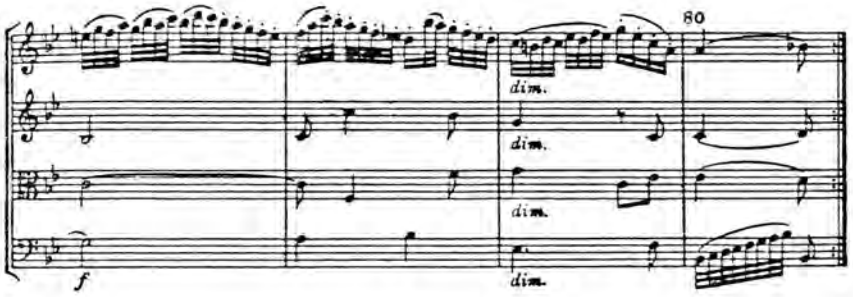

Ex. 49 Op. 9 / 3 - iv. b.23 - 29.

This rhythm necessitates the choice of the section of the bow which should be used and the proper distribution of bow length, as the two separate semiquavers only employ half the amount of the two slurred notes. A similar phrase occurs in Op. 17 / 2 - i in bars 23 - 85.

Ex. 50. Op. 17 / 2 - i b.23.

The previous examples refer to particular concepts related to bowing technique, taken in isolation. However, the demands on the cellist are greatly extended when any one of these concepts appears in conjunction with either one, two or three others.

A combination of the correct positioning of the bow between the fingerboard and bridge, and the smooth transition from one string to another is required for the sensitive interpretation of the following example:

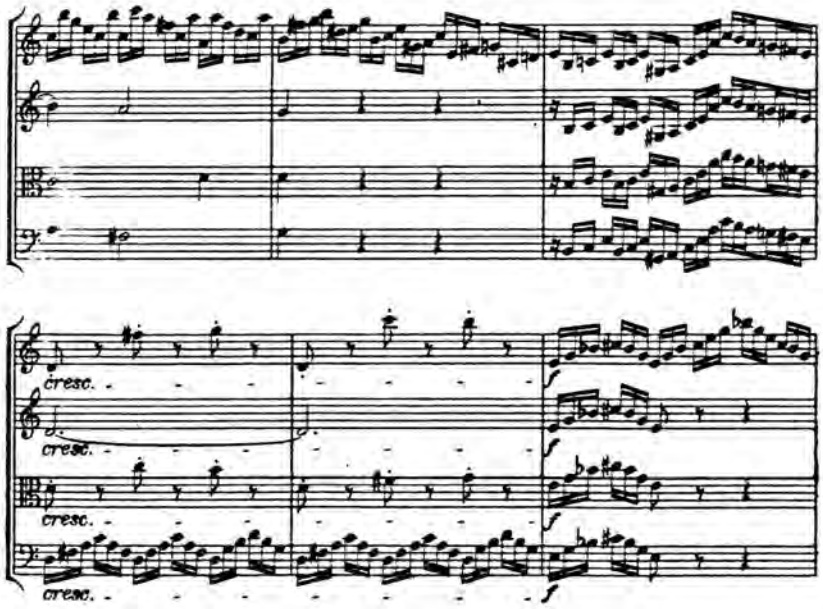



Ex. 51 Op. 9 / 5 - i b.77 - 80.

The same example also shows, in bar 80, a run consisting of eight demisemiquavers in one bow to be played diminuendo.

Bow control here necessitates careful apportionment of the bow, diminishing speed and pressure whilst simultaneously drawing the bow towards the fingerboard.

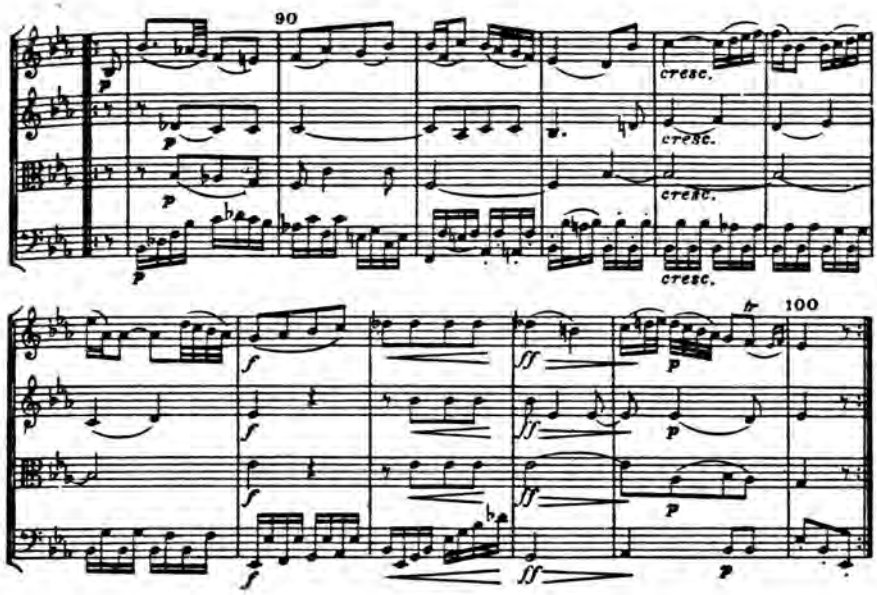
The following example uses a combination of i, ii, iv and v of the techniques listed on page 115.




Ex. 52. Op. 9 / 3 - iii b.23 - 28.

The beginning of this semiquaver passage has to be played in the middle of the bow towards the point, with the bow position near the fingerboard and tilted inwards using only a fraction of bow hair. In bars 26 - 27 the cellist would gradually work the bow towards the heel while straightening the angle of the bow to ensure the use of maximum bow hair. Simultaneously, to obtain greater volume of sound for the forte in bar 28, the bow has to move towards the bridge.

The same combination of techniques, including a variety of bow strokes, appears in Op. 17 / 3 - i, bars 91 - 92.




Ex. 53. Op. 17 / 3 - i b.89 - 100.

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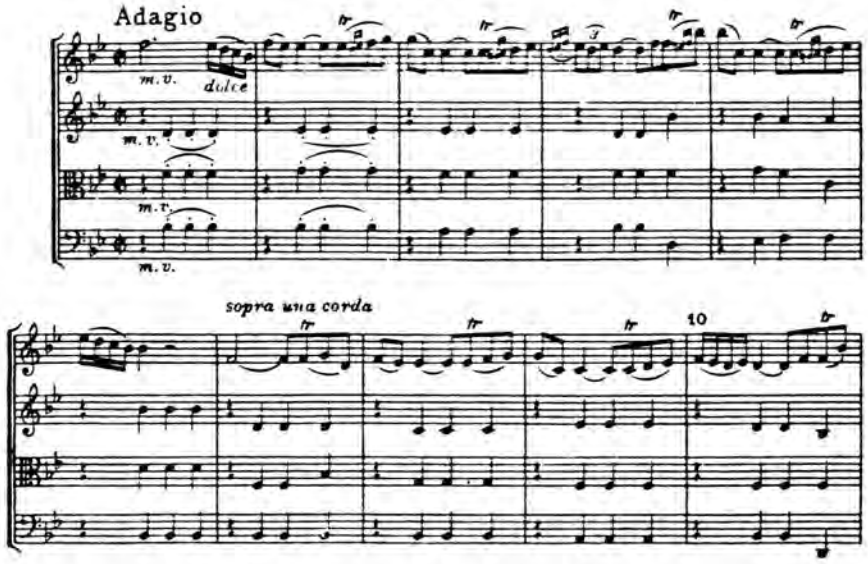
## THE CONTRIBUTION OF THE CELLO TO THE TEXTURE.

In the ten early quartets the cello provided little more than the bass line. Although the cellist's basic rôle remains similar in Opp. 9 and 17, he now has to become more aware of the musical fabric woven by the other three parts.

To achieve this aim he has to pay greater attention to the subtleties of the harmonic progressions, and has to vary tone quality in accordance with the changing musical texture. In addition the cello participates, at times, in the melodic and contrapuntal structure of the music. This new approach to the cellist's ability manifests itself in a more sensitive and liberated accompaniment, in the conscious use of the tonal characteristics inherent in the cello, and in occasional phrases of melodic independence.

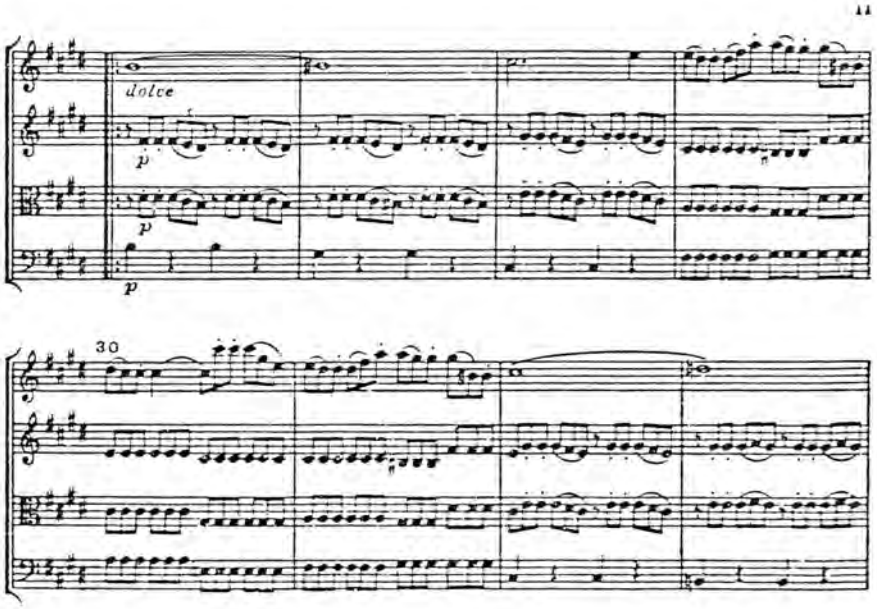
The simple use of repeated notes in Op. 17 / 2 - iii still adheres to the writing of the Opp. 1 and 2 sets.

**III**



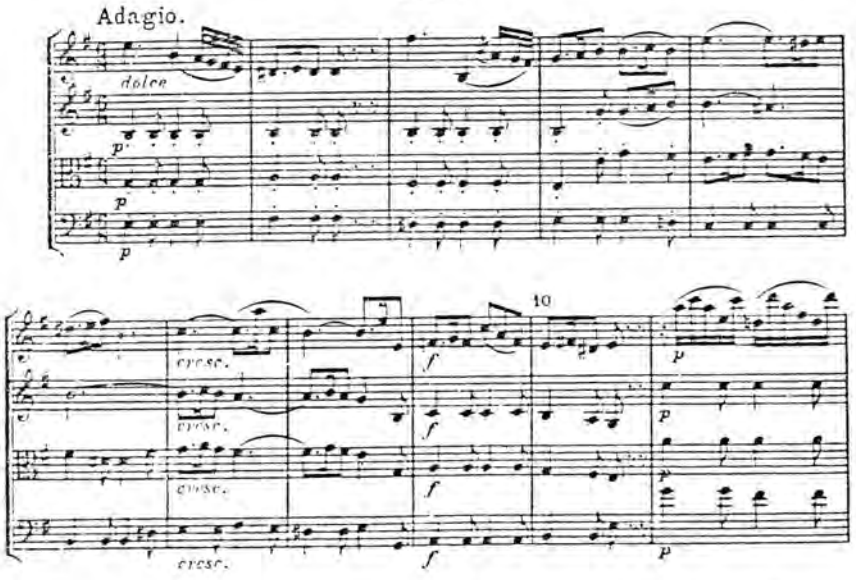

Ex. 54. Op. 17 / 2 - iii b. 1 - 10.

On the other hand,a number of movements demand rhythmic sensitivity and fluidity. This appears most often in the slow movements where the expansiveness of the tempo and the leisurely melodic style call for a forward-moving bass line to accompany the first violin. The following three examples show, in their variety of accompanying figures, the gradual change from regular pulsation to a more liberated bass line:

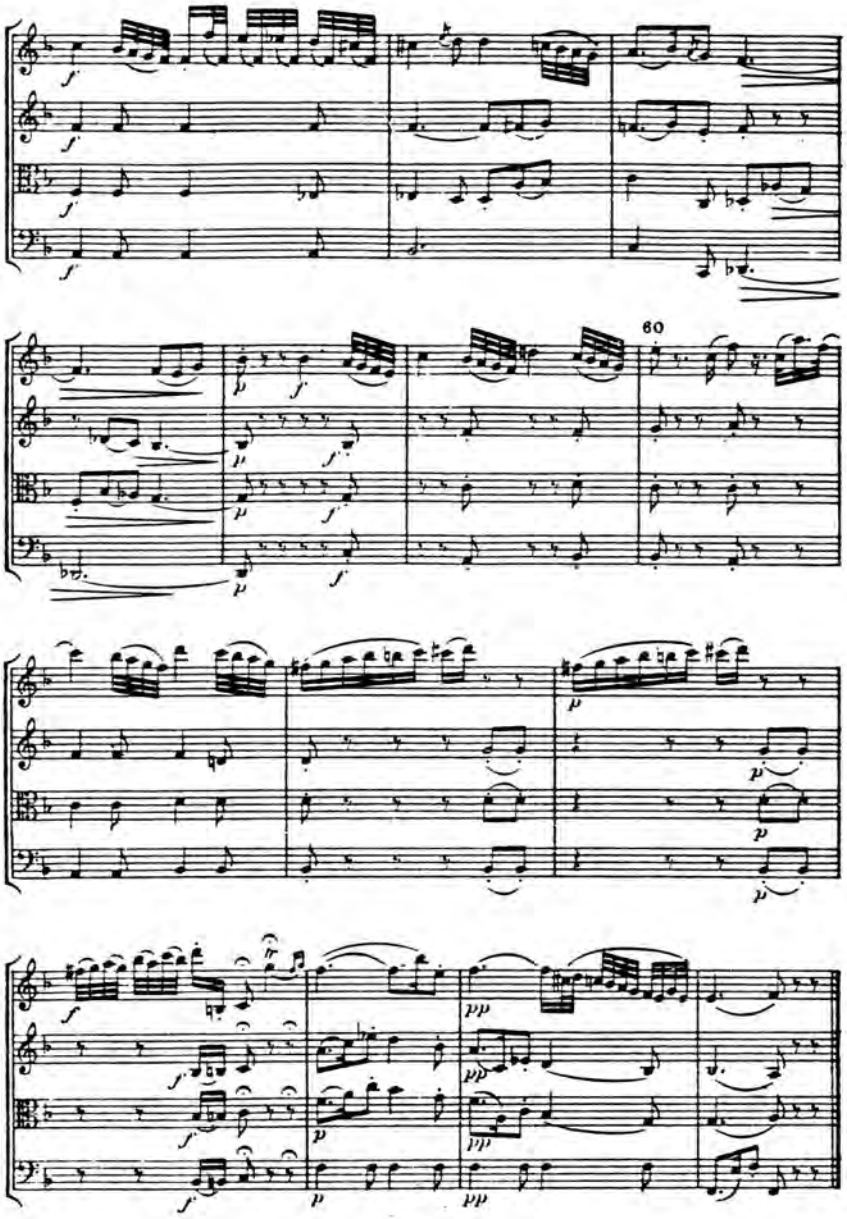



Ex. 55. Op. 9 / 6 - iii b.26 - 33.

III.

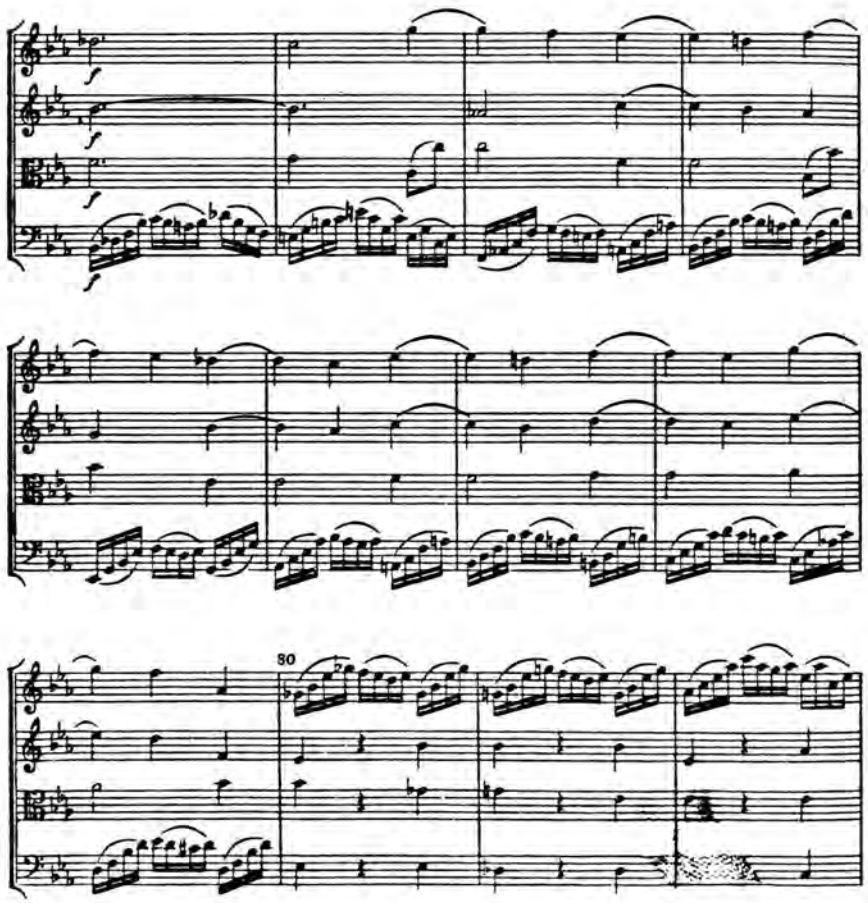



Ex. 56. Op. 17 / 1 - iii b. 1 - 11.




Ex. 57 Op. 9 / 1 - iii b.54 - 67.

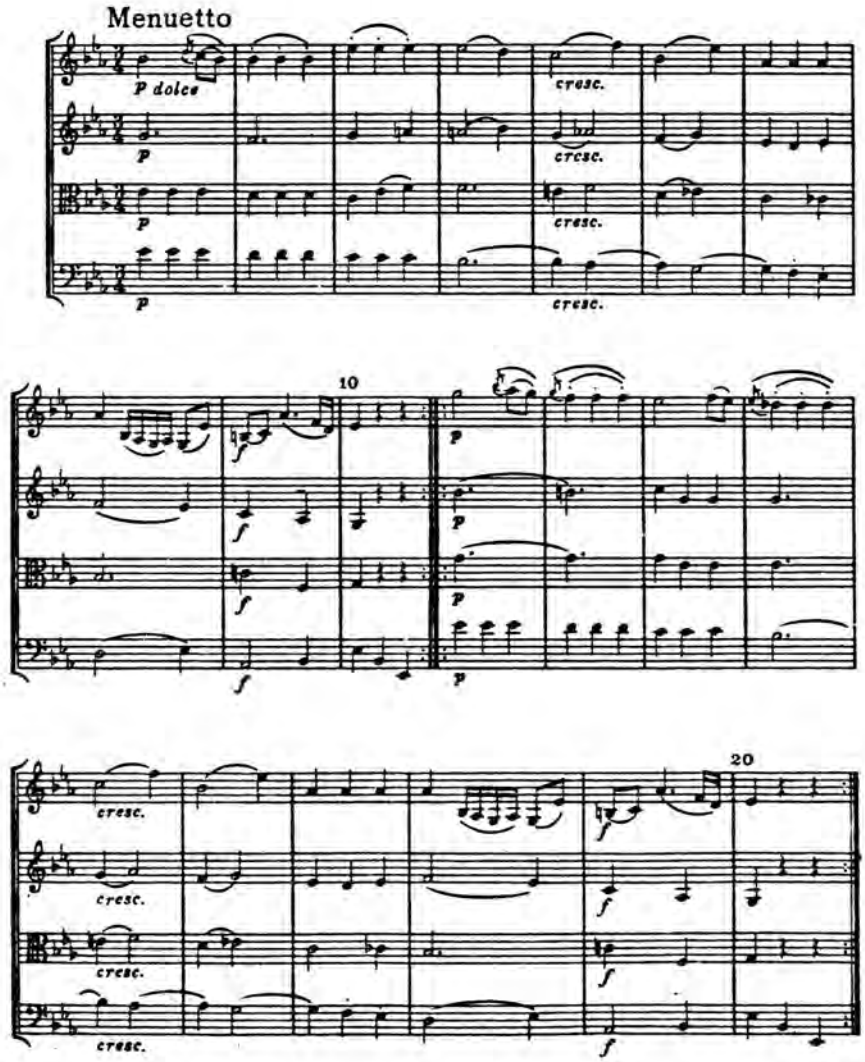
The prominent cello passage in Op. 17 / 4 - iii combines the two aspects of harmonic support and rhythmic drive mentioned above. In these flowing, forte semi-quavers the undulating bass line, being the only moving part, assumes a high degree of prominence.




Ex. 58. Op. 17 / 4 - iii b.71 - 82.

In complete contrast, the cello part of Op. 9 / 2 - i depends, not on rhythmic prominence, but on delicate adjustment to the demands of the various registers. During the course of ten bars the cello line descends two octaves and the player has to adjust his tone quality according to the dynamics and harmony.

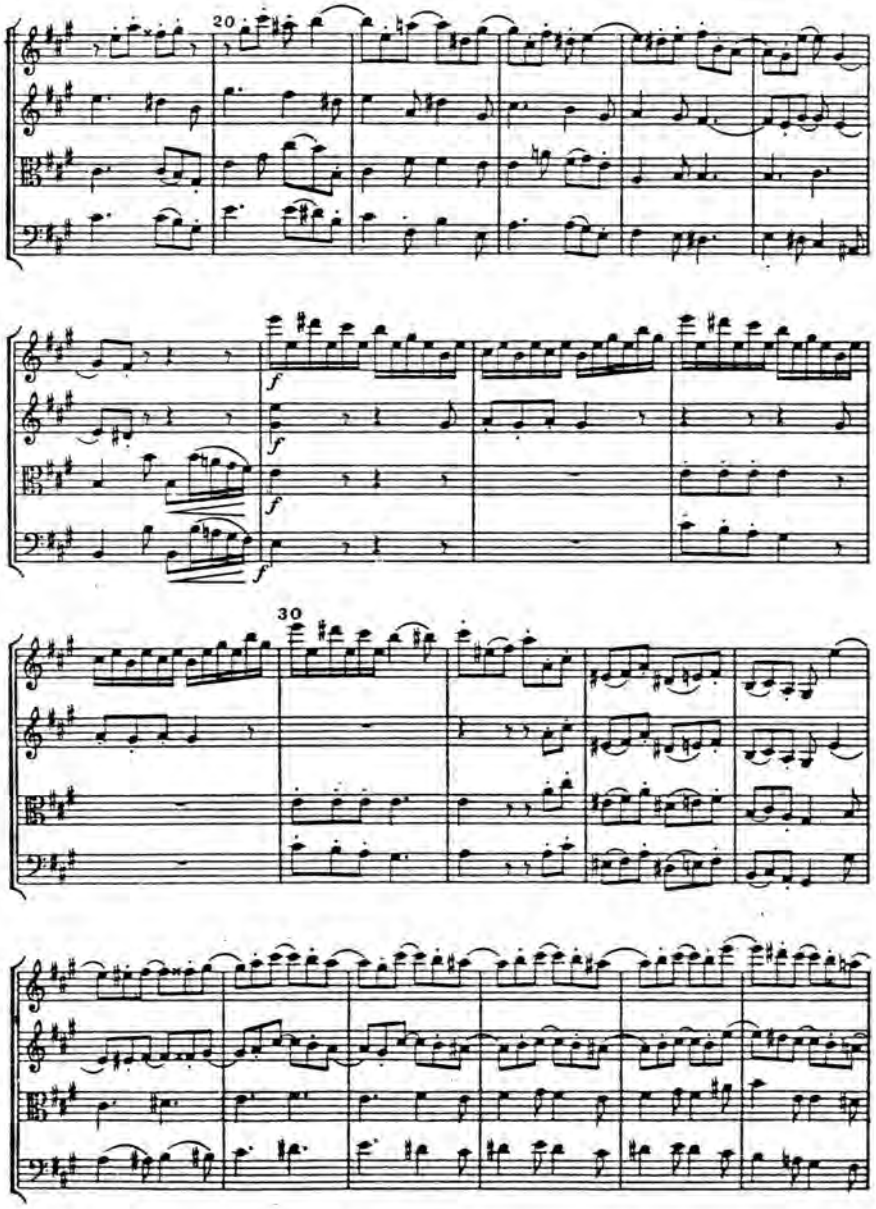
A rather intriguing feature of this cello accompaniment is that it is restated in the second section of the minuet with different melody and harmony in the three upper instruments.




Ex. 59. Op. 9 / 2 - ii b.1 - 20.

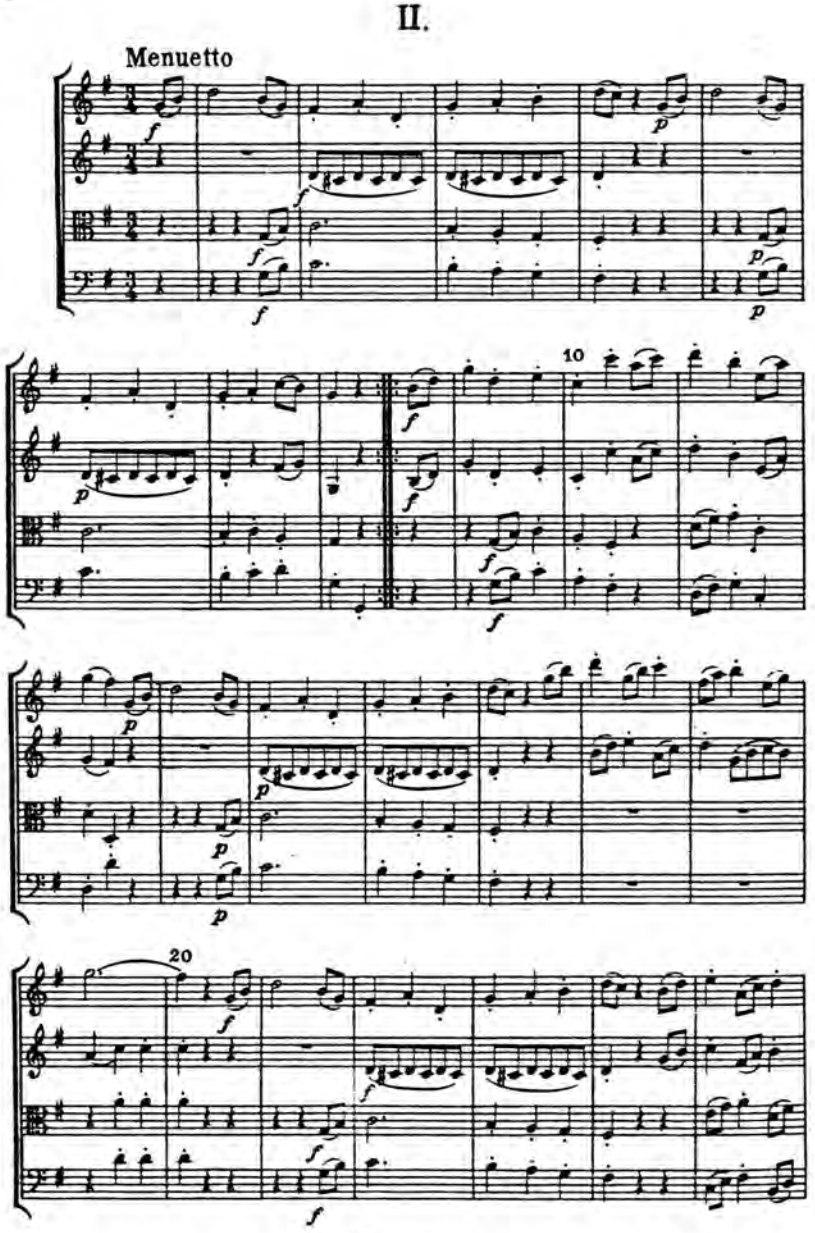
Consequently, this passage taxes the cellist's sensitivity to pure intonation, especially in the respective opening phrases (bars 1 - 4 and 11 - 14).

In spite of its melodic character the cello part must not predominate in the following passage, taken from Op. 9 / 6 - i, but simply give the harmonic foundation and blend in with the texture of the three higher instruments.




Ex. 60. Op. 9 / 6 - i b.19 - 39.

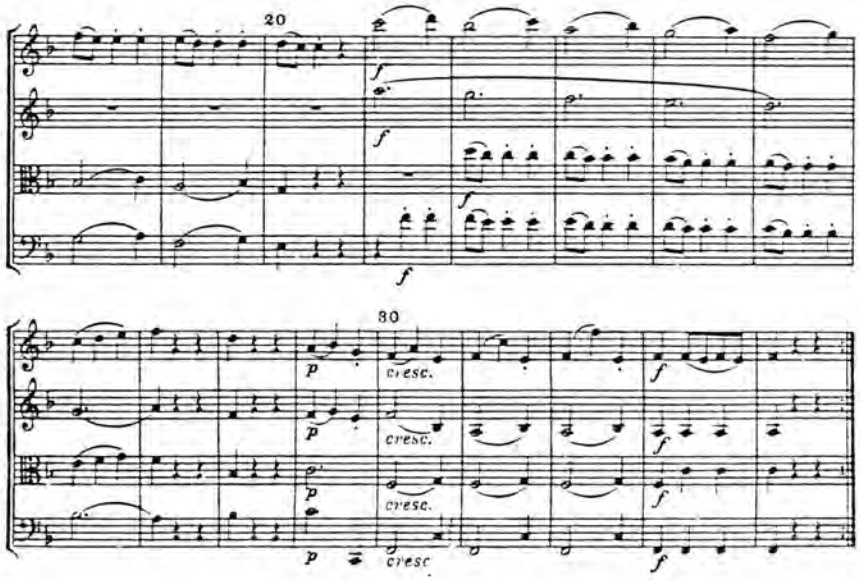
The parallel motion of viola and cello found at times in Opp. 1 and 2 reappears in the minuet of Op. 17 / 5. Nevertheless, the texture differs from earlier examples on account of its contrapuntal prominence.[1]




Ex. 61. Op. 17 / 5 - ii b.1 - 25.

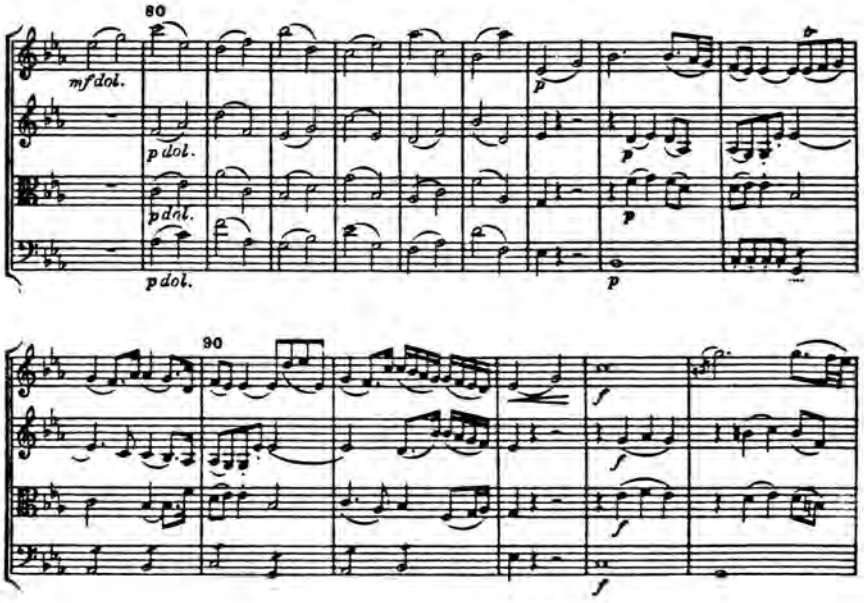
1. This quasi-canonic relationship between the two outer voices is a favourite technique of Haydn's, found in a number of his minuets.

A similar passage occurs in bars 21 et seq. of Op. 17 / 2 - ii, but here the cello part is more independent, playing a sixth below the viola and adding strength and sonority to the accompanying line in the initial forte passage. The texture is thus enhanced by the more equal sharing of the harmonies of the two lower strings.



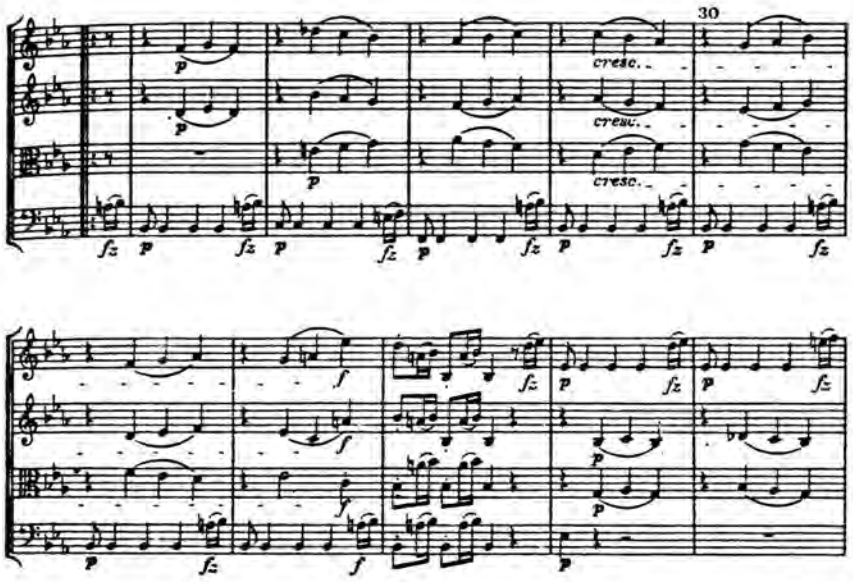

Ex. 62. Op. 17 / 2 - ii b.18 - 34.

Parallel voice-leading of a particularly intricate nature underlines bars 80 - 86 of Op. 17 / 4 - i, where the second violin, viola and cello together imitate the first violin at the distance of one bar in a strictly canonic manner. Owing to the particular nature of this phrase the resulting texture is contrapuntal, as well as chordal. The cello, therefore, has not only to answer the melodic precedent set by the first violin, but also has to sustain the harmonic framework of this extract. Undoubtedly, in this rather unusual context, it is the harmonic, rather than the melodic responsibility, which takes preference.



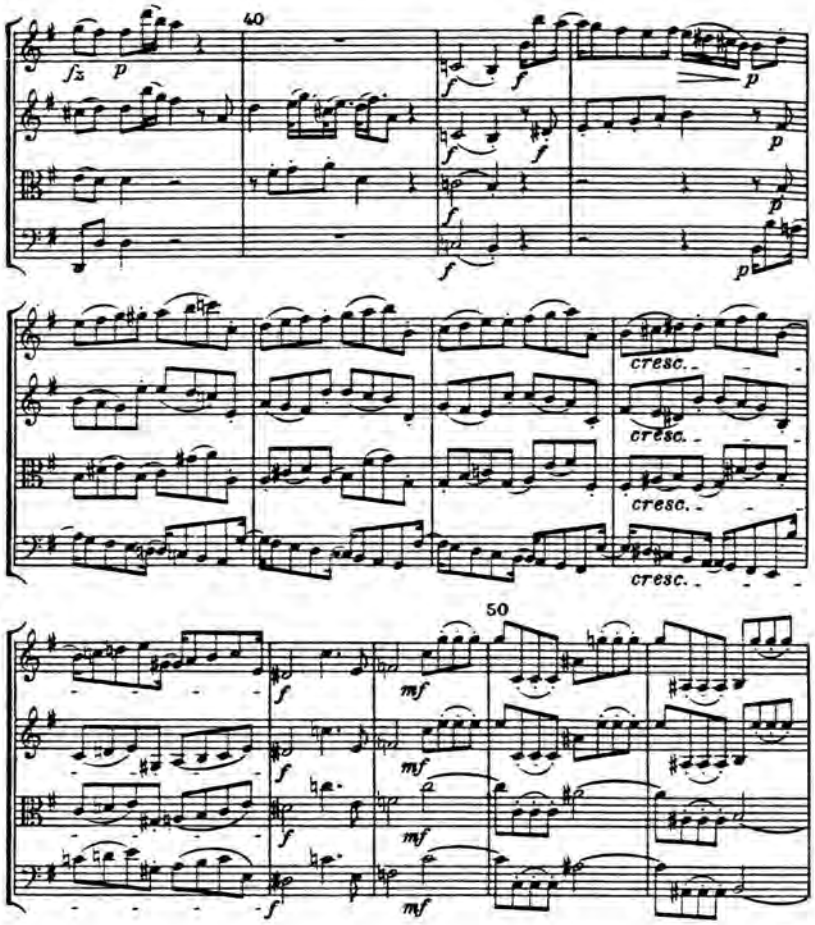

Ex. 63. Op. 17 / 4 - i b.79 - 94.

The use of syncopated accompaniment immediately demands a more forceful rôle from the cello line, especially whenever the cello rhythm contradicts the three higher instruments. The first example is found in Op. 9 / 2 - iv, bars 25 et seq. requiring a slight accentuation on each note and a "biting" accent on the last two semiquaver beats, marked fz. Compared to instances of such syncopation in Opp. 1 and 2 those of Opp. 9 and 17 are of a more sophisticated type.



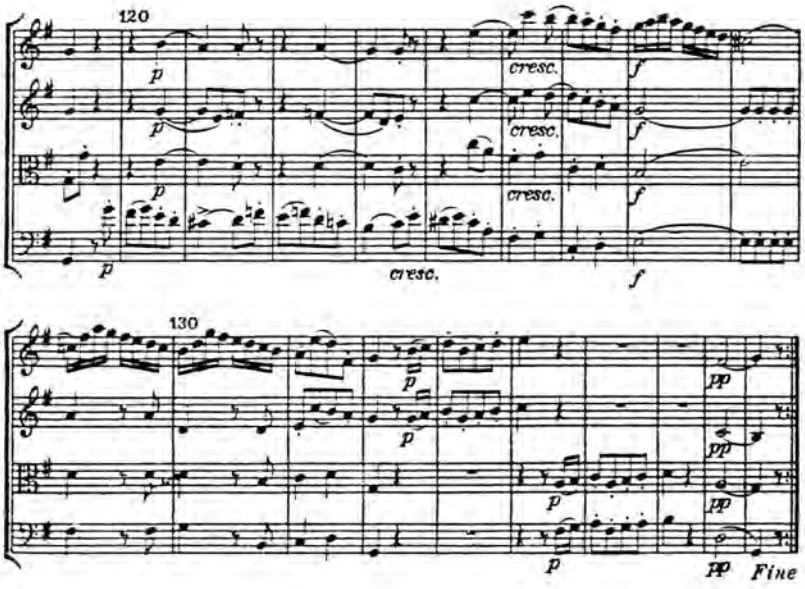

Ex. 64. Op. 9 / 2 - iv.b.25 - 35.

The syncopated accompaniment in bars 41 - 47 of Op. 17 / 5 - i needs sharp definition and added stress on the off-beats, because of the fast tempo and the regular rhythmic drive of the other parts.




Ex. 65. Op. 17 / 5 - i b.39 - 51

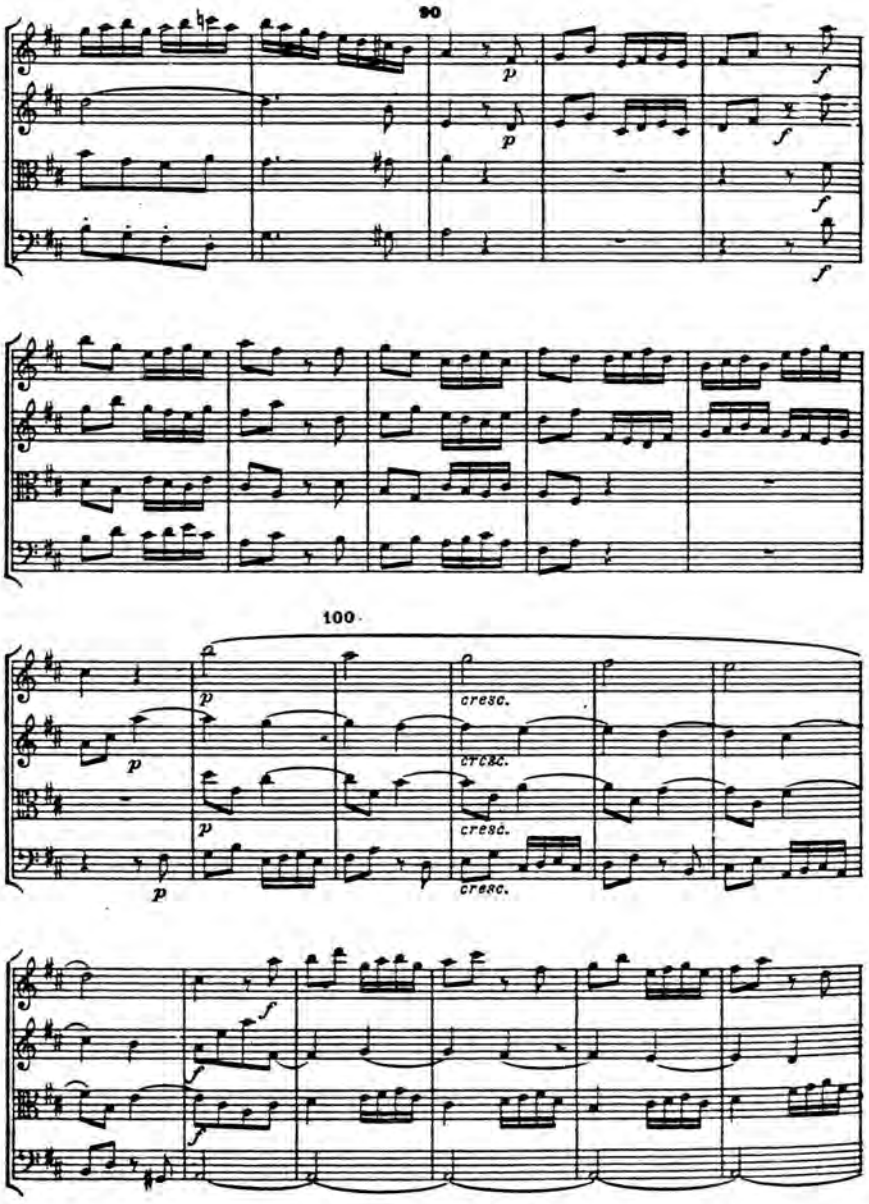
Throughout Opp. 9 and 17 there are only occasional moments when the cello assumes melodic independence. In Op. 9 / 3 - iv, for example, the cello briefly adopts the violin theme, beginning in a high register, marked piano, and quickly descending.




Ex. 66. Op. 9 / 3 - iv b.119 - 138.

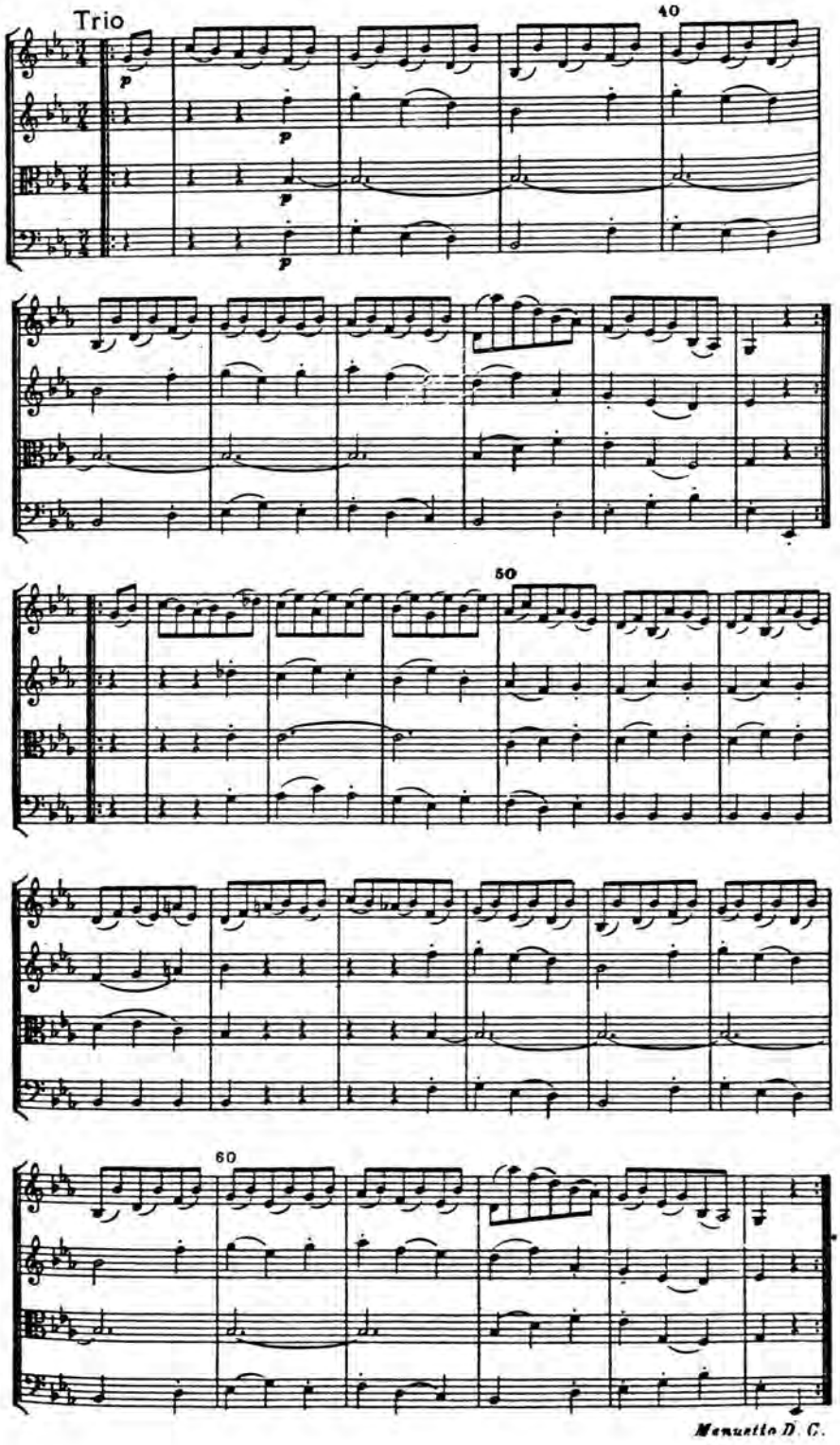
This passage, however brief it may appear, is significant because it displays a confidence usually only found in the writing for first or second violin.

A similar, but more extended example occurs in Op. 17 / 6 - iv. Here the cello brings a new and rather humerous interpretation to the violin motif, especially when it reaches the lower register, where the particular quality of the G string produces a ponderous and rather gruff tone colour.



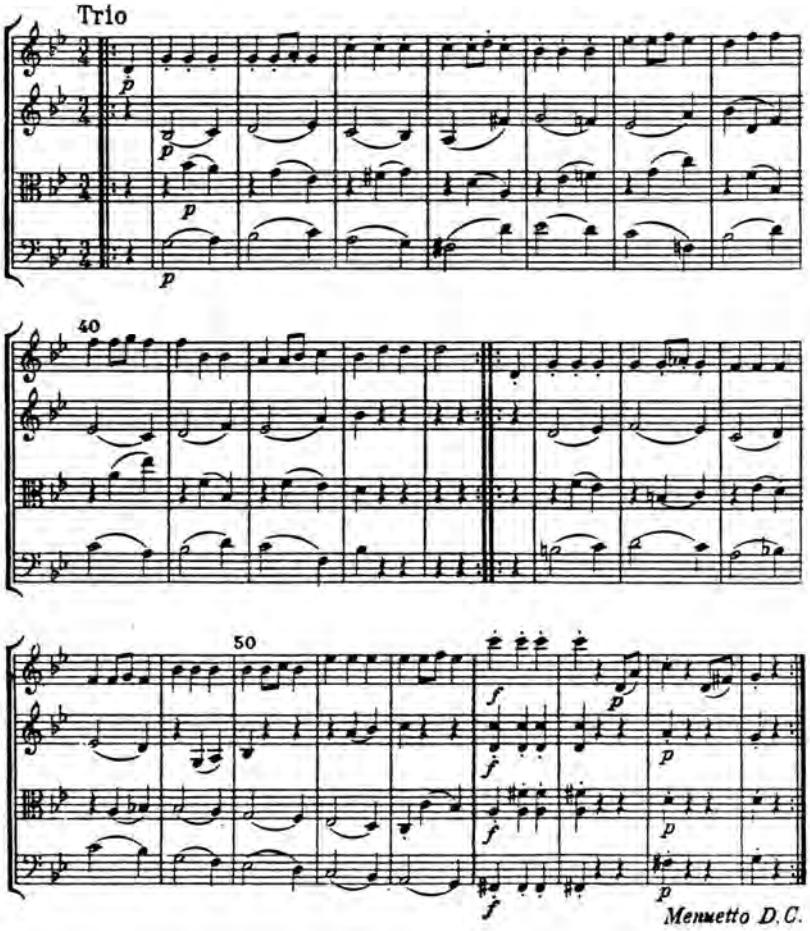

Ex. 67. Op. 17 / 6 - iv. b.88 - 109.

One of the most important melodic rôles assigned to the cello is found in the trio of Op. 17 / 3 - ii where it plays the main theme (doubled two octaves higher by the second violin) against a counterpoint in the first violin.




Ex. 68. Op. 17 / 3 - ii b.36 - 64.

In Op. 17 / 5 - ii the energetic tune played by the first violin is offset by an expressive counter-melody shared by cello and second violin. The viola adds further interest by a counterpoint resembling the plaintive character of sigh motives.




Ex. 69. Op. 17 / 5 - ii b.32 - 56.

## CHAPTER V.

## THE EMERGING INDEPENDENCE OF THE CELLO'S ROLE IN OP. 20.

The six Op. 20 quartets were published in 1772 and given the title of Sun Quartets, simply because of the rather insignificant personification of the risen sun which appeared on the title page of the first edition.

As with the previous quartets, Haydn was again influenced by the instrumentalists for whom he wrote, and this is particularly noticeable in the cello part.

In Opp. 1 and 2 there was an obvious, although limited, development in the technique expected of Albrechtsberger. The first quartet in the Op. 9 set shows a slightly more advanced cello part for Joseph Weigl and the technical demands increase with each work. Similarly, Marteau's influence is felt throughout Op. 17, possibly reflecting his technical superiority over Weigl. Certainly Haydn's confidence in Marteau increases with Op. 20, and there is no doubt that his expertise was a tremendous inspiration to Haydn during the composition of this set of quartets.

However, in contrast to the mild and gentlemanly Weigl, Marteau was a temperamental, flamboyant figure who caused Haydn many administrative problems. Notwithstanding these problems Haydn must have respected his professional ability: if his talents had not warranted it Haydn would not have gone to such trouble in placating the Prince after Marteau's various escapades.

Some proof of Haydn's anxiety to retain the services of Marteau is to be found in a letter addressed by him to

the Chief Bookkeeper of the Esterhaza administration on the 9th of January, 1772, when he submitted a request to assist Marteau in obtaining wood, candles and lodging money which were due to him. Again, in the early part of 1774, when the Prince concluded that Marteau and others had been absent without leave and had ordered deductions from their salaries, Haydn was quick to draw the Prince's attention to the fact that Marteau had been granted leave for a few days and that his absence beyond that period was due to the fact that he had been copying some concertos in Vienna and was also having his cello repaired.[1]

On the 8th of September, 1775, Marteau - probably as a result of some breach of discipline was summarily dismissed from the Prince's service, but, once again, Haydn intervened on his behalf and the dismissal was retracted. Marteau eventually left the service of the Prince in 1778.[2]

Haydn's attitude on these and other occasions proves without doubt his concern for the welfare and the musicianship of his colleagues, who were, moreover, intimate friends of Haydn's within an elitist primary group.

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1. It is interesting to note that Weigl, Marteau and Kraft all had children with above-average musical talents. At a very young age their respective fathers took them on concert tours, a fashion of the times. All these children were cellists and at least two of them, Joseph Weigl and Nicholas Kraft became leading cellists in Europe in their adult years.

2. Robbins Landon, Haydn, vol. II, p.205.

Marteau's ability and musicianship are clearly reflected in the quality of the cello writing in Op. 20. It was in this set of quartets that Haydn, for the first time, regarded the cello not only as a melodic solo instrument but also as a moving structural part of great importance. The harmonic and tonal structure of the music relies heavily on the cello part, which not only supports, but often leads the modulations, such an important aspect of sonata form. The dramatic potential in all basic key - conflict is greatly enhanced in Haydn's Op. 20 by the sweeping entries and flowing lines found in the cello part. It is therefore, not too much of an exaggeration to say that the cello part of Op. 20 opens the way for the full development of Sonata style in chamber music.

In addition to its fuller participation in the musical structure, the cello part also expands technically in Op. 20. The full compass of the instrument is used with great freedom, and its own special tone qualities are more thoroughly exploited than ever before. Its expressive potential is brought in line with those of the other instruments, particularly the violins, and there is an overall contiguity of string tone.

It is a characteristic peculiar to the string quartet that the four instruments blend together to sound as

one; and yet within this homogeneous texture each instrument contributes its own individual tone quality and emotial timbre. Op. 20 thus represents a consolidation of all the work Haydn had previously done in this genre, and becomes the paradigm which was to affect this form for all time. Haydn's quartets here attain their historical place or as Tovey put it: "further progress is not progress in any historical sense, but simply the difference between one masterpiece and the next."[1]

Op. 20 was written during what has become known as the Sturm und Drang period in Haydn's life (1766 to 1774) which saw a revolution in his style, as was the case with other Austrian composers. Artists in all art forms were turning away from the superficialities of the rococo style, and, to clear his music of all these "trifles", Haydn turned more and more to the style of the old contrapuntalists.

The chief manifestations of Sturm und Drang style in the Op. 20 quartets are:

i) The use of minor keys.
ii) Greater harmonic tension, especially in the slow movements.
iii) Greater textural concentration in the quick movements.

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1. D. Tovey, Cobbett, vol. I, p.537.

iv) Larger intervals in the themes.

v) An increasing use of contrapuntal devices.

vi) A more agitated use of syncopation in accompanying figures.

vii) Greater dynamic range, from pp to ff, and greater use of crescendo, decrescendo and accents.

Proof of the emotional intensity that went into the laborious creation of these quartets can be surmised from the fact that here, for the first time, Haydn made use of numerous and complicated sketches, and that the autograph hand reveals "a barely suppressed state of excitement".[1]

Another indication of the state of "crisis" apparent in Op. 20 is evident from the perplexity Haydn felt about the position of the minuet, which alternates between second and third movement. His indecision about this movement continues in the scherzos of Op. 33 and is only finally resolved in Op. 50, from which point onwards, it is always in third position.[2]

It would appear, then, that this experimentation with the overall balance of movements in the Op. 20 quartets is yet another indication of their significance as a turning-point in Haydn's life.

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1. Robbins Landon, Haydn, Vol. II p.299.

2. There are only three exceptions to this rule: Op. 64/1, 64/4 and the incomplete 103.

Robbins Landon sums it up by saying that with the "Farewell" symphony, the piano sonata no. 33 in C minor and the Op. 20 quartets, the history of music is revolutionised. "The great period of the Viennese classical style has begun, and it is no exaggeration to say that their music was never the same again".[1]

A table giving the tempo and description of each movement is shown below.

Op. 20 no. 1.

1. Allegro moderato.
2. Menuetto. Allegretto.
3. Affetuoso e sostenuto.
4. Presto.

Op. 20 no. 2.

1. Moderato.
2. Adagio.
3. Menuetto. Allegretto.
4. Fuga a 4 soggetti - Allegro.

Op. 20 no. 3.

1. Allegro con spirito.
2. Menuetto. Allegretto.
3. Poco. Adagio.
4. Finale. Allegro molto.

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1. Ibid.

Op. 20 no. 4.

1. Allegro di molto.
2. Un poco Adagio Affetuoso.
3. Menuetto. Allegretto alla zingarese.
4. Presto scherzando.

Op. 20 no. 5.

1. Allegro moderato.
2. Menuetto.
3. Adagio.
4. Finale. Fuga a due Soggetti.

Op. 20 no. 6.

1. Allegro di molto e scherzando.
2. Adagio cantabile.
3. Menuetto. Allegretto.
4. Fuga a tre soggetti - Allegro.

In the whole set of six quartets, Op. 20, a new-found confidence in the cello as a solo instrument manifests itself. Each work shows, in varying degrees, a marked improvement in the status of the cello, which, naturally, affects the texture and style of the four instruments as a group, and foreshadows the thoroughly integrated quartet style of Haydn's later works. Moreover, in view of the technical assurance implicit throughout this set it

will be neither necessary, nor relevant, to analyse in detail those aspects of elementary cello technique which were dealt with in Opp. 1 - 17, but rather to study the emergence of the cello part as an independent voice. This can be considered from two angles: firstly, the technical agility demanded of the cellist and secondly, and of more significance, the cello's rôle in relation to the other instruments. These two viewpoints are not, of course, mutually exclusive, but for the purpose of this Chapter the technical aspects will be dealt with first, so that it can be seen how these affect the independence of the cello part within the context of the string quartet.

SPACIAL FREEDOM.

The most significant technical advance in the cello part lies in the direction of spacial freedom, often coupled with instrumental agility.

The freedom with which the cello part ranges over a compass of three octaves represents a great advance over Opp. 9 and 17. In particular the upper range of the instrument is given a prominence never encountered before, as the following table demonstrates:

OP. 20.

No. 1. 

No. 4. 

No. 2. 

No. 5. 

No. 3. 

No. 6. 

Although this does not give any indication of the extent to which different areas are used, the upward extension in nos. 1 - 3 gives the first clue to the significant use of the cello's high register in these three works, in particular no. 3 where the thumb position appears for the first time.[1]

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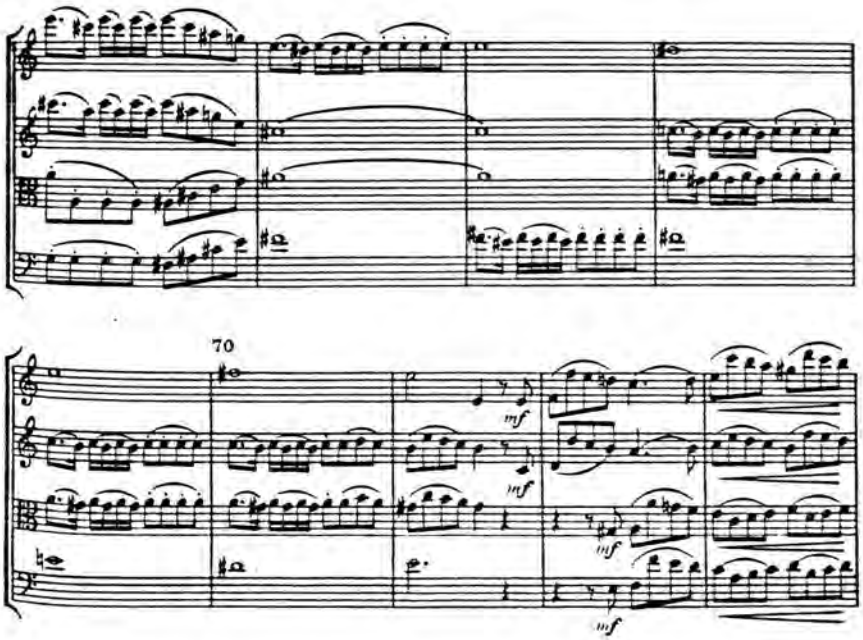
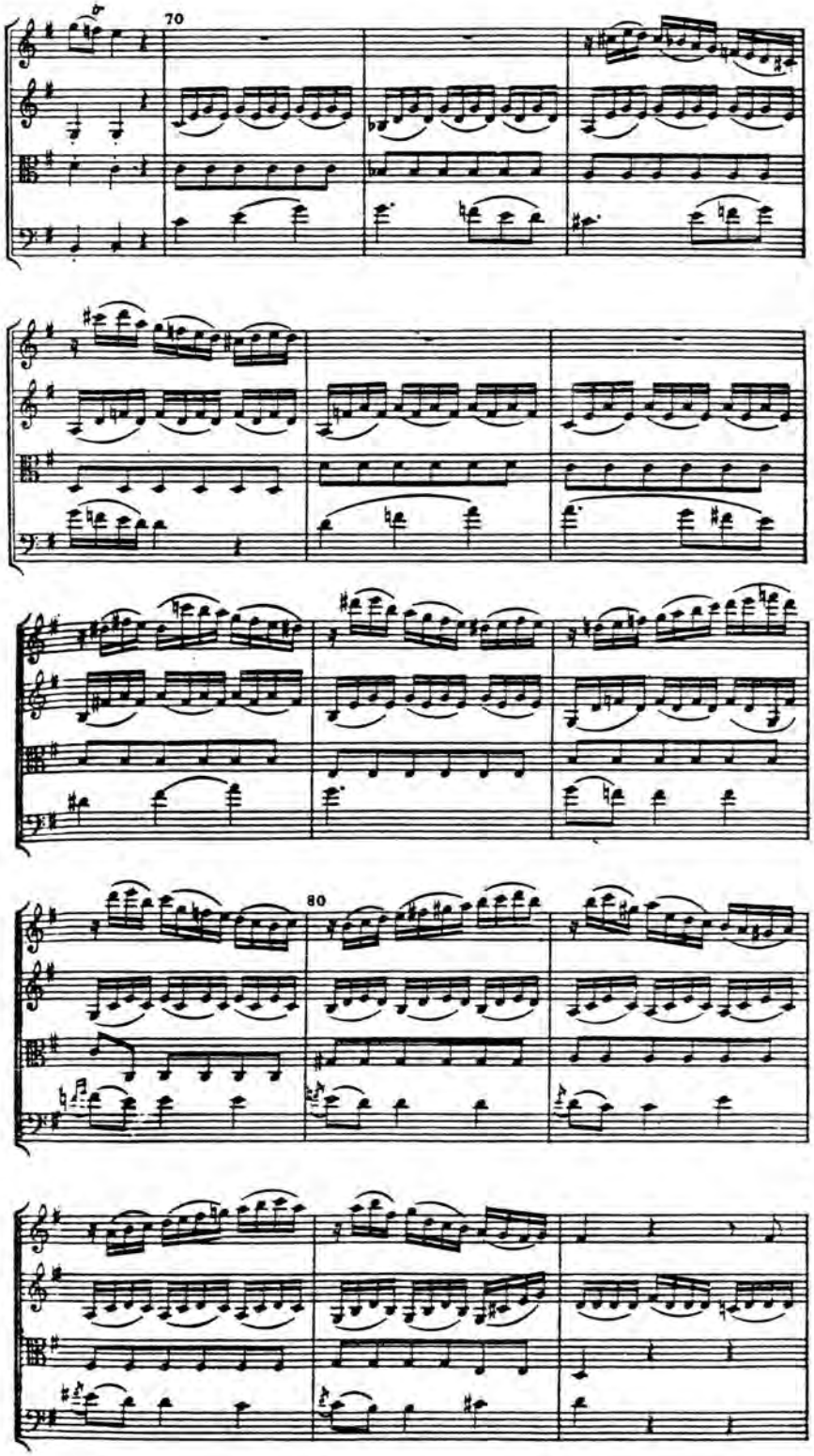
1. This is discussed in detail below p. 155.

As early as bar 32 of Op. 20 / 1 - i the upper compass reaches b' flat, although there are a few phrases in the whole quartet that dwell in this region. However, in Op. 20 / 2 the exploration of the upper-octave range begins in earnest, and throughout this quartet the cello consistently plays in its higher register, so that the four instruments are often very close in pitch. Bars 66 to 71 of the first movement illustrate this well. It can also be seen that the cello here takes over the rôle of a higher instrument, playing a phrase that in an earlier quartet might have been assigned to the second violin.




Ex. 1. Op. 20 / 2 - i b.65 - 73.

The most extended passage using the upper register of the cello is in Op. 20 / 3 - iii, where the poignant tone quality of the theme is particularly emphasized.

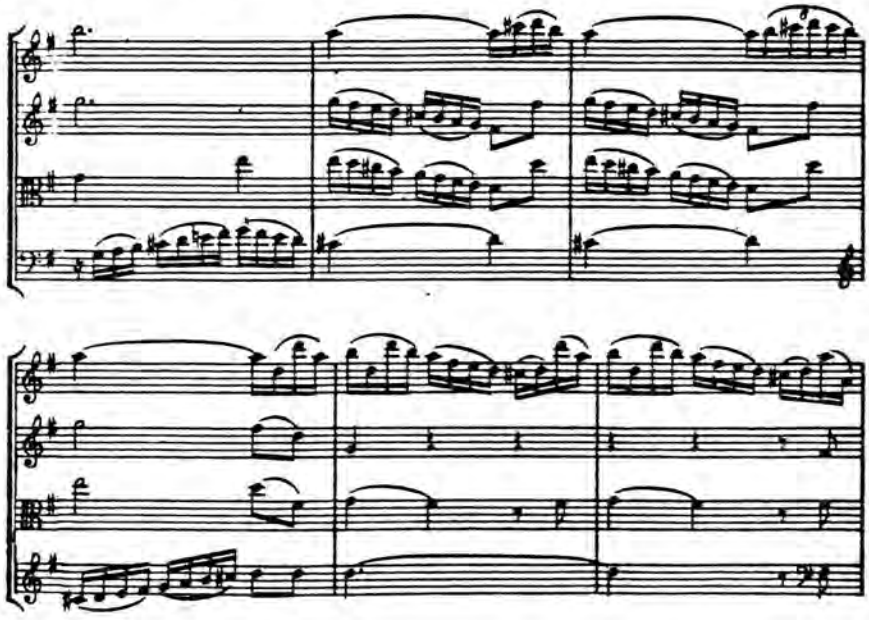



Ex. 2. Op. 20 / 3 - iii b.69 - 84.

The cello here intensifies the plaintive, soulful nature of the melody which the other instruments of the string quartet are incapable of doing, and it is in this way that the cello contributes to the enrichment of texture and adds to the emotional depth of the work.

The sustained height of this cello solo and its anguished re-interpretation of the originally serene and contemplative main theme make this passage so intense that the ensuing bars of rests in the cello part come as a considerable relief. This foreshadows the use of the cello in Op. 33, where, in places, its absence can sometimes become as important as its presence.

The confidence with which Haydn devotes such a long section to the upper compass of the cello had been acquired during an earlier part of the same movement where, in bars 35 - 36, the thumb position had made its first appearance in the quartets.



Ex. 3. Op. 20 / 3 - iii b.32 - 37

The rising D major scale could not have provided a smoother and more natural approach to the new position. The transition occurs on a', enabling the player to reach up to d'', the highest note yet achieved in the cello part, and, moreover, in a fairly exposed and unsupported context.

The problems associated with thumb-position, which is a new technique here, need to be discussed in some detail. In the first to fifth positions (or sixth, depending on the size of the hand) the thumb is kept behind the neck of the cello. Once a higher register is required, the thumb moves round onto the fingerboard assuming the rôle of an artificial nut. This destroys the psychological "reference point" previously supplied by the thumb in relation to the neck of the instrument and nullifies the security and confidence which hinged on the former position of the thumb. Thus the playing in thumb position requires not only physical gymnastics but psychological stamina as well. Therefore it is not surprising that this is the first time the thumb position is encountered in the quartets.

Moreover, as the cello was played without a tailpin in Haydn's time, players generally avoided moving the thumb from one position to another in order not to create awkward problems in the balancing of the instrument.

The periodic concentration on the cello's upper register is balanced by a noteworthy increase in extended passages in the lower register. The third movement of Op. 20 / 1, for example begins with a low, dark, "mezza voce" sonority. The closeness of texture increases as the cello part moves upwards and only the middle registers of the three higher instruments are used, fusing them into closely-woven, sustained harmonies.

It is in such homogeneous passages as these that one can only strongly disagree with Moe's statement that in Op. 20 "Haydn was too involved in developing a texture of four independent voices".[1]

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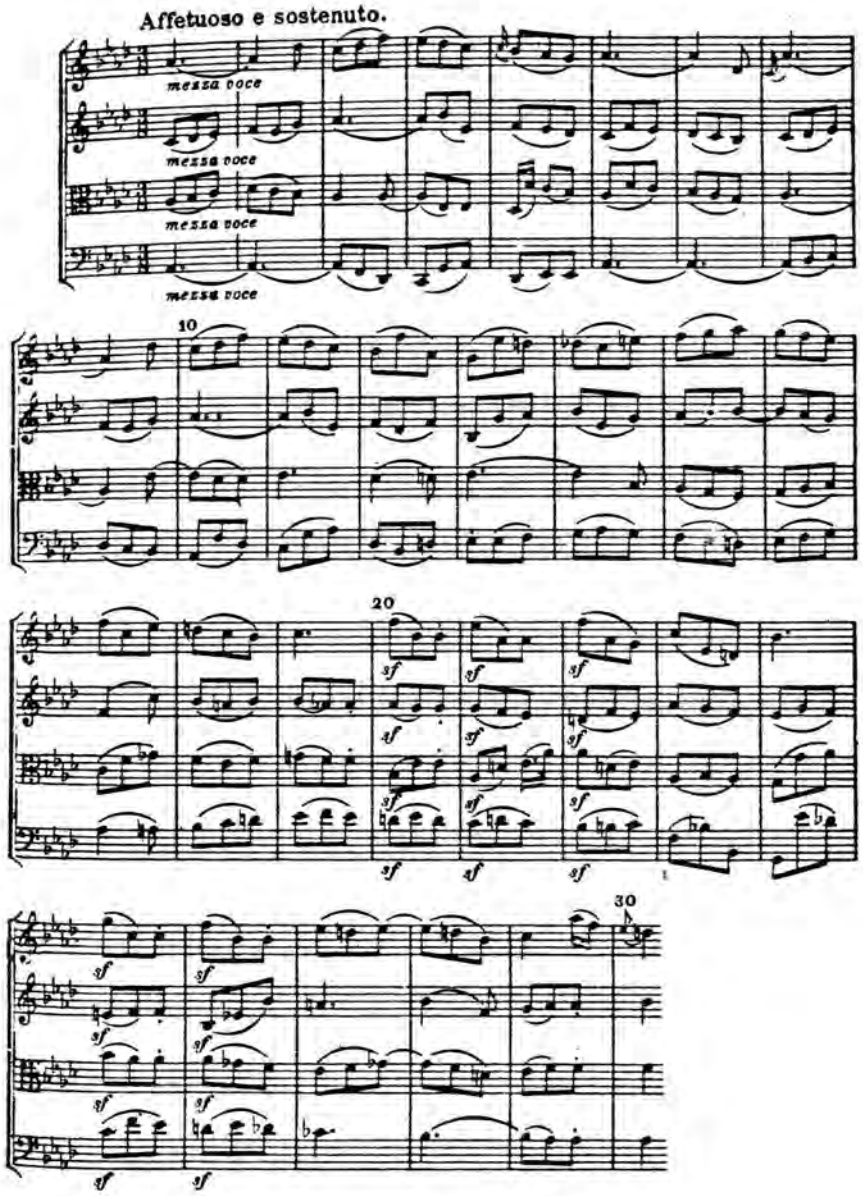
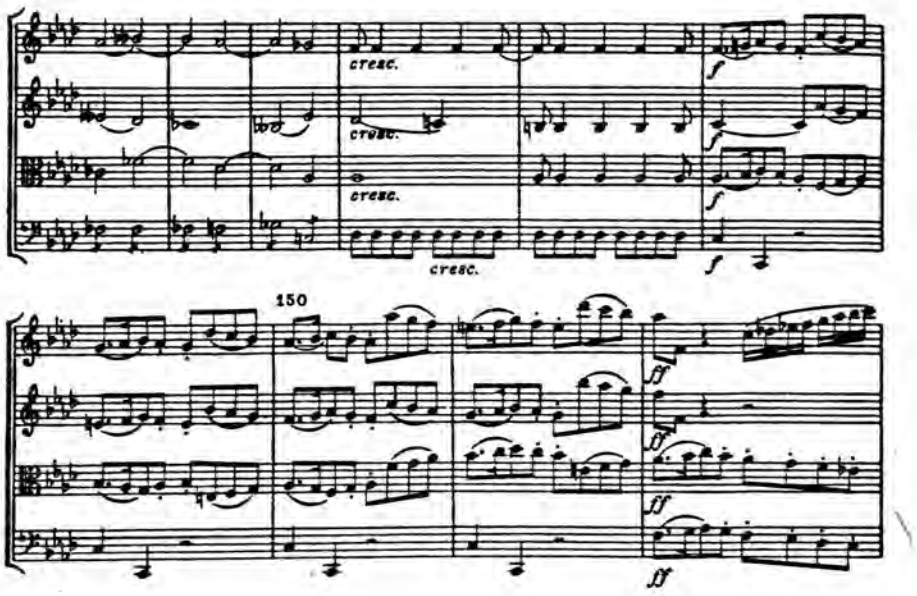
1. Moe, Orin, Texture in the String Quartets of Haydn to 1787. Unpublished Doctoral Thesis, 1970, p.262.




Ex. 4. Op. 20 / 1 - iii b. 1 - 29.

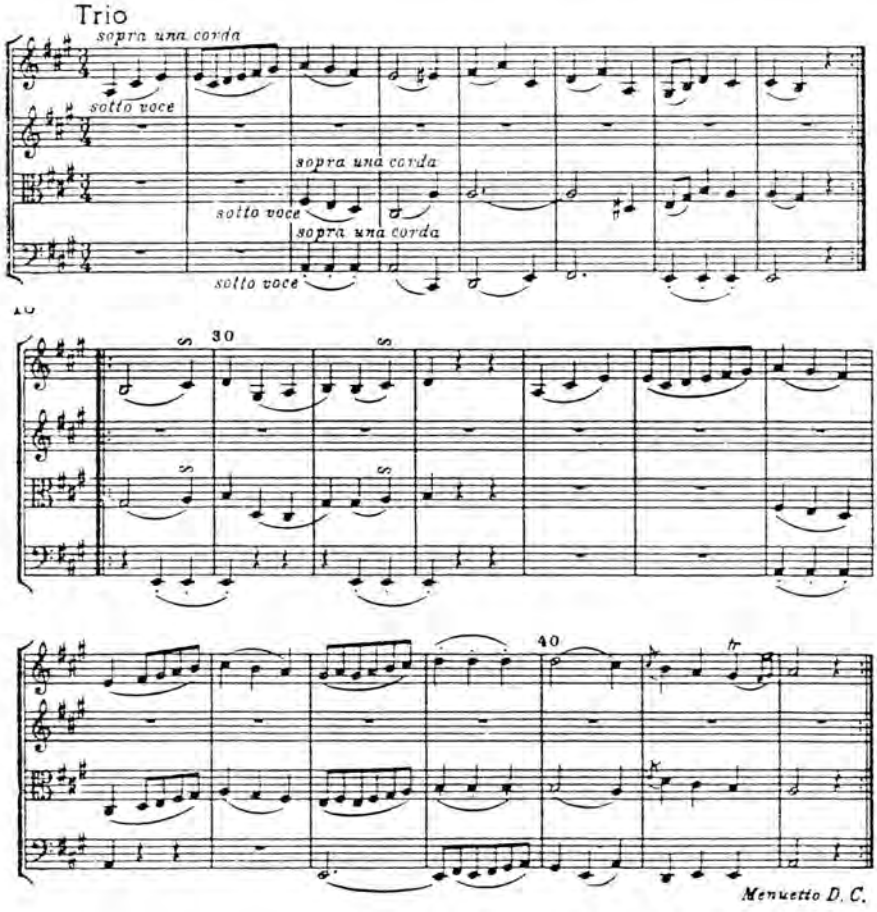
A far more consistent and deliberate use of the low register occurs in Op. 20 / 5, partly because of the sombre F minor tonality and partly because of the frequent occurrences of pedal points. In particular, the use of the open C string is exploited here, adding greater tension and solemnity to the dominant chord, in such passages as Op. 20 / 5 - i bars 148 - 152.




Ex. 5. Op. 20 / 5 - i b.143 - 152.

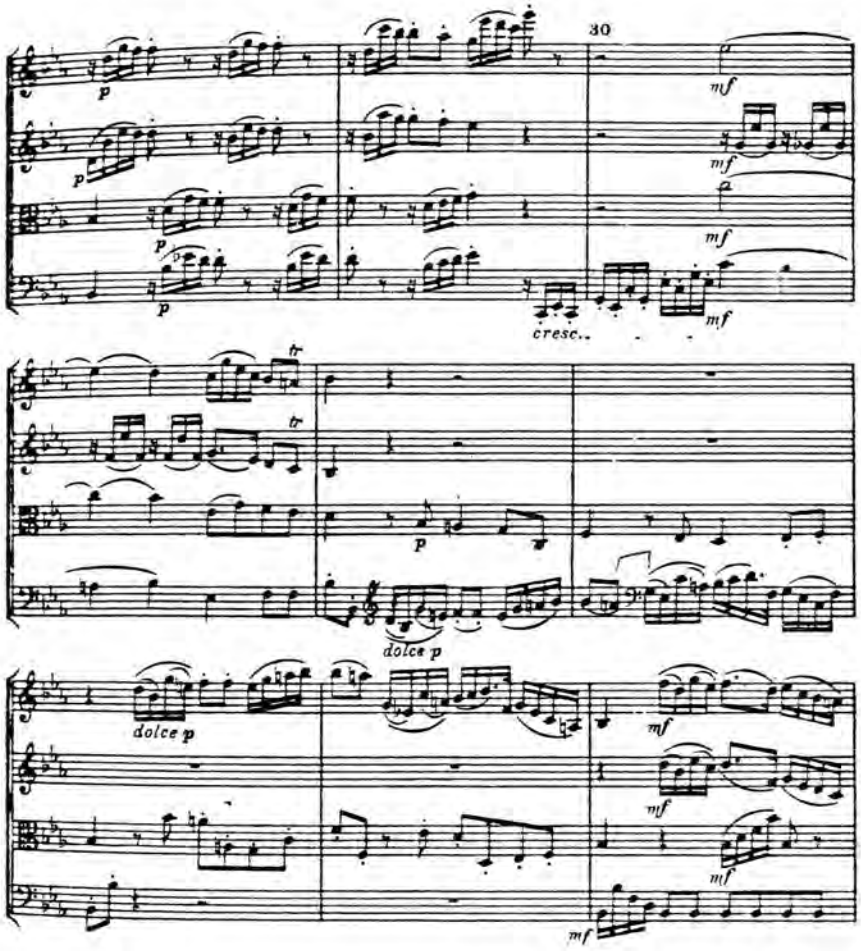
In the trio of Op. 20 / 6, all three instruments - the second violin being "tacet" - are instructed to play "sopra una corda" throughout, which, in effect, means that

each line is played on the lowest string of the instrument concerned. This gives a hushed, delicate tone, especially to the cello, since even the upper notes on the C string are influenced by its dark sonority.



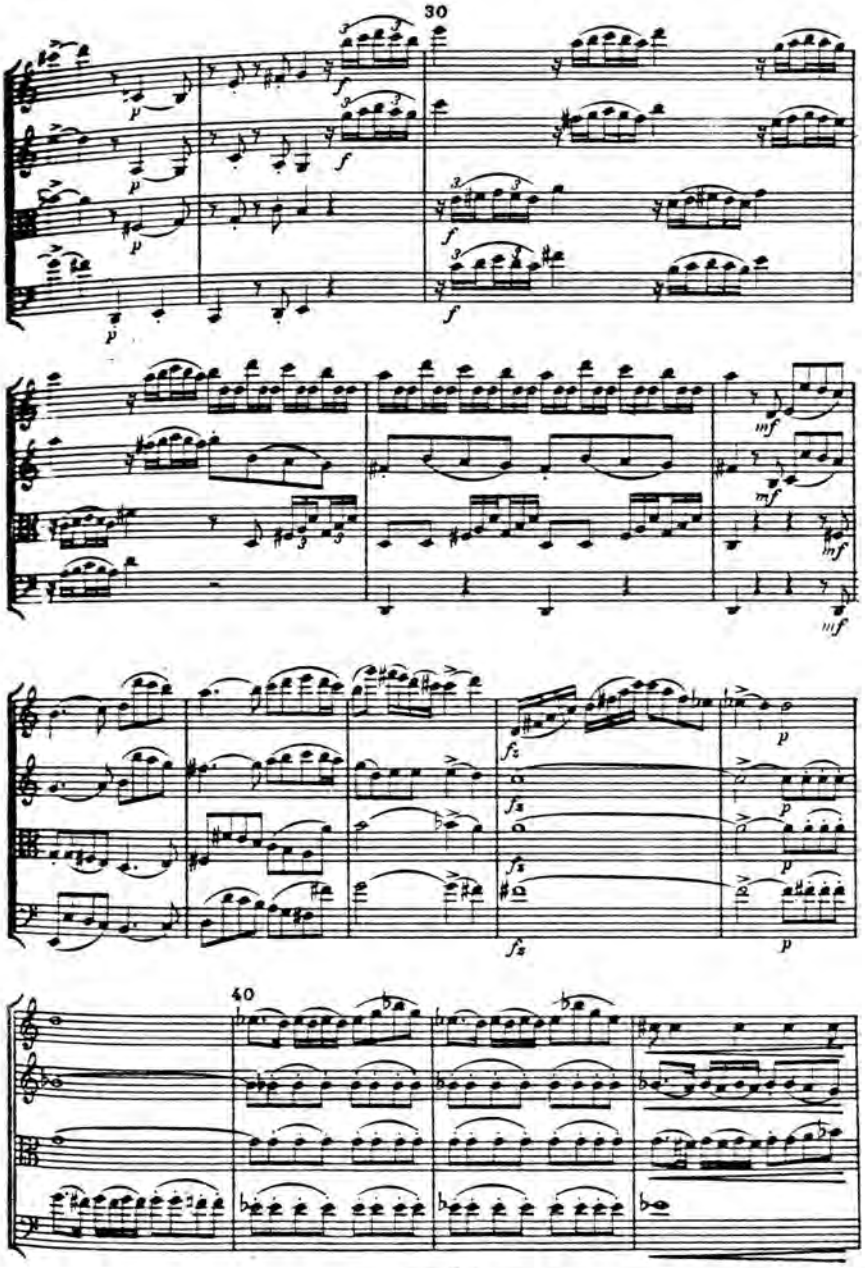

Ex. 6. Op. 20 / 6 - iii b.21 - 42.

Normally the cello part does not stay in any one register for extended periods and an obvious way in which spacial flexibility is achieved is by rapid movements between extreme ends of the compass. In Op. 20 / 1 - i, the cello line covers three octaves in the course of only three bars, reaching to b' flat, the higher limit of this quartet, and then quickly descending.



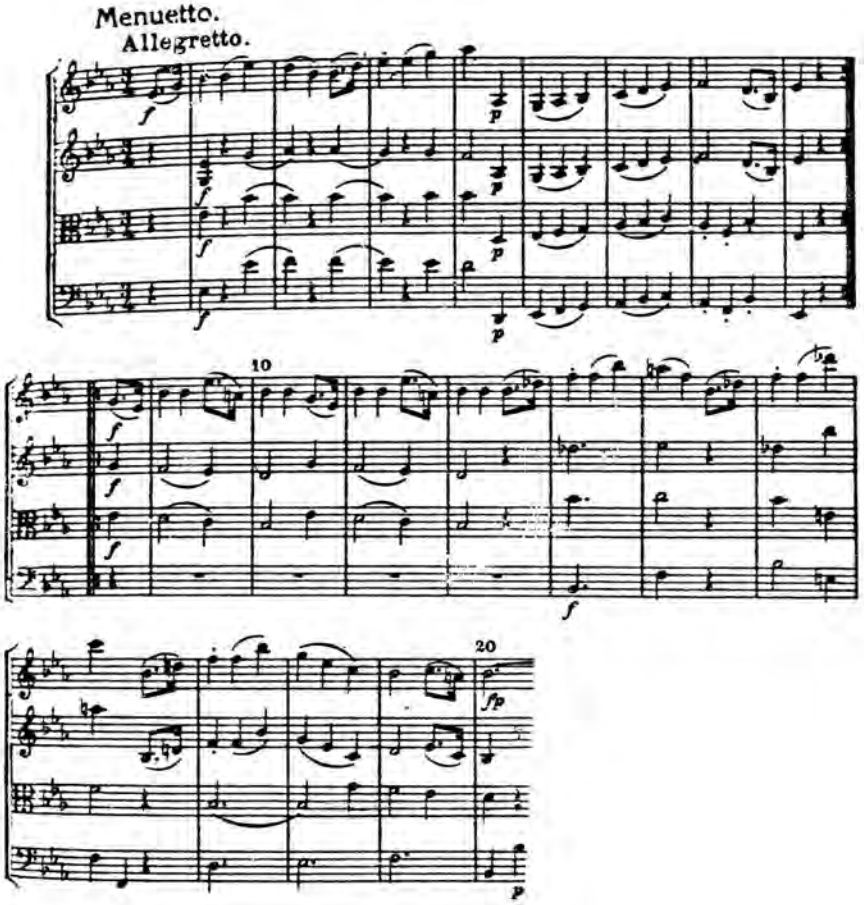

Ex. 7. Op. 20 / 1 - i b.28 - 36.

In Op. 20 / 2 - i an even more dramatic fluctuation between extremes occurs. In bar 28, where the work changes key, a huge, downward leap in the cello part from f' sharp to D initiates a less assertive quality in the music. In the next eight bars (b.29 - 36) the cello continues to vacillate rapidly between regions two or more octaves apart.



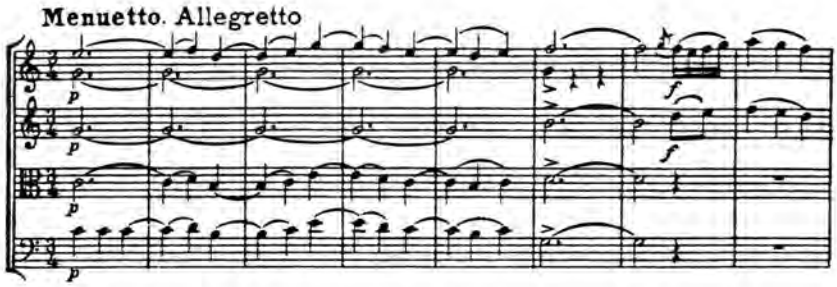

Ex. 8. Op. 20 / 2 - i b.28 - 42.

Haydn obviously valued this dramatic potential and sudden changes of register are used in a number of different ways - either within a musical phrase, as in the following examples:



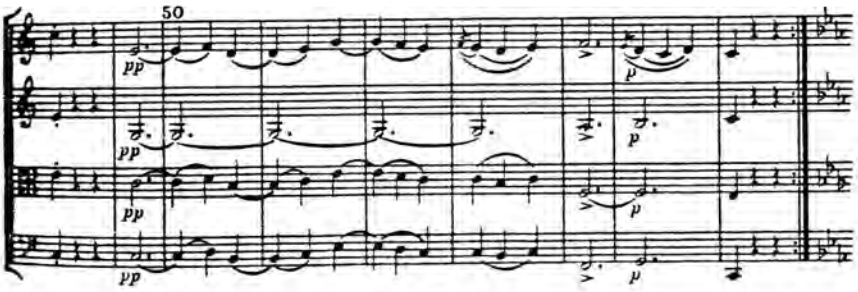

Ex. 9 Op. 20 / 1 - ii b. 1 - 19.

or at the repeat of an entire phrase in a lower register,



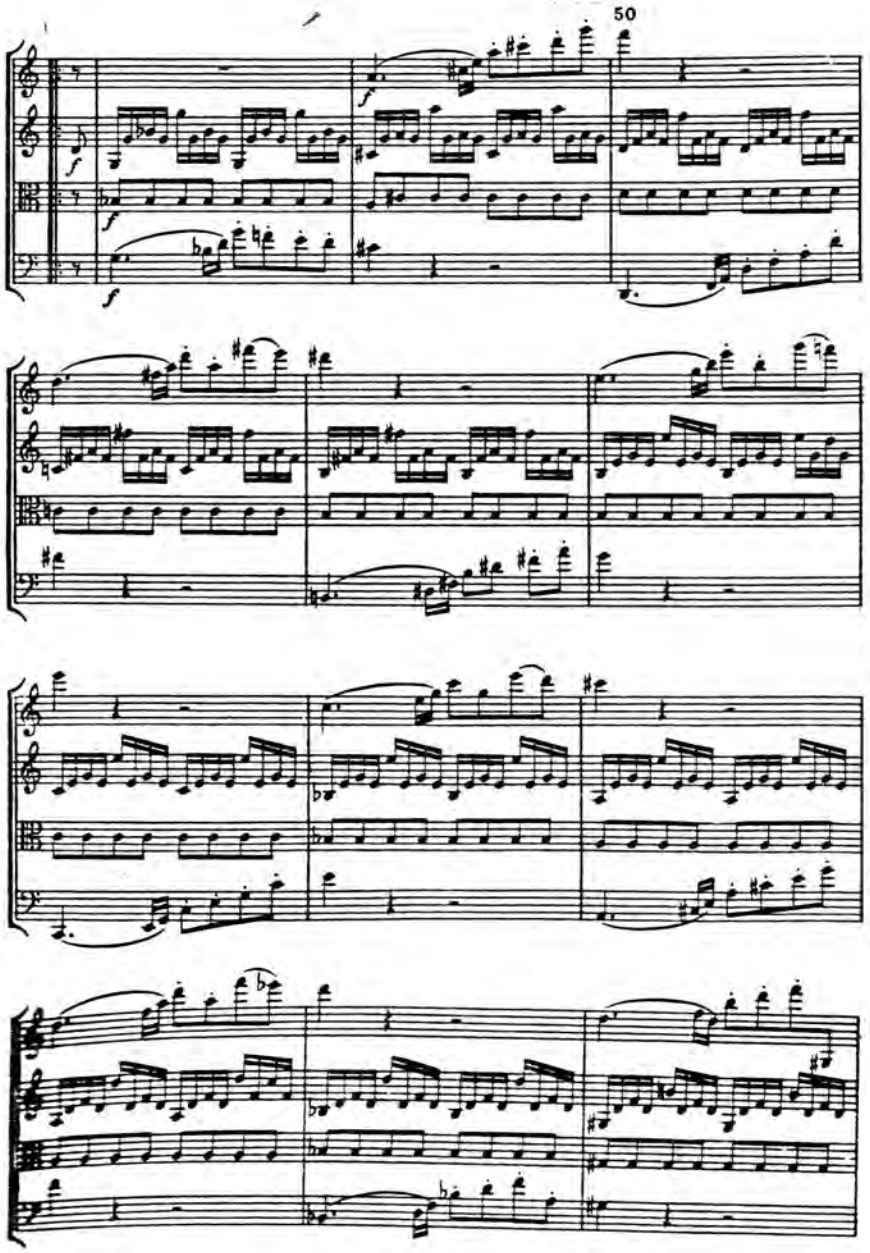

Ex. 10. Op. 20 / 2 - iii b.1 - 8.

resulting in a different, more sombre tone-colour.



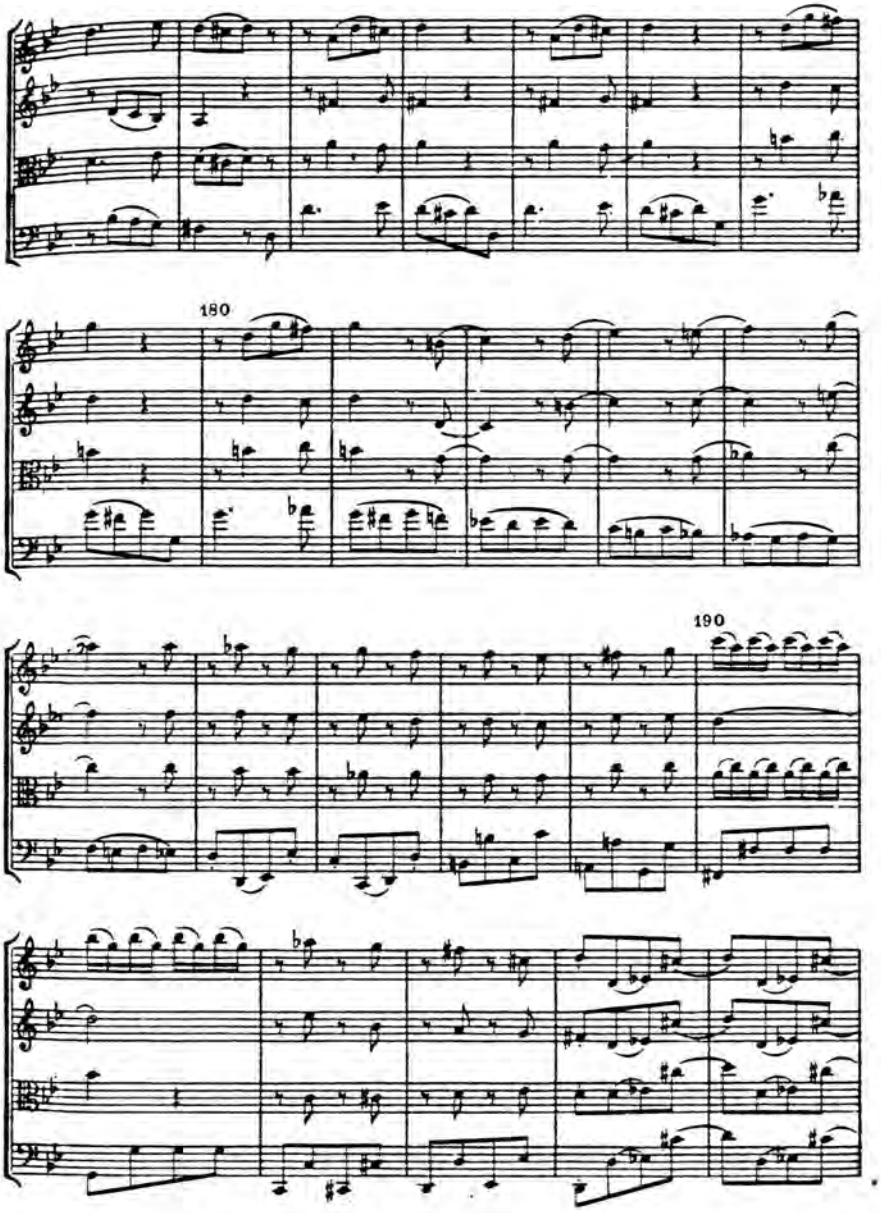

Ex. 11. Op. 20 / 2 - iii b.48 - 56.

In addition, changes of register are used during a development section to lead the argument and direct the modulations:




Ex. 12. Op. 20/2 - i b.48 - 59.

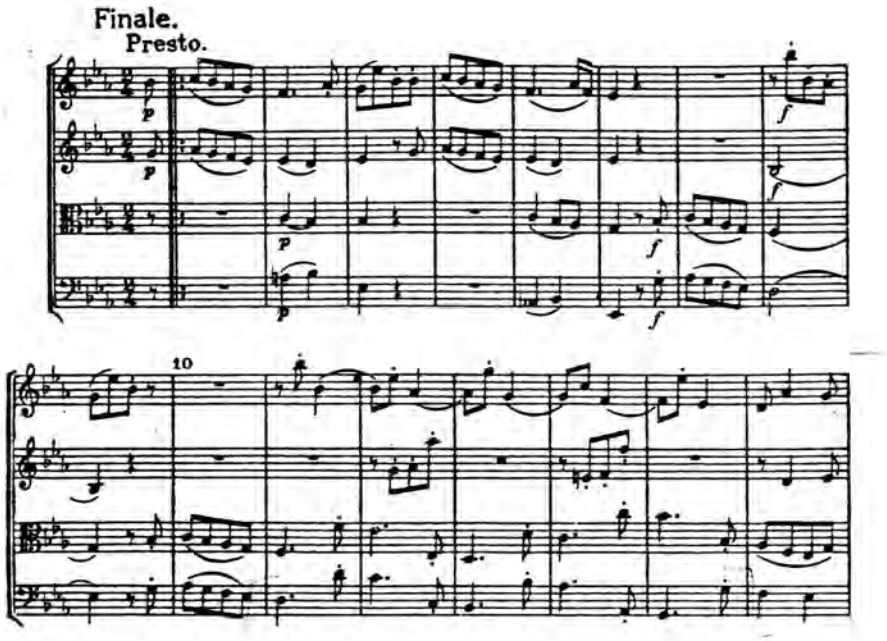
In all these examples, it is not just the cello's register, but also its varying tone-qualities within each register, that are important. One notable passage in Op. 20 / 3 - i highlights the different qualities of the tenor, baritone and bass ranges of the instrument.




Ex. 13. Op. 20 / 3 - i b.172 - 195.

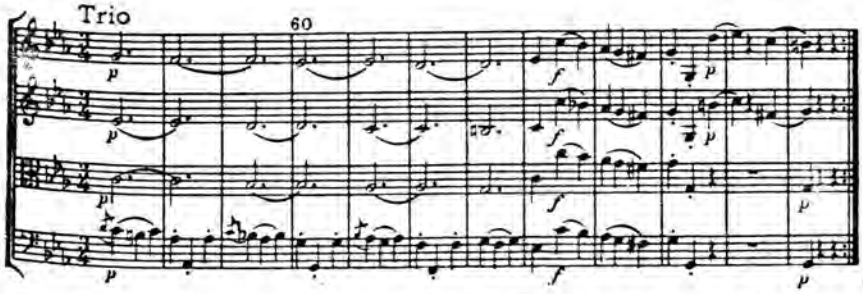
ii) INSTRUMENTAL AGILITY.

This term implies a concordance of the various aspects of cello technique covered in Opp. 9 and 17 and it will only be necessary here to give some examples of where the absorption of these techniques has enabled the cello line to become more mobile. Octave leaps occur more frequently in Op. 20 than in the previous sets, and Op. 20 / 1 - iv relies heavily on the following kind of bouncing octaves:



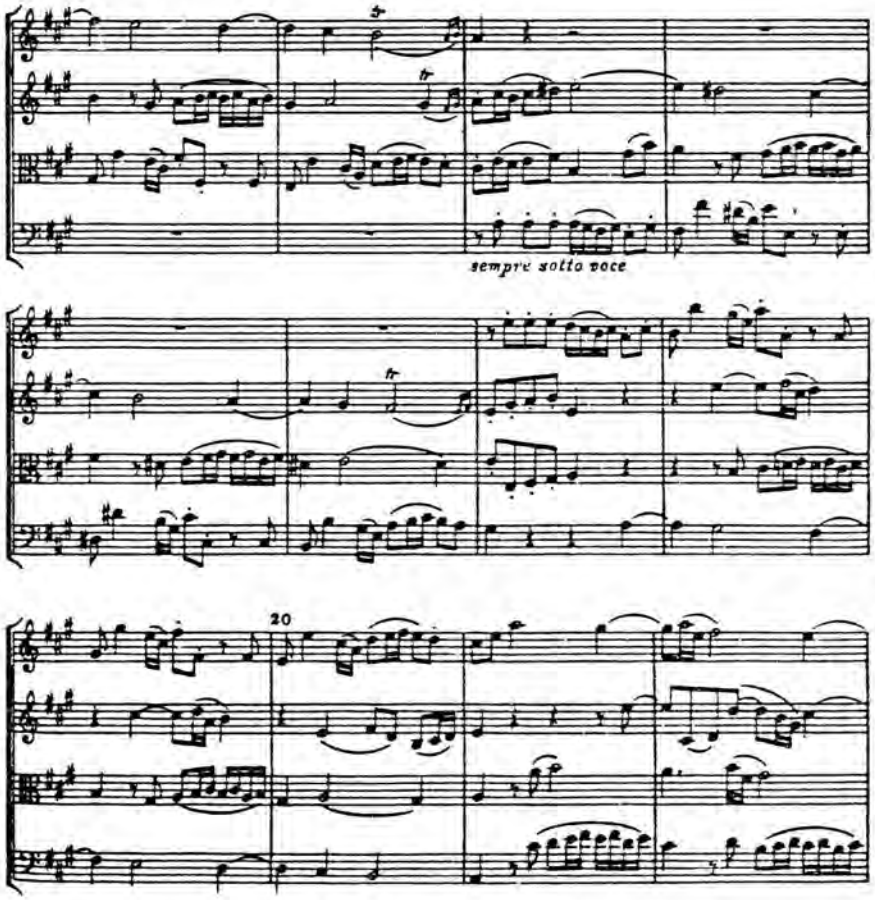

Ex. 14. Op. 20 / 1 - iv. b.1 - 16.

In the trio of Op. 20 / 2 - iii the main interest lies in the lively activities of the cello part, using the warm middle register.



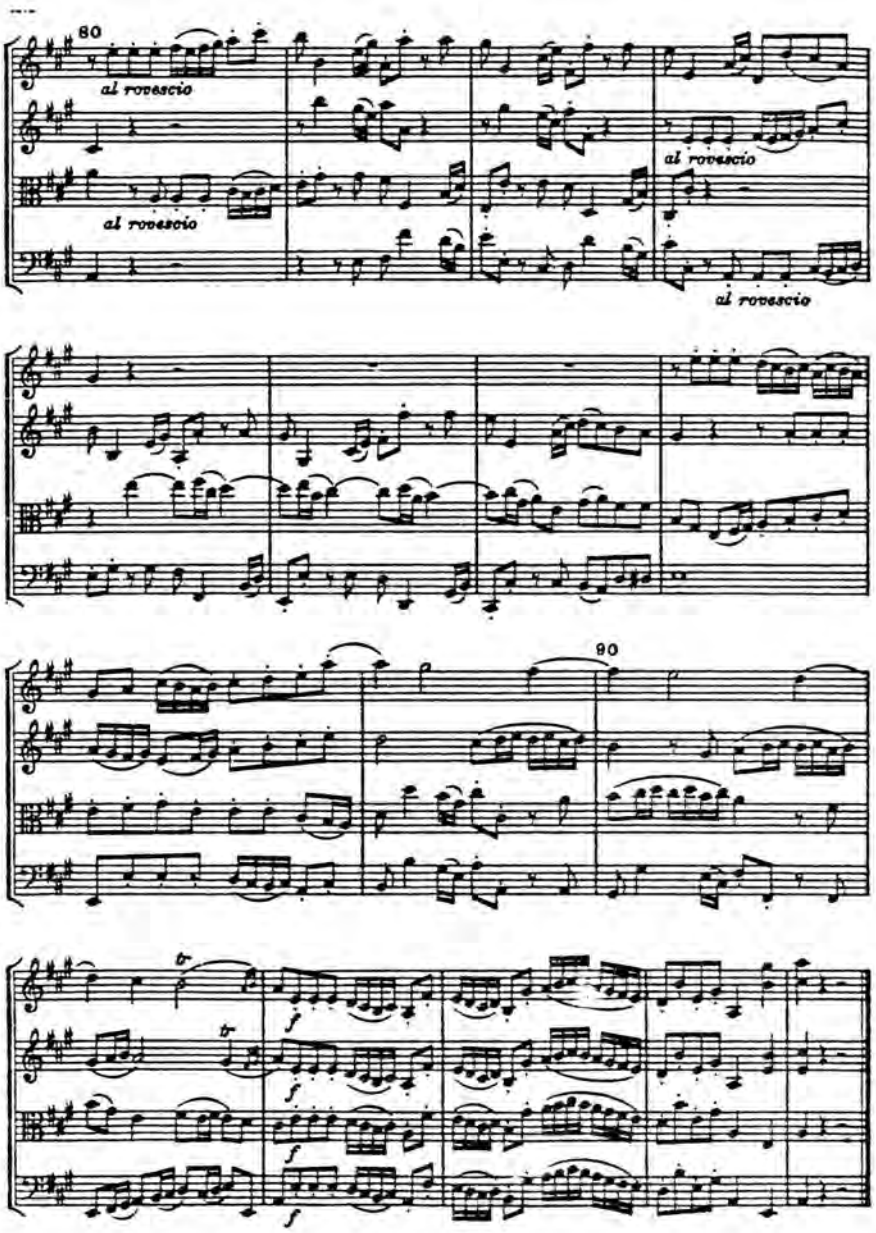

Ex. 15. Op. 20 / 2 - iii b.57 - 68.

In Op. 20 / 6 - iv octave leaps form an integral part of the fugue-subject. They are rendered slightly more difficult here by the fast speed and the "sotto voce" indication:



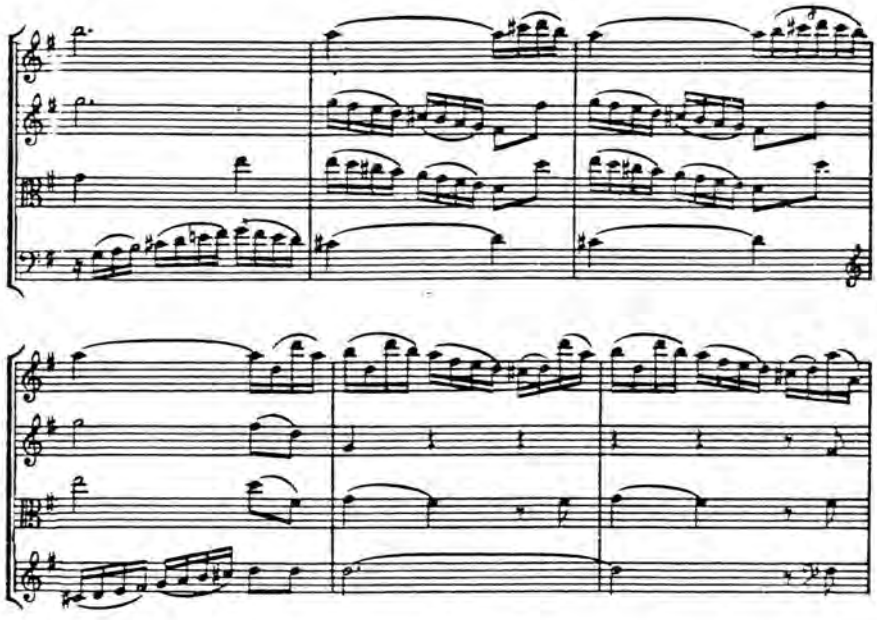

Ex. 16. Op. 20 / 6 - iv. b. 11 - 22.

Probably the most difficult passage occurs in the closing bars of the fugue where the subject alternates between statement and inversion, forcing the cellist to move around the fingerboard, changing positions, using shifts, and alternating between close and extended positions at great speed.




Ex. 17. Op. 20 / 6 - iv. b.80 - 95.

Haydn frequently requires the cello part to leap an octave or more from one phrase to the next, either with or without a rest in between. The following example shows a typical mid-phrase leap which is difficult to achieve especially because of the "mezza voce" marking.[1]



Ex. 18 Op. 20 / 3 - iii b.32 - 37.

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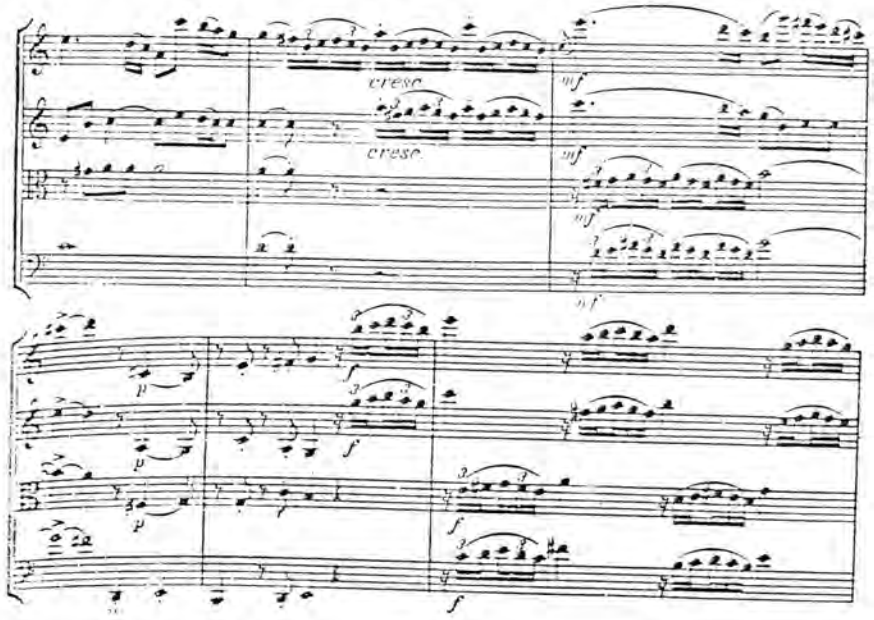
1. This marking not seen on the reproduced example is found in bar 30.

The passage, previously mentioned,[1] necessitating a sudden leap occurs in Op. 20 / 2 - i, bar 29, where, from a phrase marked mezzo forte, in a high register the cello-line spontaneously descends to D, marked piano.




Ex. 18a Op. 20 / 2 - i b.25 - 30.

A similar instance of rapid readjustment occurs in the development of Op. 20 / 1 - i where the function of the cello changes from that of a supportive bass to melodic partnership with the second violin, only to resume its former rôle one and a half bars later. The readjustment needs an increased agility in the overall technical demands, with quick accurate left-hand movements coupled with sensitive bowing.

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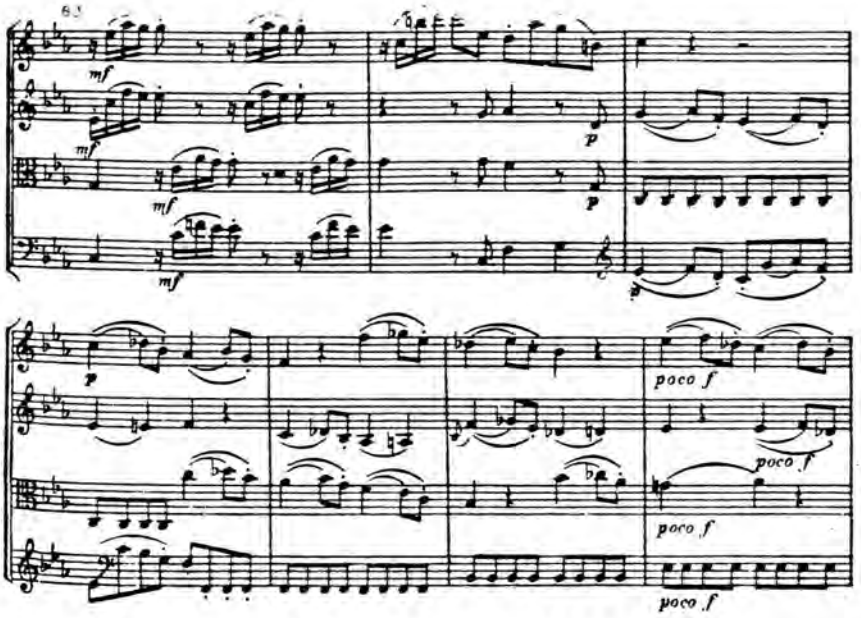
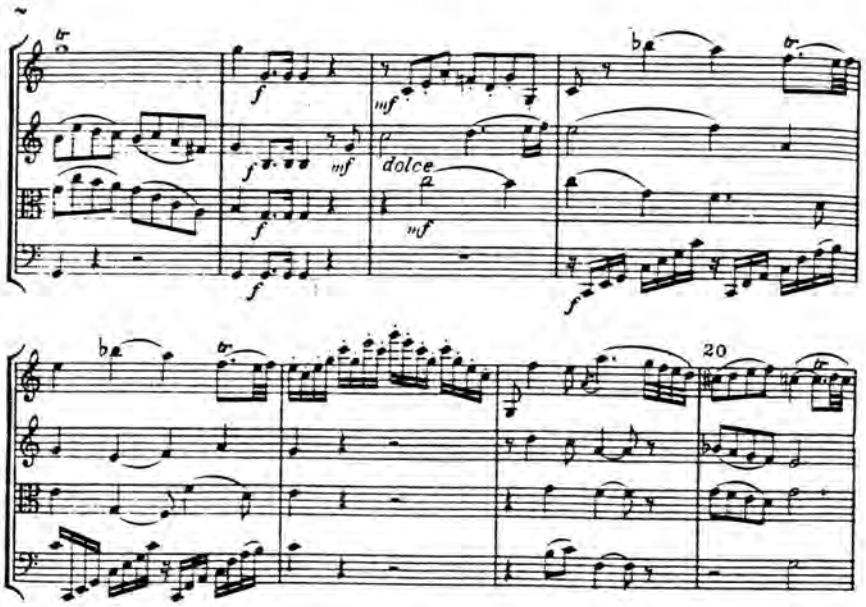
1. See previous page.




Ex. 19 Op. 20 / 1 - i b.60 - 66.

Op. 20 / 2 - i contains bustling semiquaver arpeggios which provide strong contrast to the melodic lines of the other instruments. Although an example of the first arpeggio in b. 16 was illustrated in the previous chapter[1] the tempo here is twice as fast as in the earlier example.




Ex. 20. Op. 20 / 2 - i b.13 - 20

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1. See above, p. 122.

## THE CELLO'S RÔLE IN RELATION TO THE OTHER INSTRUMENTS.

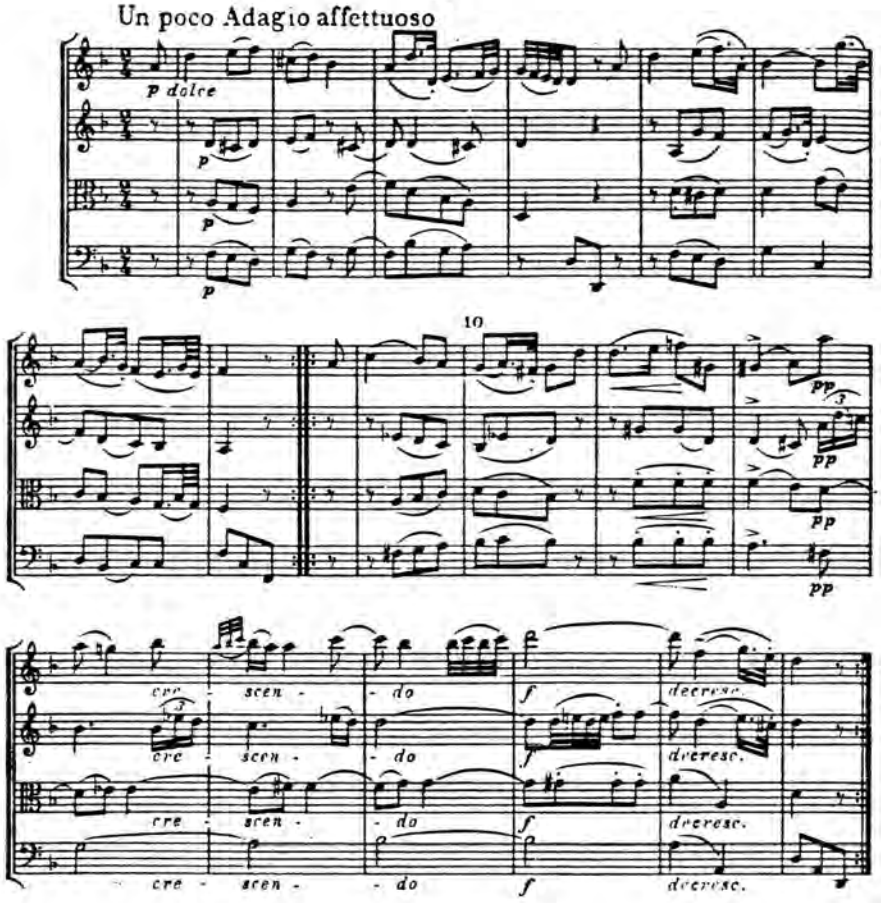
The cello's rôle in relation to the other instruments, and its subsequent influence on the texture of the quartet style, will be discussed under the following five headings.

i) Harmonic stability.
ii) Pedal points.
iii) Contrapuntal independence.
iv) Accompaniment.
v) Solo prominence.

### i) Harmonic Stability.

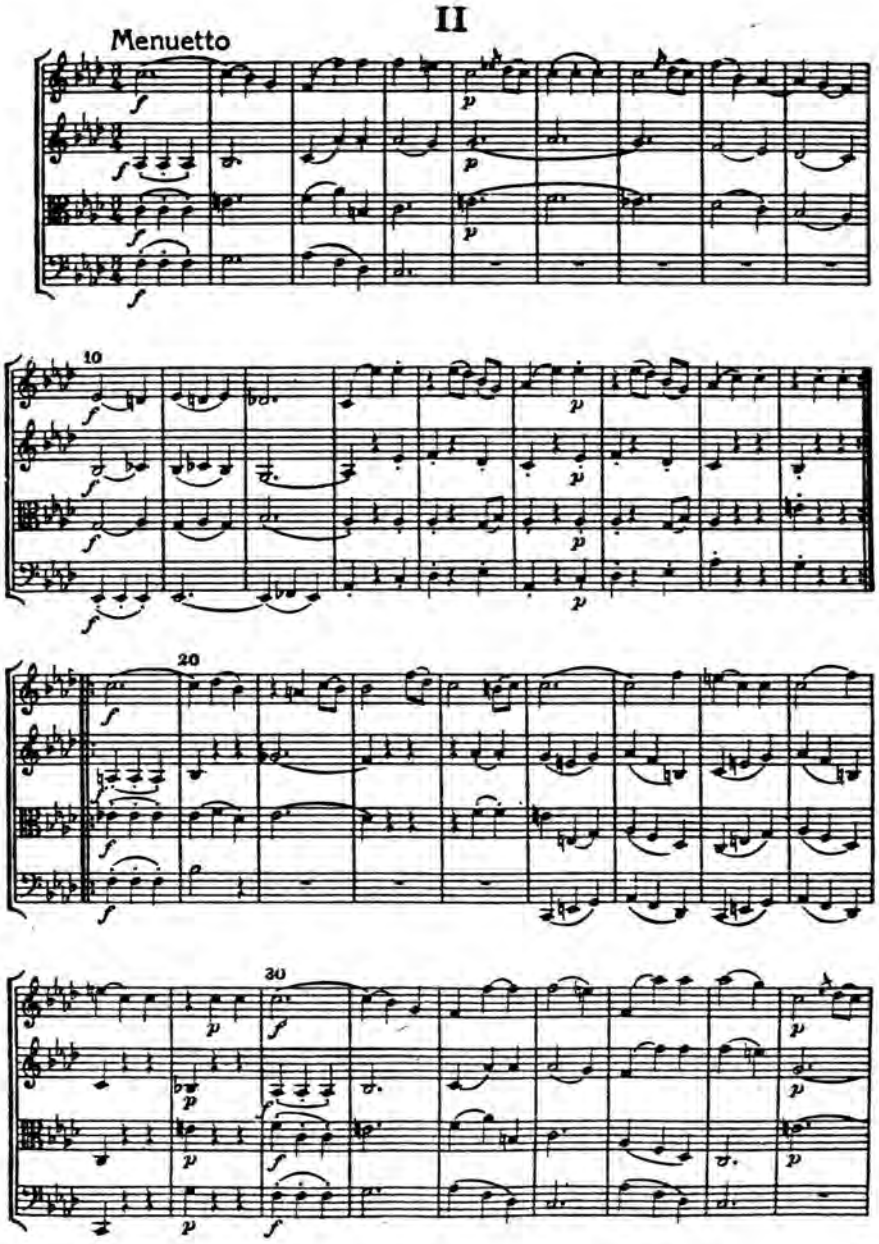
One of the primary harmonic functions of the cello part is to provide a stable, yet flexible bass line for harmonic movement in the upper voices. This is particularly noticeable in theme and variation and minuet movements, with their limited modulations. In Op. 20 / 4 - ii the cello line of the main theme remains virtually unchanged throughout variations 1, 3 and 4. It is not a solid, continuous bass, but supports the harmonic texture with sensitive and flexible phrasing, often moving in rhythmical concordance with the second violin and viola.

II




Ex. 21. Op. 20 / 4 - ii b.1 - 18.

In Op. 20 / 5 - ii the cello is used sparingly and is reserved for sections which are harmonically the most important. In the first four bars it adds to the dark texture of the accompaniment and after a five-bar rest (where the texture immediately brightens) re-enters on low E flat, reinforcing the gravity of the harmonies.

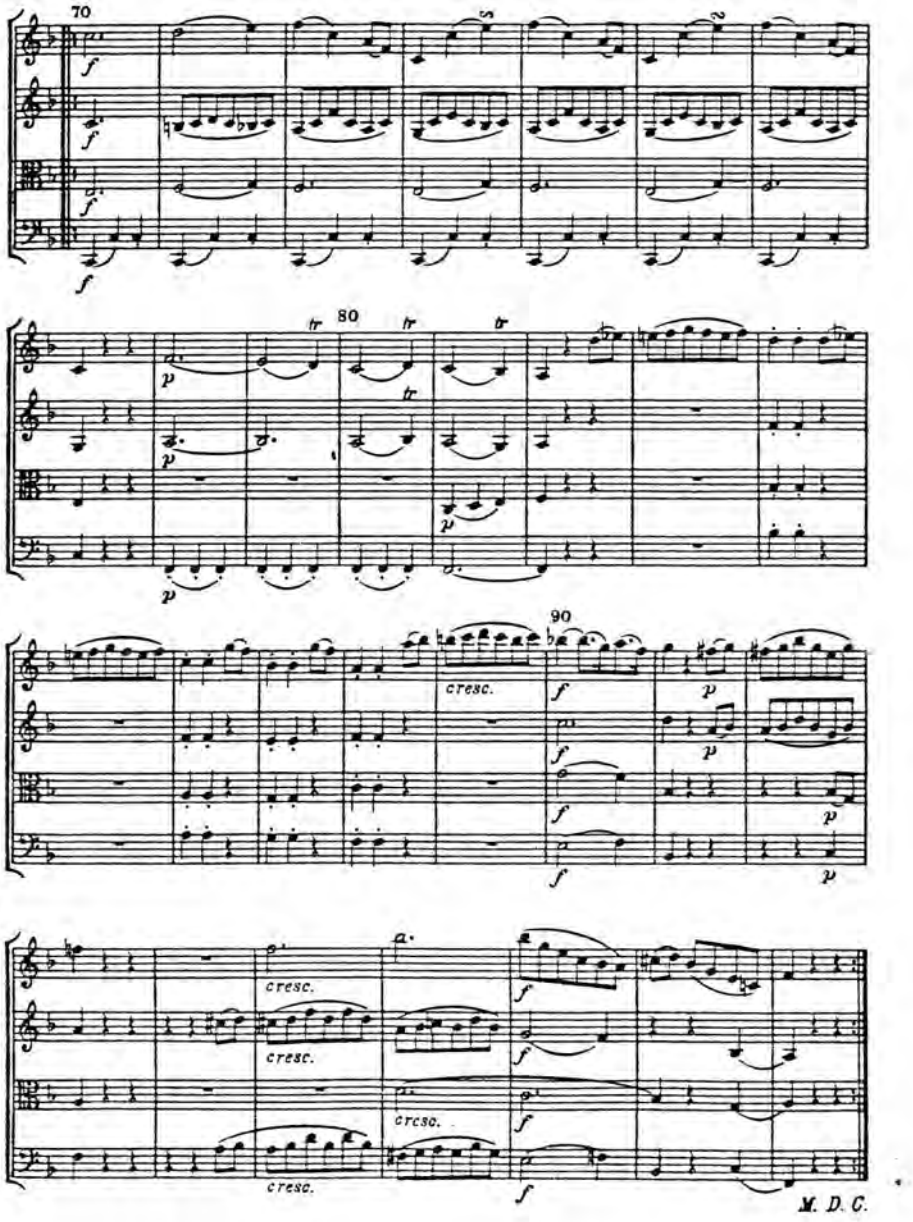



Ex. 22. Op. 20 / 5 - ii b. 1 - 36.

Further intensification occurs in bars 24 - 28, the effect of which relies on harmonic colouring as well as in the dark "colour" created by the low register of the cello.

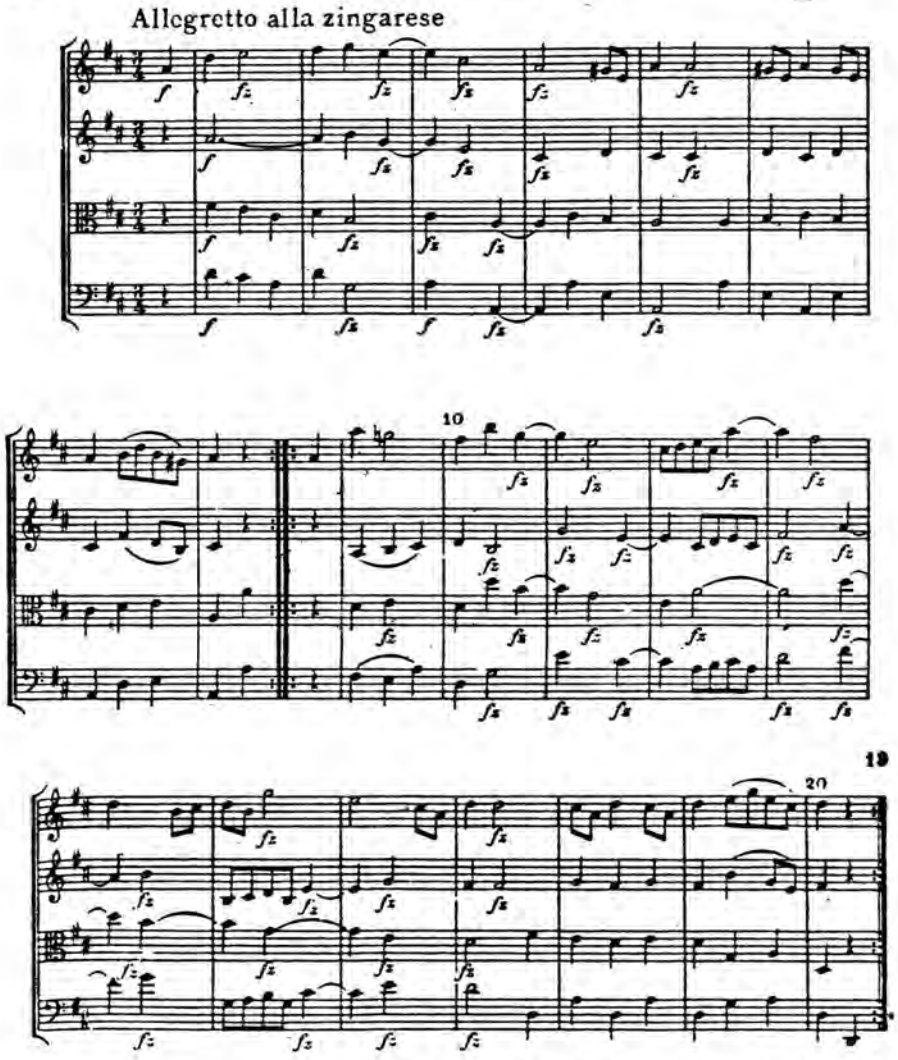
The tonality of F minor in Op. 20 / 5 provides many opportunities for the expression of moods varying from

sombre tragedy to bleak desolation. It is a key highly suited to the cello, and Haydn misses no opportunity of exploiting the low dark register of the cello to re-inforce the tragic mood, and in particular of utilising the low C string in dominant harmonies. This can be seen in the minuet example quoted above and also in the F major trio:




Ex. 23. Op. 20 / 5 - ii b.70 - 99

In the minuet of Op. 20 / 4 the cello contributes both to the harmonic and the rhythmic structure of the music by means of forceful, syncopated accents. This movement, specifically entitled "alla zingarese", exemplifies Haydn's use of gypsy rhythms, and displays "what must have been his encyclopaedic knowledge of gypsy folk melodies, with their repeated phrases of hypnotic force, their chain trills, syncopations, the typical "biting" grace notes and all the other tricks of the great primas".[1]




Ex. 24. Op. 20 / 4 - iii b.1 - 20.

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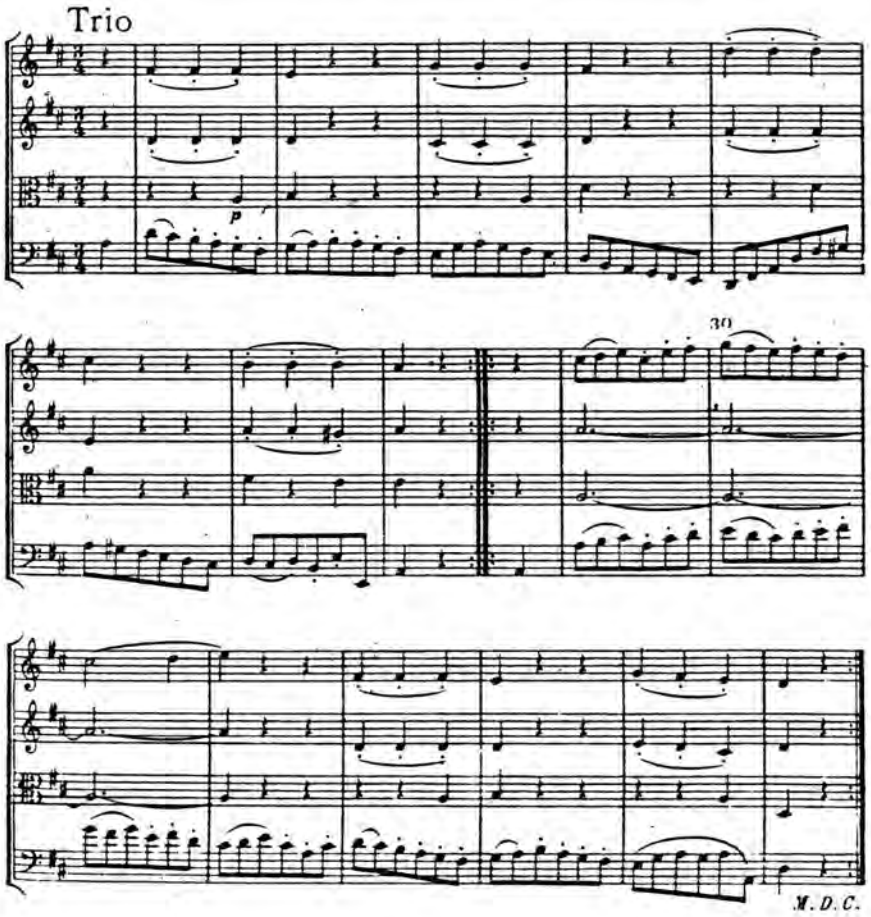
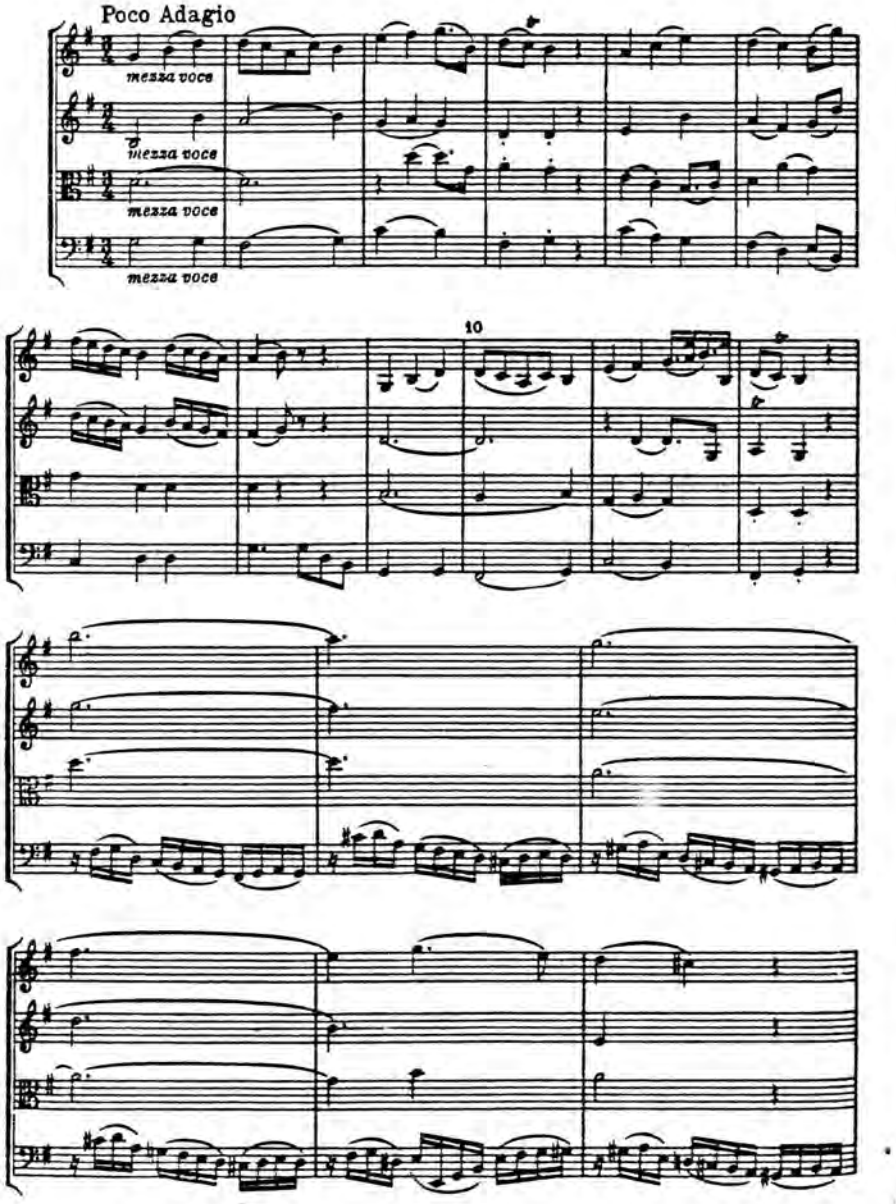
1. Robbins Landon, Haydn, Vol. II, p.574.

The ensuing trio relies heavily on the continually moving cello part, in contrast to the jerky syncopations in the preceding example. Here the cello is very prominent, having to maintain a continuous flow of undulating quavers, which outline the harmonic structure, rather in the manner of a variation movement.




Ex. 25. Op. 20 / 4 - iii b.20 - 36.

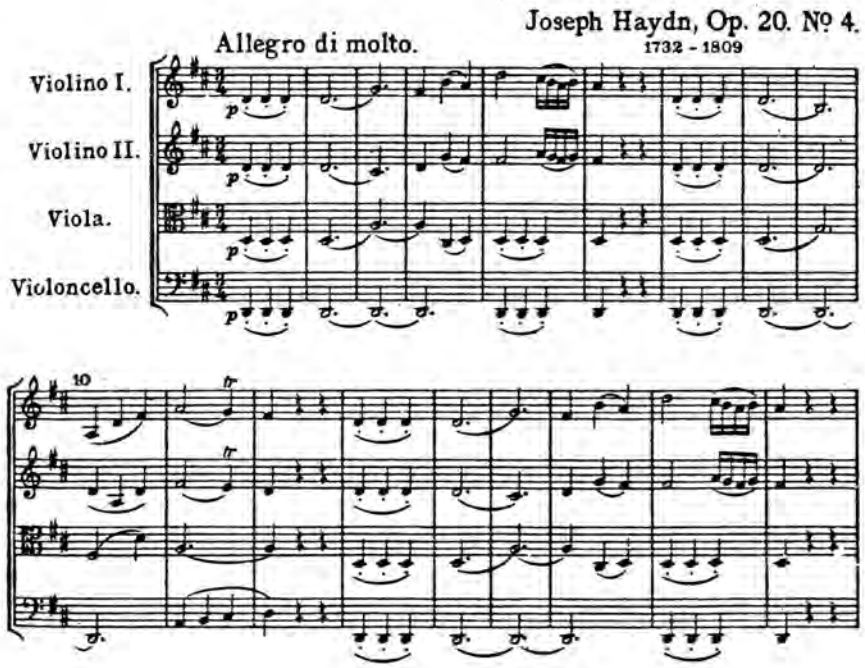
The same kind of flowing harmonic bass line occurs in the adagio of Op. 20 / 3. In the following example the intensity of the sustained harmonies in the three upper instruments is reinforced by the semiquaver cello line, and the "off-beat" entry of each cello phrase adds an undercurrent of anxiety.




Ex. 26. Op. 20 / 3 - iii b. 1 - 18.

A more tranquil, harmonic rôle is assigned to the cello in Op. 20 / 4 - i. Robbins Landon describes this movement as "serene (but not undramatic) ... where the irrationality consists primarily in one of the first of Haydn's rather frequent exotic excursions into the world of gypsy (or if one will, Hungarian) folk lore".[1] The cello here emphasises the prevailing atmosphere of peasant rusticity with its frequent drone-bases and dancing rhythms, which help to consolidate the pastoral character of the D major tonality.

**I**




Ex. 27. Op. 20 / 4 - i b.1 - 18

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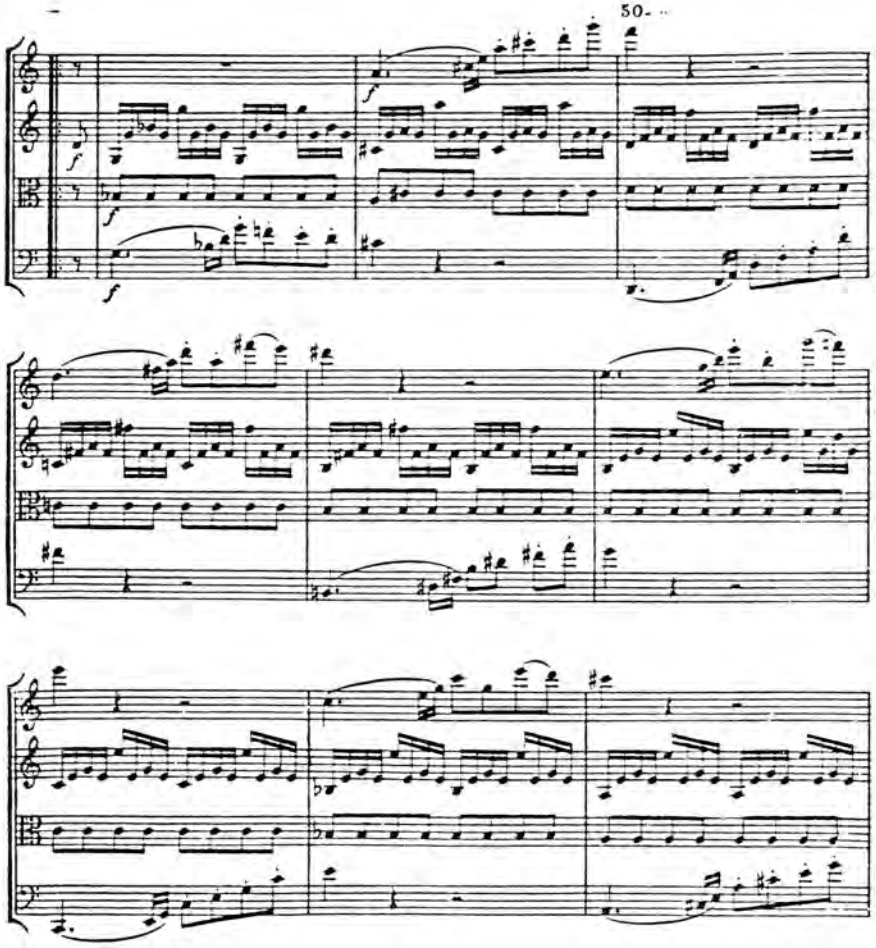
1. Op. cit., p.279.

It is interesting to note the way in which the cello affects the texture in bars 11 and 12 in the rising tetrachord after the ten static bars of D, giving a new lift to the phrase.

The close unity of the instruments and the dense texture make this movement a masterpiece and in the contrast between rustic pedal-points and scurrying triplets the cello's role is of paramount importance.

In contrast to the previous example where the cello's role is to stabilise the key centre, it is sometimes used in the context of sonata form movements to precipitate modulation. For example in the development section of Op. 20 / 2 - i the cello initiates a dramatic argument with the first violin, relying on middle pitch contrast as it directs the restless changes of key.

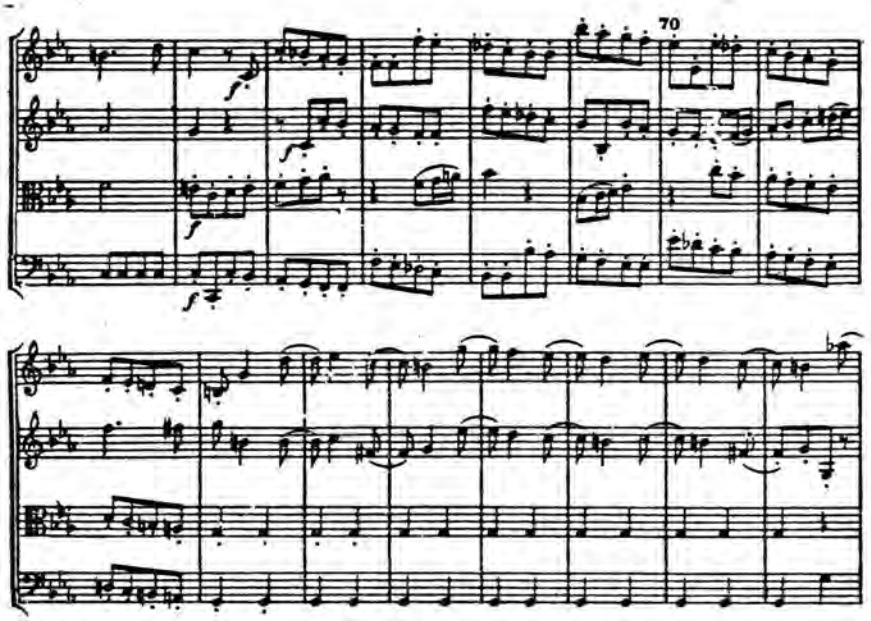



Ex. 28. Op. 20 / 2 - i b.48 - 56.

ii) Pedal Points.

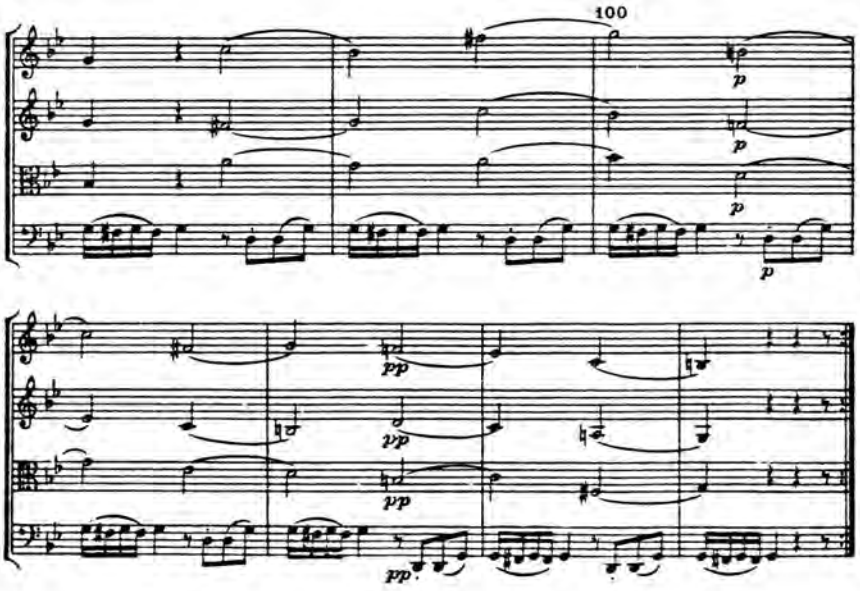
The depth of the cello's lower compass makes it highly suitable for use in pedal points. Apart from the obvious rustic pedal bass of Op. 20 / 4 - i pedal points in the cello part are usually introduced in order to generate or continue passages of harmonic tension.

The pedal G in the following example follows a strenuous passage of imitative counterpoint, and momentarily stabilizes the harmonies.




Ex. 29 Op. 20 / 1 - iv. b.64 - 79.

The ending of Op. 20 / 3 - iv is a rather unusual example of a cello "ostinato" stabilising the harmonies, the effect being rather similar to that of a pedal point.

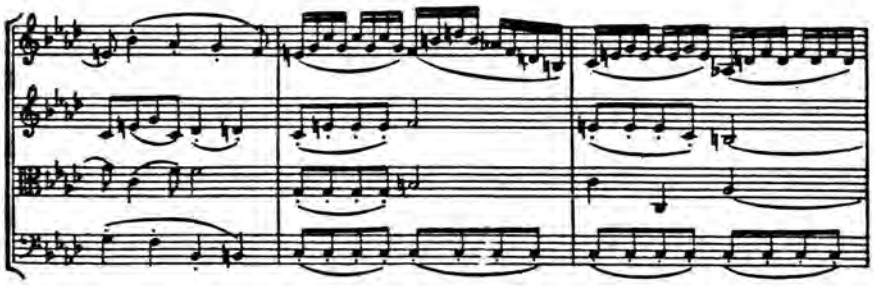



Ex. 30. Op. 20 / 3 - iv. b.98 - 104.

This would demand a considerable degree of control over finger and bow movement in order to keep the sound delicate and subdued (but up to speed), especially in the last three piannisimo bars on the C string. The mysterious quality of this final, subtle statement from the cello necessitates a refined sense of musicianship from the player.

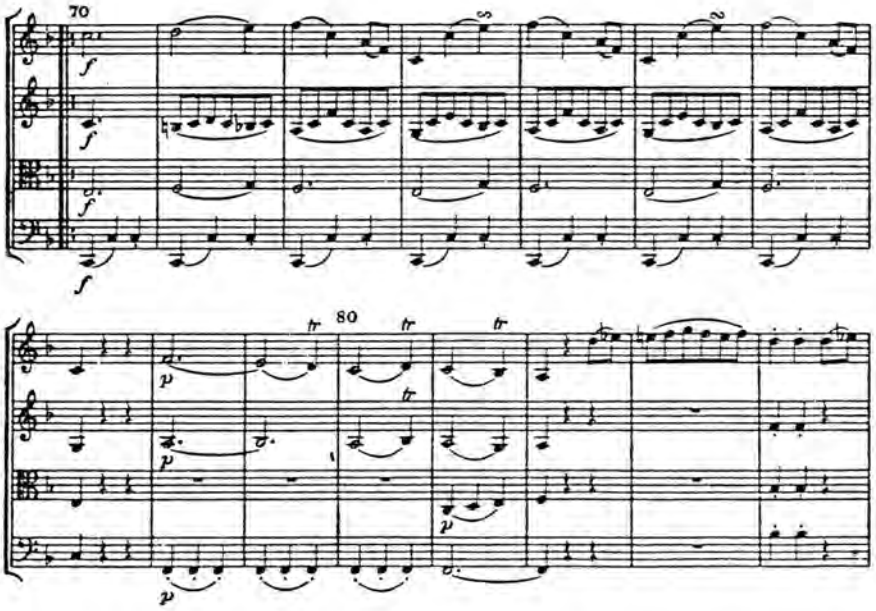
However, it is undoubtedly in Op. 20 / 5 that cello pedal points assume a position of great importance. In the first movement there are frequent short, throbbing

pedal bases which contribute to the agitated character of the music.



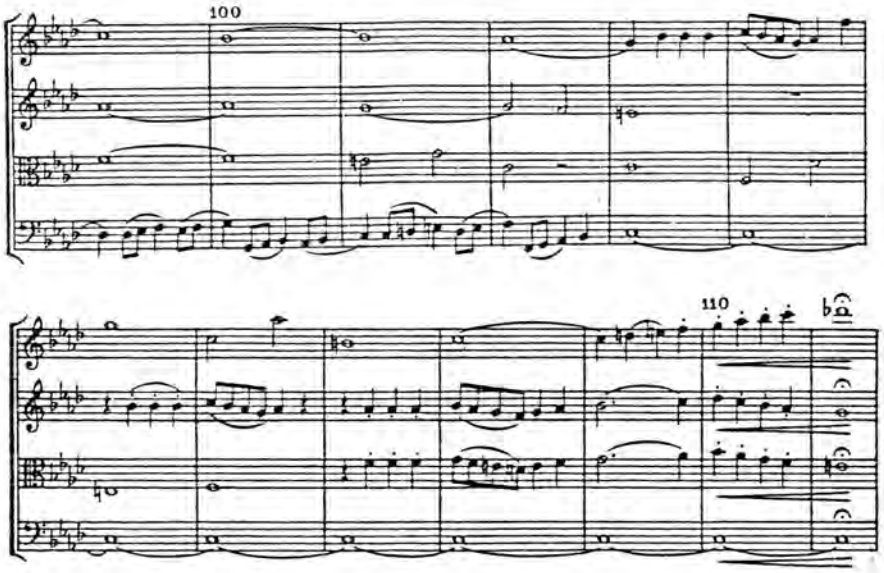
Ex. 31. Op. 20 / 5 - i b.102 - 104.

In the F major trio pedal points are consistently used for anchoring the bass line, thereby creating harmonic tension with the upper parts. The use of the open C string is again used with great effect:



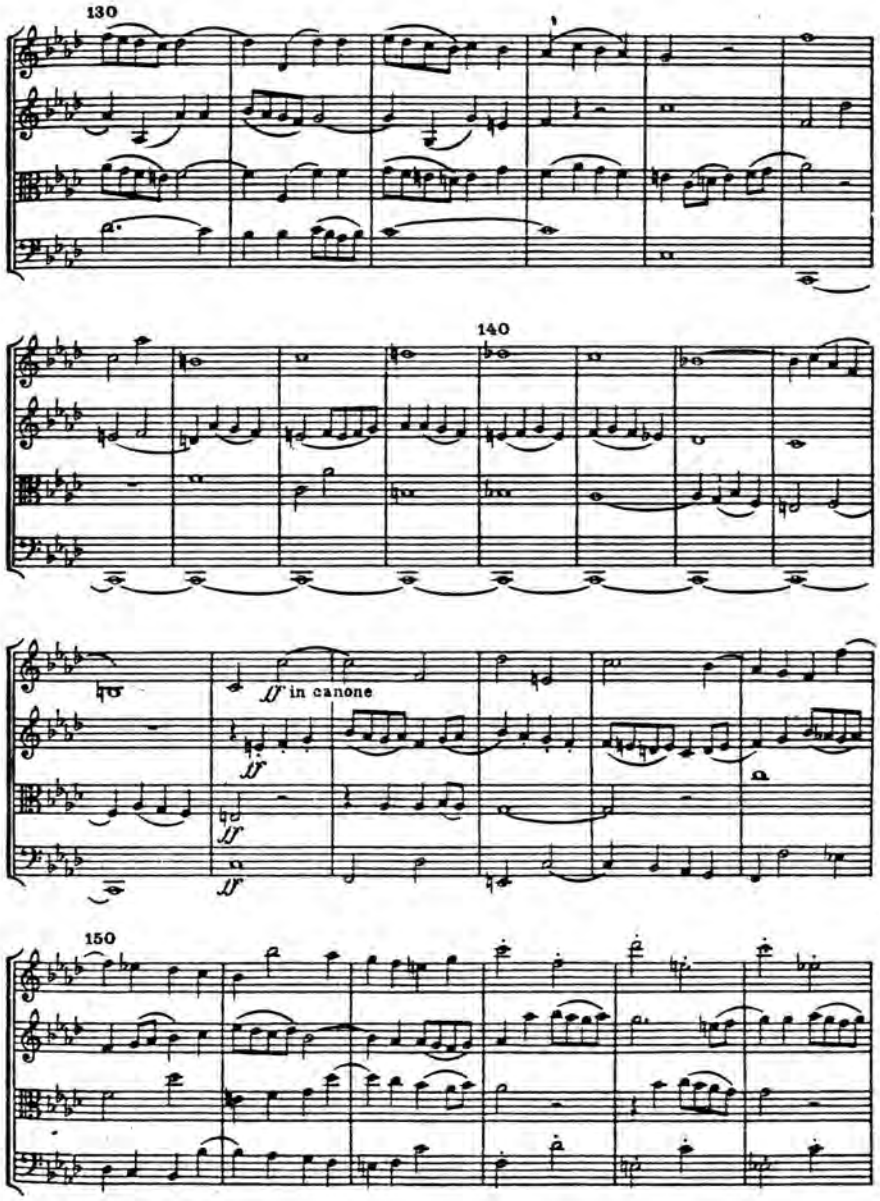

Ex. 32. Op. 20 / 5 - ii b.70 - 84.

In the Fugue of No. 5, the cello has massive dominant pedal points, and it is here that its use comes closest to that of the pedals in Bach's great organ fugues. The two most important passages are from bars 103 - 111,




Ex. 33. Op. 20 / 5 - iv b.99 - 111.

and again in bars 132 - 145, where the open C string is used with more sonorous and powerful effect than in any of the previous quartets.

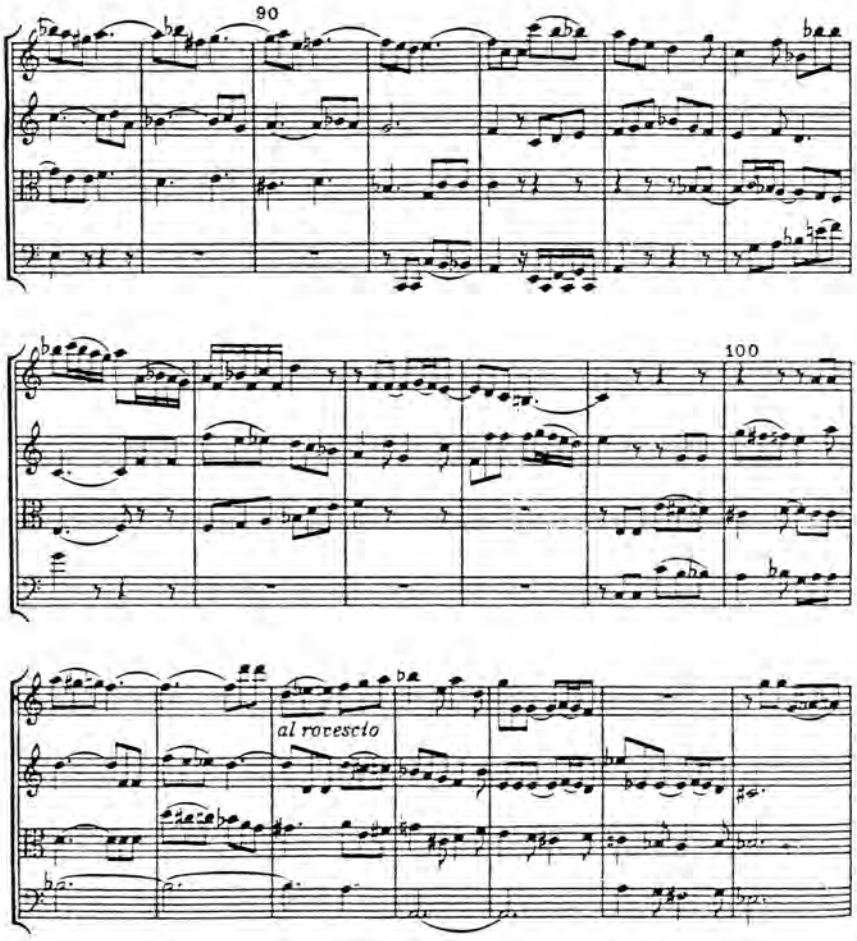



Ex. 34. Op. 20 / 5 - iv b.130 - 155.

This long cello pedal marks what one might almost call the culmination of the powerful rôle played by the instrument throughout Op. 20. The compelling and decisive quality of this passage asserts the cello's fundamental importance not only as a sturdy bass line and melodic participant but also as an equal collaborator in the harmonic texture. Once this point has been reached, one can no longer view the cello part as simply a tactful "supporter" of the other three instruments and a new light is shed on the concept of accompaniment.

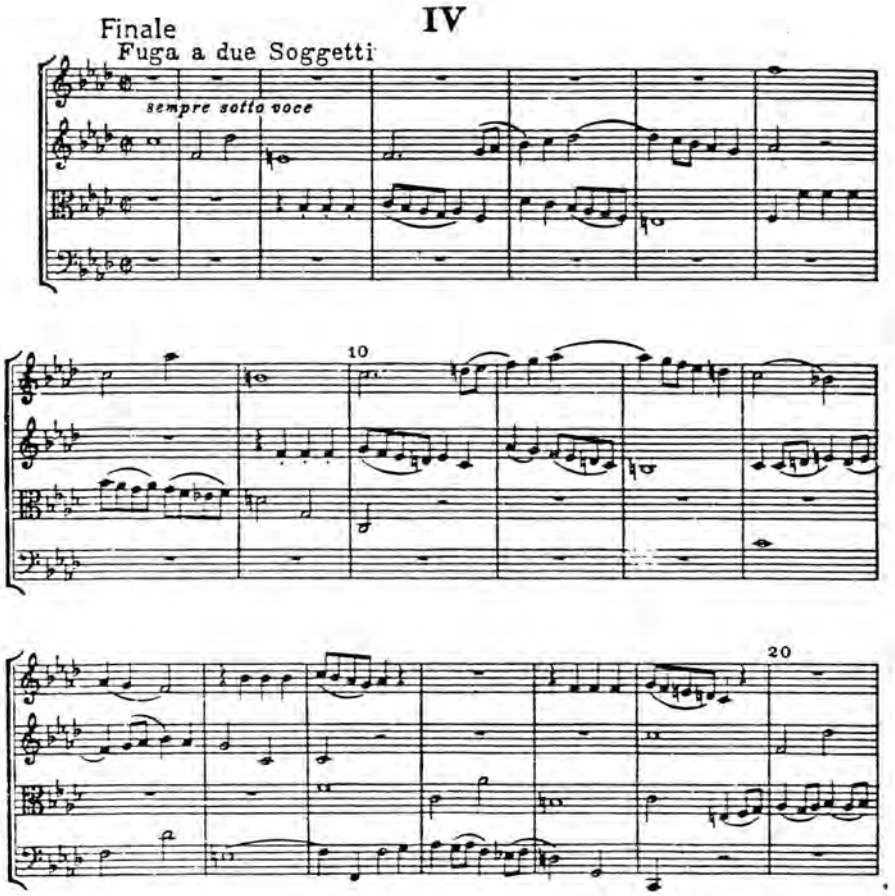
iii) Contrapuntal Independence.

It is in the fugal finales of Op. 20 nos. 2, 5 and 6 that the cello's contrapuntal independence is most obvious. In Op. 20 / 2 - iv the cello's part is not technically difficult, but demands a good measure of agility because of the structure. Despite the demands of a strict four-part fugue, the style is for the most part relaxed and the texture often extremely lucid. The cellist's main concern is to blend carefully with the other instruments in phrases (beginning on the second quaver) which frequently follow several bars of rests.




Ex. 35. Op. 20 / 2 - iv. b.88 - 107.

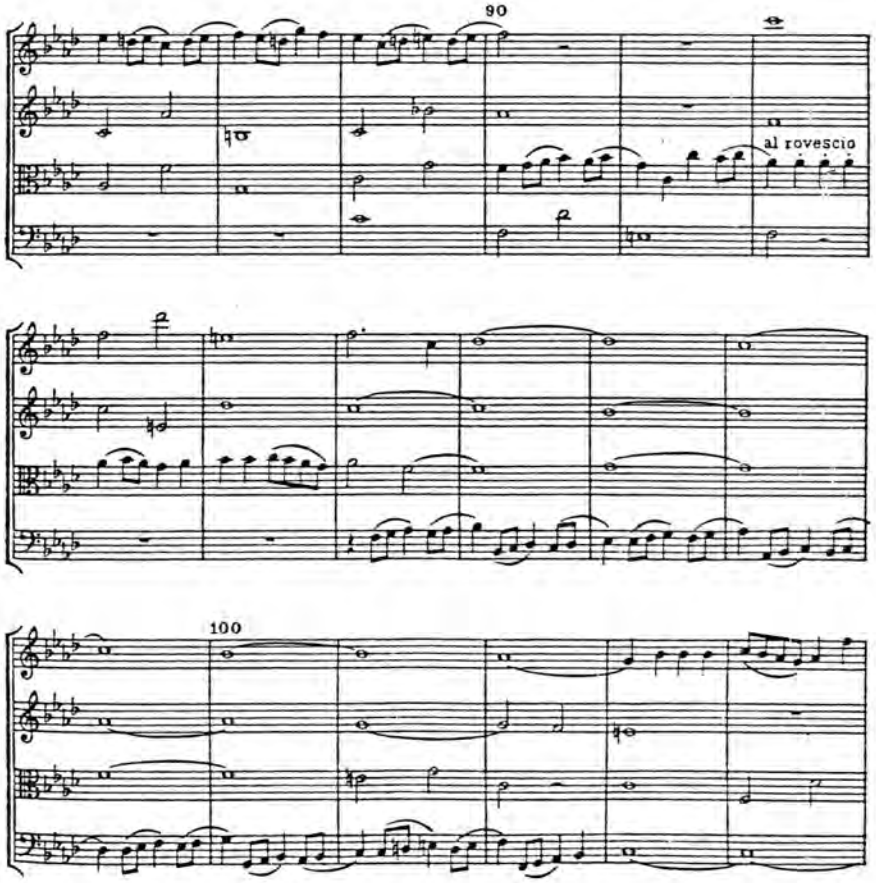
The finale fugue of Op. 20 / 5 is highly baroque in style. Here the cello has a more intrinsic part than in number 2, substantiating the claim made in the Encyclopaedia des Sciences [1](1777) that the only perfect writing for a string quartet would have to be in fugue form. The work has a weighty subject, which is extremely violinistic, but also suitable for the cello line. The first fugue-subject is accompanied, thus removing what otherwise would have been the entirely exposed character and adding a buoyant mood to this complex and dramatic work.




Ex.36. Op. 20 / 5 - iv.bl - 20.

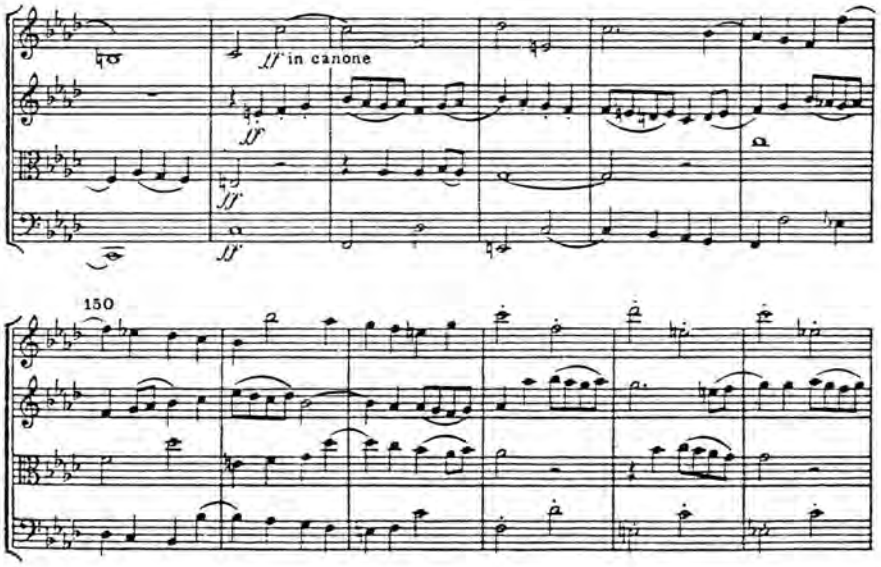
1. Taylor, E. "Rousseau's Conception of Music". Music & Letters, vol. XXX 1949. p. 231.

In bar 89 the cello and first violin in stretto restate the first subject against its inversion in the second violin part.



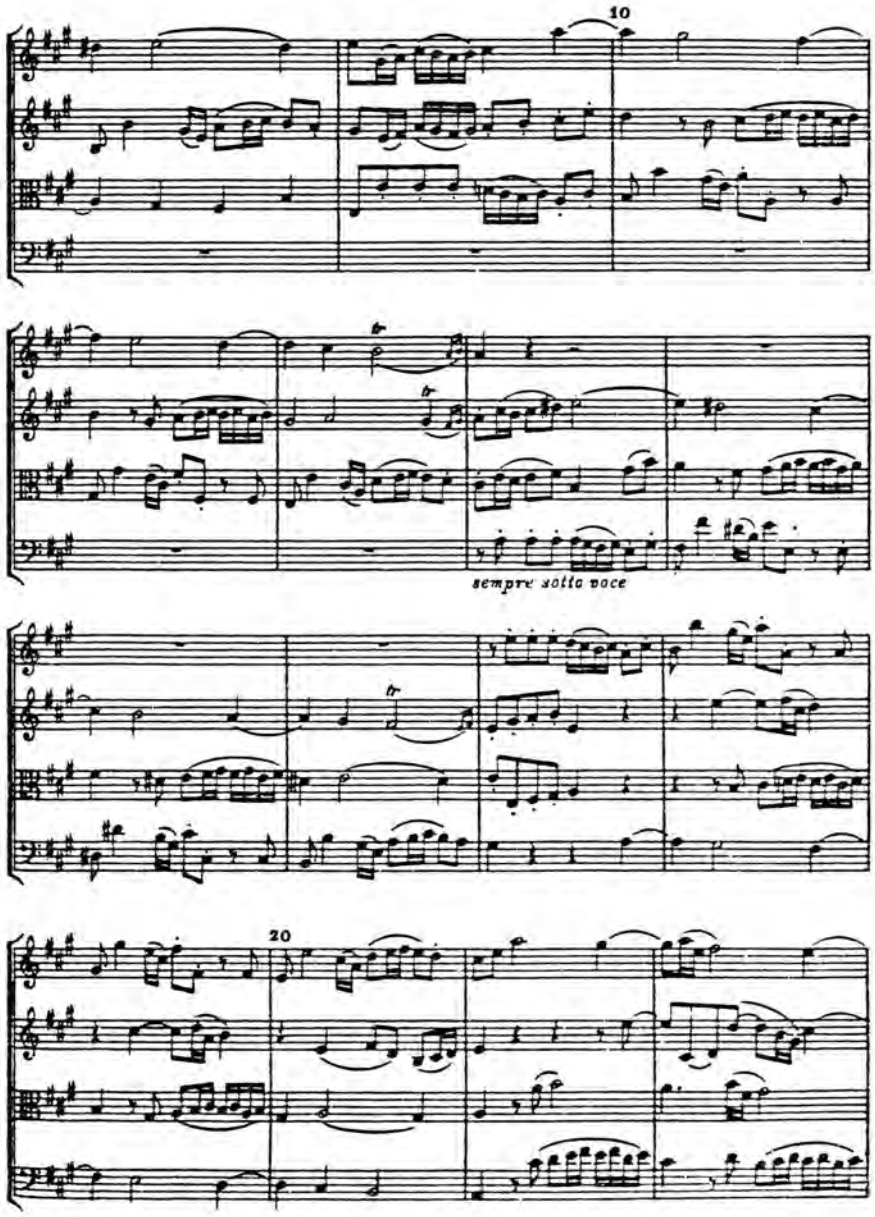

Ex. 37. Op. 20 / 5 - iv bar 87 - 104.

In bar 145 the cello's importance is further promoted by a strident ff canon with the first violin based on the first subject, and initiating the final section of this majestic fugue.




Ex. 38. Op. 20 / 5 - iv. b.144 - 155.

After the dramatic intensity of Op. 20 / 5, the last quartet in this set adopts a light-weight style throughout, typical of the last quartet of a set.




Ex. 39. Op. 20 / 6 - iv. b. 8 - 22.

Although the cello shares equally in the contrapuntal texture of this finale, none of the instruments have the same assertive, solemn quality of Op. 20 / 5 - iv and there is certainly more lightness and space in the cello part than in the others. As Barrett Ayres has pointed out:

> It is interesting that of the 95 bars of the fugue only 47 are written in four complete parts, and of these, seven are in four parts by virtue of a dominant pedal and four because they are written in octaves.[1]

Despite the buoyancy of the cello part and the bright texture of this exuberant fugue, the importance of the cello line cannot be overstressed. As with all four-part fugues, the bass line is often the most portentious of the four and its function becomes increasingly serious as the fugue moves towards its conclusion. Indeed, the cello's rôle in all three fugues of Op. 20 is a major indication of the way in which Haydn regarded it as an instrument of fundamental and crucial importance.

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1. Barrett-Ayres, Haydn and the String Quartet, p. 133.

It is fair to say that the use of fugue in the quartet became an entrenched feature of the medium because of Haydn's Op. 20. Tovey suggests that their influence was even more significant.

> Besides achieving in themselves the violent re-conquest of the ancient kingdom of polyphony for the string quartet, they effectively establish fugue texture from henceforth as a normal resource of sonata style.[1]

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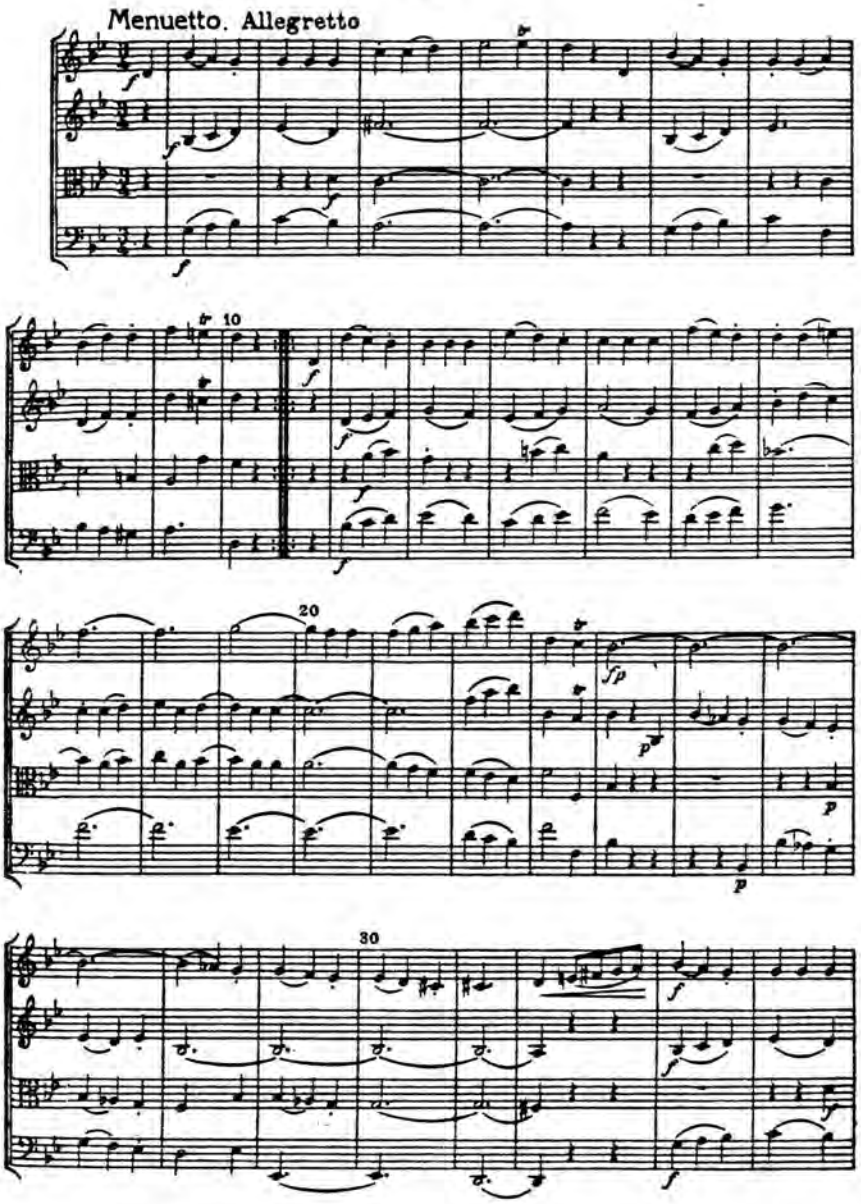
1. Tovey, "Haydn" Cobbett, vol. I, p. 536.

iv) SENSITIVITY OF ACCOMPANIMENT.

Despite its increasing claims on the melodic and contrapuntal share of the texture, the cello remains the lowest instrument in the quartet, and can never entirely escape its radical harmonic responsibilities. What it can and does do in Op. 20, is to make its presence as a root-instrument more varied and interesting in passages where its rôle is primarily that of accompaniment. In Op. 20 / 3 - ii the cello most effectively moves in almost continuous contrary motion against the first violin suavely counter-balancing, and yet encouraging, the graceful violin melody.

## II




Ex. 40. Op. 20 / 3 - ii b. 1 - 34.