I really hate to use crusty words like *radiant* but that’s the word that keeps popping into my head. This is the beautiful golden warm component of the trio of last symphonies—the *Così fan tutte* to the trio of great da Ponte operas. Knowing it far less well than the other symphonies I was able to approach it without too many preconceptions. This one certainly holds up its own with the other two members of the great final triumvirate.

There have been attempts to give it the nickname of *Masonic* due to some real-or-imagined correspondence between the key of E-flat and Mozart’s Masonic interests. Be that as it may, the nickname hasn’t managed to stick.

The aspects of the work which have impressed me the most are:

- The first movement’s ability to move from a comfortably relaxed theme into high energy and drama—while maintaining connections throughout with that opening theme.

- The orchestration: throughout there is imaginative and downright revolutionary use of the winds and brass, both singly and in combination with strings and each other. I think this might be one aspect of the symphony that has really awaited the resurgence of period instruments—the recording I’m using, of the English Baroque Soloists under John Eliot Gardner, is a revelation. Just the sound of the horn at ms. 54 – 61 of the first movement is one of the most thrilling orchestral sonorities until middle period Beethoven, I think. 1 - 54 - 61.mp3

Zaslaw wonders about the E-flat’s relative obscurity in comparison to the other two:

> Could it be that the kinds of ideas Mozart chose to explore in this work survive the translation from the lean, transparent sounds of eighteenth-century instruments to the powerful, opaque sounds of modern instruments less well than the more muscular ideas of the G minor and ‘Jupiter’ symphonies—that the flat key, which creates a somewhat muddled string sound compared to the brilliance of C (K. 425, 551) or D major (K. 297, 385, 504), makes less of an impression in large modern halls on twentieth-century instruments than it did in small halls with the instruments of the period)?

- The slow movement. Even by Mozartean standards it is richly woven.

- The minuet overall, which brings the Mozartean sense of grace and dignity in the minuet to its peak.

- The rich wild humor of the last movement. As a structure it’s a lot of fun (one of Mozart’s few shots at Haydn-esque monothematicism) but what really makes it kick are all the sudden veering twists and turns he takes with it, almost like a puppy playing with a sock.

### 1.1 Composition of the Three Last Symphonies

There is no clear-cut reason for Mozart’s having written these final three symphonies. That there would almost certainly be a *practical* reason is almost beyond argument. The conception of an artist creating works because he *has* to create, the inner compulsion that keeps the artist writing no matter what, is foreign to the 18\(^{th}\) century. The 19\(^{th}\) and 20\(^{th}\) century would like to remold Mozart into the current image, but it doesn’t work. Mozart was a practical composer, as was Haydn and as was Beethoven. (Beethoven towards the end of his life begins writing more for posterity than practicality, so he provides the 19\(^{th}\) century with its model of the Artist.)

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1 Any time I refer to “Zaslaw” I am referring to: *Mozart’s Symphonies: Context, Performance Practice, Reception*, Oxford: Clarendon Press 1989
was even known to drop compositional projects that he was working away with if the commission dried up, or if something better came along.

Zaslaw has three suggestions for practical goals for the three final symphonies:

- A series of subscription concerts which were scheduled for mid 1788. Whether or not these concerts actually took place is not absolutely clear. At any rate, these were his last attempt at large-scale public subscription concerts, although he made another attempt at a small, private series in 1789. These three great works would have been the kingpins of such a series.

- He might have wanted to sell or publish the three symphonies as an ‘opus’—although in fact they remained unpublished until after his death. There are some indications that they were performed outside Vienna during Mozart’s lifetime. Early catalogs of the manuscripts put them together as a unit as well.

- A third goal just might have been a visit to London. He had strong British friends (who were to become instrumental in Haydn’s successes in London a few years later). The English tour fell through (as did Salomon’s attempt to get Mozart to go to London at the same time as Haydn). But if he were to be planning a London trip, big symphonies were just the ticket for English audiences. (That’s why Haydn wrote so many for them.)

Mozart made a German tour in 1789; he played in Dresden on April 13 and there was a symphony on the program (we don’t know which), but it was a big, strong orchestra. He certainly could have programmed one of the last three. For a concert in Leipzig on May 12 we do have the program, which lists for the opening work a “symphony”, for the closing of Part I a “symphony”, and the end of the whole thing a “symphony”. It couldn’t have been the last three—that would be a hell of a lot to ask of the audience, considering that there were also two piano concertos, two opera scenes, and piano improvisations. But maybe one of them was on the menu—possibly broken up into parts as was common in that era. An extremely unreliable source says that one of the symphonies was in C major but had a last movement in fast 6/8 time—that would probably make it #34.

It seems likely that the symphonies were performed in Mozart’s lifetime, despite old wives’s tales to the contrary. If nothing else, there was a big fancy concert on 16/17 April 1791, under Salieri’s direction, which included a ‘grand symphony’ with two clarinetists (the brothers Stadtler) in the orchestra. This means that as long as it wasn’t K. 297, then it was either the E-flat or the G minor. (There is a late manuscript of the G minor with the added clarinet parts, which could have been produced for this concert.)

By the way, Salieri and Mozart were on very cordial terms and were actually quite friendly colleagues throughout his years in Vienna. Amadeus is a marvelous play and one of the best movies of the last 25 years, but it isn’t history. (Nor was it meant to be.) Nor was Salieri the earnest hack composer he is made out to be in the movie. This man was the teacher of Beethoven and Mendelssohn, among others. The movie strains to make the point, I’m afraid, rather too much, painting him as being barely able to write a decent melody. Well, even very good movies have to use very wide paintbrushes. (One other remark about Amadeus: if you ever see it again, note the scrupulous care with which Haydn is never mentioned as even being alive. That was absolutely critical since Haydn’s very existence destroys one of the central themes—Salieri’s jealousy because of the greatness of Mozart’s talent combined with his youth and vulgar, arrogant personality, his feeling of unfairness because he was worthy of the possession such a great talent and Mozart wasn’t.)
2 Orchestration

2.1 About Advances in Orchestration

This is from Zaslaw, pages 413 – 414:

In the years following *Idomeneo* and the ‘Haffner’ and ‘Linz’ symphonies Mozart had been exposed to the extraordinary wind playing of Vienna and, in his operas and piano concertos of those years, he had gone beyond the already advanced techniques found in the works of 1780–3, forging entirely new methods of orchestration. (His brilliant use of the wind instruments, much criticized at the time, subsequently formed the basis for the orchestration of Haydn’s late orchestral works as well as the orchestral works of Beethoven, Schubert, and many lesser lights.) The change in orchestration did not occur in isolation, for Mozart’s style had deepened in all major genres in the mid-1780s, becoming more contrapuntal, more chromatic, and more extreme in expression. The ‘Prague’ symphony benefited not only from this newly-elaborated orchestration and deepening of style, but also from the more serious role that, increasingly, was assigned to symphonies, which were now expected to exhibit artistic depth rather than to serve merely as elaborate fanfares to open and close concerts.

Three decades later a writer in the *Allgemeine musikalische Zeitung* could look back and recall the revolution in orchestral playing that had begun in the 1780s:

*When we think of music as difficult, we must realize that many of us remember a time when few orchestras had clarinets and none had trombones, when pieces that today any little orchestra can play easily almost at sight had to be laboriously studied, and other works that are now played everywhere simply for the pleasure of playing them were rejected as impossible of performance. Indeed, we clearly remember that Mozart’s music was at first reluctantly put aside by many orchestras, while those orchestras that prefer Italian music still distrust it.*

These remarks should not be taken to mean that orchestras in the classical period were at first feeble and gradually grew in size and skill. Rather, the fate of individual ensembles rose and fell, influenced by the degree of interest and the economic situation of their patrons, the expertise of the available players, and, especially, the quality of their musical leadership. In each era the best ensembles played the music to which they were accustomed with skill and comprehension. But when musical styles changed, all ensembles did not adapt themselves equally quickly, and pre-eminence in performance often shifted to another place with a younger orchestra or more up-to-date leaders....Similarly, perhaps only the very best orchestras outside Vienna could deal immediately with the newest orchestration of the 1780s, which required that all wind players be capable not only as ripienists but also as soloists. Once the new style was well established, leaders and players everywhere came to understand how to deal with it, but last of all in Italy, where Mozart’s music was usually considered impracticable well into the nineteenth century in most places.

2.2 Remarks in general

The instrumentation here is notable for one rather startling omission: there are no oboes. Normally you would use them, but here he has omitted them. Instead, we have two bassoons, two clarinets, and one flute, supported by two horns and two trumpets, plus the usual body of strings & timpani.

The oboe is a pungent instrument, a ‘hot’ instrument. It seems rather out of character in this work which is notable for its rounded, warm (but not hot) character. Furthermore, I see that Mozart is really exploiting the use of the clarinet in this work; the oboe would act more as a competitor to the clarinet.

Here’s a bit from Zaslaw:

*It is also Mozart’s only late symphony, and one of his relatively few orchestral works in any genre, without a pair of oboes, which imparts to it a particular timbre.*

There is no technical reason to exclude the oboe.
I bring this up because of a silly writer of the name of Fétis who was active during the early 19th century, up to about 1850-ish or so. He wrote the following review of a performance of the E-flat symphony in his *Revue Musicale*, on April 27, 1828:

The E-flat Symphony has not the brilliance we expect after the grand effects of Beethoven’s symphonies. There are no parts for the oboes, because at the time Mozart wrote it oboists played in that key only with considerable difficulty, regarding it as too arduous.

Well, let’s see if the oboe wasn’t used in other symphonies in E-flat of the era. There are three other Mozart symphonies in E-flat major: K. 16 (listed as #1, but probably the work of Leopold rather than Wolfgang), K. 132, and K.184. They all have a pair of oboes. K. 543 is the only one of Mozart’s without.

Haydn’s symphonies in E-flat major are: 11, 22, 36, 43 (Mercury), 55, 74, 76, 84, 91, 99, and 103. *Every single one of them uses oboes*—well, #22 uses English horns (same difference.)

So, of the symphonies of major composers of the late 18th century, the only one that doesn’t use oboes is K. 543, the topic at hand.

Monsieur Fétis was once again filled with merde. (Practically every bit of Fétis I’ve come across has been as blatantly inaccurate as the above quote.) One could perhaps rationalize that Fétis didn’t know those early symphonies of Mozart. But apparently he didn’t know any of the Paris or London symphonies of Haydn, either. #103, the “Drumroll”, was still fairly popular in the 1820s. And yet this guy was to become a professor of theory at the Conservatoire. (He wasn’t one yet in 1828.)

Incidentally, Fétis did write some major works on counterpoint and a good (for the time) history of music that he never completed. He taught counterpoint at the Conservatoire and later on wound up heading the Brussels Conservatoire. However, his other voluminous writings are marked by inaccuracies, bad judgement, and often a biased and downright unfair attitude towards other composers and teachers. I note with some amusement that an equally silly writer, Georges de Saint-Foix, in his “The Symphonies of Mozart” (written originally in 1947) quotes Fétis as an explanation for the lack of oboes in Symphony No. 39. (French musicology has always tended to run towards overstatement and inaccuracy, combined with an almost trained-seal habit of swallowing other French musicologists’s opinions whole.)

### 2.3 Textures

Mozart is much more inclined to write complex orchestral textures than other composers of the era. The average orchestral texture is two-part, with melody and accompaniment. Three-part textures aren’t quite as common; more than three blocks of sound (two melodies with accompaniment—which includes bass and harmony) tend to become too difficult to follow.

Second Movement: Measures 77 – 83 provide a very nice demonstration of a fairly complex orchestral texture. Violin1 carries the main melody; basses and violin 2 carry a counter melody, while the wind choir carries yet a third melody. The accompaniment consists of an E-flat pedal point. [II - 77 - 83.mp3](II - 77 - 83.mp3) It’s a three-part texture that almost becomes a four-part.

### 2.4 Treatment of Winds

#### 2.4.1 The Emergence of the Clarinet

The clarinet comes into the orchestra during the Viennese Classical period, and Mozart—ever on top of the latest advances—is one of the first composers to use it with regularity.
However, he wasn’t the first to use it, of course. Some of the earliest uses are by Rameau in 1749 and 1750 for two of his operas. Starting in 1754 onwards the *Concerts spirituels* in Paris was using clarinets, and from 1758 the Mannheim orchestra—the greatest European orchestra of the time—was using them in works by Stamitz.

The ‘period’ clarinet of the late 18th century had a narrower mouthpiece, with a wider reed than the modern instrument. Up until about 1780 it had five keys, at which time a sixth was added. The many pitch and fingering problems encountered in playing the instrument resulted in their being made in many different keys—by 1780 there was an instrument in C, B-flat, B, D, Eb, A, and F. Nowadays it is the Bb and A clarinets which have survived—the Bb for flat keys and the A for sharp keys.

Mozart’s first use of clarinets in a symphony was “Paris” symphony of 1778 (#31, K. 297/300a)—which makes sense, given that he was writing for the *Concerts spirituels*. The writing for clarinets is not particularly distinguished. Mostly they are used as harmonic fillers—just part of the overall wind choir. Sometimes they appear in a trumpet-like guise (even though there are trumpet parts in the work):

![Music notation](image)

There are moments in the symphony in which the clarinets are given a bit of more important information. A pairing between clarinets and bassoons, in the second group of the first movement:

![Music notation](image)

However, the clarinet isn’t used at all in the second movement, and in the third and final movement is highly restricted to simple doublings and reinforcement.

Mozart’s reasons for writing this would seem to have more to do with the clarinet playing in the orchestra rather than any problems with writing for the clarinet *per se*. He was thoroughly familiar with the instrument’s possibilities and styles of playing. As early as 1771 he was writing clarinet parts in the Divertimento K. 113. In measures 7 – 8 of that work, we get this interchange between clarinet and horns (with doublings in oboes, english horns, and bassoons added later):

![Music notation](image)

However, writing clarinet parts for a specific ensemble with known players (as in the various *divertimenti*) and writing for an orchestra—in which the odds are that the clarinet isn’t going to be played well—is quite different. So while in the *Paris* symphony Mozart might include clarinet parts, they are not only modest, but disposable.

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2 Apparently not, however the *Concerts de la Loge Olympique*, which is a pity—that’s the group Haydn wrote symphonies 82 – 87 for so we might have had some clarinet writing from him before the “London” symphonies of 1791 – 1795.
It is later, under the influence of the fine wind playing encountered in Vienna, that Mozart will bring the clarinet into the full sphere of orchestral symphonic playing; the later symphonies do not have disposable clarinet parts, and in the E-flat symphony Mozart goes so far as to do away with oboes altogether and give the clarinets some of the most important expressive material in the wind section.

2.4.2 Mozart’s Expansion of the Woodwinds

It is very important to remember that a composer who wrote important passages for winds during this period was really asking for trouble in a lot of ways. Winds were, in fact, very unreliable during this period. Consider this passage by J.-J. Momigny in 1818 (!) about the use of wind instruments: here he is discussing a passage in the first movement of Haydn’s Symphony #104, in which a flute and two oboes play alone for eight bars (bars 9 – 16 of the recapitulation). He says:

> It is necessary to admit that, even though Haydn wisely took all the precautions that could lessen the danger of such an undertaking, he had hardly reason to be pleased with himself at having handed over the reins of the symphony for eight bars to three wind instruments, which at very least have the inconvenience of never being perfectly in tune, even if they have the good luck to be unintimidated and to carry on with aplomb.

> The warmth of the hall or a drop of water in the instrument can upset the most able artists [on these instruments], and make a blemish on the brilliant and royal robe of the symphony.

> No composer is more on guard against these unfortunate accidents than the great Haydn. His wind instruments are always polished with an unequalled care. Mozart’s are sometimes more haphazard, and if the tempo is even a little accelerated, then you can see them lose their effectiveness.

As an example of the above, consider this little moment from the John Eliot Gardiner/English Baroque Soloists recording of the E-flat symphony. Excellent players, first-rate. But there is one passage from measures 65 – 67 in which there is a nearly impossible bit of intonation with period instruments. They do better than almost any ‘period’ group on Earth, but on the second beat of measure 66 there is still a moment that curls the hair: II - 65 - 68.mp3

2.4.3 First Movement

2.4.3.1 Second Theme

The wind choir actually finishes up the phrase—this kind of cutting-and-dividing of melodies is definitely one of Mozart’s orchestral practices that was admired by many. Also it was copied with varying effects by other composers; I came across one musical writer griping about young composers nowadays ripping their melodies into little patches in order to orchestrate them à la Mozart, except that they weren’t doing it well. I - 98 - 119.mp3

The closeness between flutes and clarinets (remarked above) is demonstrated again by the use of the flute to actually finish the clarinet’s melody: I - 106 - 109.mp3

2.4.3.2 Retransition

The winds play quite an important role in the retransition to the recap. (I’ve noticed this in other Mozart works like the G-minor symphony.)

A solo wind choir finishes the retransition—no strings at all: I - 181 - 183.mp3

In approaching this retransition, the winds come into prominence, probably as a preparation for this solo passage. In measures 172, 174, and 176 the violins are moved to a low area in their registers, giving the high winds a chance to be heard—the flute in particular. This is something that might be lost on modern instruments, but comes out beautifully in a period performance. I - 168 - 185.mp3
2.4.4 Second Movement

It’s in the second movement that the winds really start to come into their own; the treatment is nothing short of spectacular.

- First, consider that the opening theme—the whole thing, a rounded binary—is played entirely without the winds; just strings. And then the winds make their appearance, at the first transition into the dominant—solo, with a new eighth-note motive that will become one of the more important ones in the rest of the movement: II - 28 - 29.mp3

- Measures 39 – 42 demonstrate a nervy pairing of clarinets with bassoons, in thirds, doubled at the octave. Normally this would be done with oboes (both being double-reed instruments) but the combination is quite successful. However, such passages had to be really rough to play in Mozart’s day: II - 38 - 44.mp3. (A lot of period groups would sound really cruddy here.) This kind of ‘sandwich’ writing, in which the main melodic lines are both above and below the harmony (represented by the repeated-note B-flat in the violins) is a Mozart orchestration practice, one of the things that makes him immediately recognizable from just his orchestration alone.

- Measures 53 – 67 have got to be one of the most wonderful treatments of the wind choir anywhere in 18th century music. From 53-57 the winds have their canonic passage, pretty much to themselves although with—interestingly enough—accompagnato from the first violins. (Normally one would expect that from violin 2 or viola). And then the strings in full body, reinforced by the horns, answer the phrase. After that, the winds take the phrase back over, but this time they keep it throughout, winding into the retransition to the recap: II - 53 - 68.mp3

- Measures 143 – 145 show Mozart stretching the capabilities of paired clarinets, but at the same time using a bit of that care that Momigny had ascribed to Haydn. Because the passage is asking a tremendous amount of the clarinets to play together in tune, he very wisely avoids any other doublings. II - 143 - 145.mp3

- Measures 154 – 159 double Clarinet 1, Bassoon 1, and Flute at the unison or octave against violin 1. I imagine this would have been impossible to play successfully by a lesser orchestra of the era. (Neal Zaslaw mentions that Mozart’s works were long considered unplayable in Italy primarily because of their wind parts.) II - 154 - 159.mp3

- Measures 160 – 162 demonstrate very nicely the difference between single instruments (bassoon and clarinet) versus paired instruments (two bassoons and clarinets) on orchestral sonority. (The flute is also added, but it’s the extra bassoons and clarinets that make the big whammy here.) II - 160 - 162.mp3

2.4.5 Third Movement

In the Trio, Mozart uses the clarinet with an understanding and an imagination beyond any other composer of the era. The lowest range of the clarinet is often called the chalumeau (from an early name for the clarinet.) This register is low, breathy, woody. It sounds like a completely different instrument from the clarinet in its higher ranges. Mozart uses the paired clarinets in the Trio for just this purpose. III - Trio.mp3. Worth noting that clearly concert high A-flat is a very unreliable note on the clarinet of the era (or perhaps just this particular one)—the player always makes it work in the recording, but you can tell it’s something of a struggle to make the note work.
2.4.6  Fourth Movement
The practice of having the winds finish up a theme started by the strings (there’s a note about that in the first movement) is aptly demonstrated by 42 – 52. Here, the melody is really tossed around between the two, with the entrances overlapping a bit when the strings reclaim the theme. IV - 42 - 52.mp3

2.5  Viola
Mozart lived in an era when the viola was very much the brunt of a lot of jokes, most of which were just as true in their own day as they are in ours. Probably even more so, since the viola section in many orchestras was actually filled by violinists who just weren’t considered good enough to play in the violin section.

The usual treatment of the viola is the upper octave of the bass line, which was frequently written in two octaves: the violas on the top, the celli in the middle, and the basses below. If the viola is not being used as part of the bass line, it is usually doubling—or nearly so—the accompaniment.

Mozart did break away from this somewhat, but not very much. I’ve done a bit of statistical counting of the first movement to find out how he treats it.

There are two indicators you can use to indicate the relative strength of a string instrument: times when it is used to carry the melodic line, or is heard solo, and the amount of divisi or double-stop writing it contains.

2.5.1  Melodic Lines
I have constructed this table of those parts of the first movement in which the viola is used in a way that is not either doubling the bass line or reinforcing the middle harmonies.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>Alone, playing a bridge passage</td>
</tr>
<tr>
<td>115 – 116</td>
<td>Short countermelody, acting as an accompaniment</td>
</tr>
<tr>
<td>152 – 153</td>
<td>Same as 115 – 116 (in development)</td>
</tr>
<tr>
<td>196</td>
<td>Same as 39 in recap</td>
</tr>
<tr>
<td>208 – 209</td>
<td>Quasi-countermelody, although still accompaniment</td>
</tr>
<tr>
<td>271 – 272</td>
<td>Same as 115 – 116 (in recap)</td>
</tr>
</tbody>
</table>

The result is: 10 measures out of 309, and never at any point carrying really important material. Even the tiny solo in 39 & 196 is only a ‘tail’ type bridge, relatively unimportant. (It could even be omitted if one’s violas were bad enough!) The ten measures account for 3.2% of the movement—thus the violas are obviously 3rd-class citizens at best.

2.5.2  Divisi and Double (Triple) Stop Writing
The viola line, like the clarinet, bassoon, trumpets, horns, and string lines, is sometimes written with more than one note at a time. This would indicate that the section either plays divisi (even though it may not be marked as such per se) or that the players use double stops. It’s usually not difficult to ascertain which would be which, although obviously an orchestra would have a certain amount of latitude as to how they’re going to treat this. (An orchestra with weaker players might well divide up all double-stop passages, no matter what.)
So here’s a table that shows those places in which the viola line is written as either divisi or double-stop. There are never indications as to which is which, although clearly all except one passage would be comfortably played as double stops:

<table>
<thead>
<tr>
<th>Measure Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>110 – 114</td>
<td>Immediately before 115 countermelody</td>
</tr>
<tr>
<td>147 – 151</td>
<td>Same as 110 – 114, also before 152</td>
</tr>
<tr>
<td>158 – 169</td>
<td>Tremolo: certainly divisi</td>
</tr>
<tr>
<td>267 – 271</td>
<td>Same as 110 – 114 in recapitulation</td>
</tr>
</tbody>
</table>

So that’s 27 measures in all, which works out to 8.7% of the time the violas are playing divisi or double stops—but the longest passage 158 – 169 is certainly divisi.

In comparison, here’s the same workup for the 2nd violins:

<table>
<thead>
<tr>
<th>Measure Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 6</td>
<td>Chords and intervals</td>
</tr>
<tr>
<td>16 – 19</td>
<td>Octaves</td>
</tr>
<tr>
<td>20 – 21</td>
<td>Thirds</td>
</tr>
<tr>
<td>54</td>
<td>Sixth</td>
</tr>
<tr>
<td>71</td>
<td>Chord; triple stop arpeggio</td>
</tr>
<tr>
<td>73</td>
<td>Sixth</td>
</tr>
<tr>
<td>75,77,79,81,90</td>
<td>Doublestops</td>
</tr>
<tr>
<td>130</td>
<td>Chord; not divisi</td>
</tr>
<tr>
<td>160 – 169</td>
<td>Tremolos in thirds; divisi. Matches viola line.</td>
</tr>
<tr>
<td>212</td>
<td>Sixth</td>
</tr>
<tr>
<td>230,232,234,236,238,247</td>
<td>Double stops</td>
</tr>
<tr>
<td>253,254,287,300</td>
<td>Triple stop</td>
</tr>
<tr>
<td>302 – 303</td>
<td>Triple and double stops</td>
</tr>
<tr>
<td>307 – 309</td>
<td>Triples and doubles; possibly divisi</td>
</tr>
</tbody>
</table>

The total here is 74 measures—or 23.9% of the movement. Also note that there are quite a few clear instances of arpeggiated triple-stop chords (look at 71 for a clear example), which are certainly not ever used in the viola lines.

In contrast to the viola, the clarinets, bassoons, and horns are heard divisi more often than not.

**2.5.3 Second Movement**

In measures 9 – 14 the violas get a repeated pedal point on V: very effective and, I might add, very exposed. [II - 9 - 14.mp3](II - 9 - 14.mp3). This passage is reiterated in 38 – 43, but with violins handling the pedal point instead. It is of course repeated in the recapitulation as well, 77 – 81. This one isolated incident is just about the only place in the entire movement in which the violas are allowed any role other than doubling either the cellos or the second violins.

**2.6 Trumpets**

The trumpets are here never used melodically; they’re always strengthening something else. That’s very much in keeping with classical usage, certainly. I didn’t detect anything in the writing for trumpets here that isn’t standard usage. I note the following uses from the first movement as examples:

- Doubled in octaves during Introduction
• Starting at 71 they’re in 3rds mixed with octaves—generally speaking they’re harmonic components, including some seconds at 77.
• Usually they double the horns: see measures 90 – 97, 120 –135.

2.7 Horns

The horns have some interesting usage here. Most of the time they act in the traditional Classical roles, which are here illustrated from the first movement:

• Sustaining pedal points (9 – 13, 97 – 105)
• Reinforcing woodwind accompaniment (62 – 66)
• Fleshing out chords (73 – 82)

2.7.1 First Movement

• 27 – 30 the horns are both counter-melody and an echo of the melody. They aren’t actually continuing the melody; the change in sonority (with violin 1 holding onto its pitch) prohibits that. Proof’s in the pudding: I - 26 - 33.mp3. I’ll agree that it’s a very noticeable sonority—but I don’t think it’s melodic. (Besides the treatment at the repeat in the next part of the phrase makes that clear enough.)
• 54 – 61 they’re a doubling of the main melody, which seems to take over at 60; the violins move in a middle register while the horns are pretty high. The result is that the horns really have the show here.I - 54 - 61.mp3
• 158 – 159 they’re slightly canonic with the winds.

2.7.2 Second Movement

Seems the best place to note a misprint in the Dover score: measure 133 (page 162, 3rd measure) contains a spurious bass clef; the horns can’t play that low! The passage should remain in treble as written.

2.8 Bassoons and Horns

2.8.1 First Movement

An intriguing bit of orchestral practice encountered in 26 – 33. The melody is answered in the horns, and then in the bassoons. The change in sonority is considerably more subtle than one might think: I - 26 - 33.mp3. Definitely noticeable; the bassoons are more pungent, more nasal.

In measures 40 – 47 the original phrase is repeated, but this time the answering echo is played first in paired clarinets, then clarinet 1 coupled with flute at an upper octave. The effect is astonishing: I - 40 - 47.mp3. The counter-melody/echo is now above the strings, and is treated with that same sense of coolness/pungency of the horn-bassoon combo. So there is a sense here that a change from paired horns to paired bassoons is emotionally similar to a changed from paired clarinets to clarinet + flute.
2.8.2  Third Movement

The use of bassoons and horns together as a kind of sub-choir of the winds is well displayed in the Trio: Ill - Trio.mp3

3  Thematic Development: Linear Growth

I’m not quite sure about the correct terminology so I’m going to introduce some here of my own, just for the purposes of clarity. It is almost an article of faith in late 18th century symphonic works that thematic materials will be in some way derived from each other—not necessarily all of them, but certainly some. Large-scale instrumental works without these thematic connections tend to lack an inner unity, which in turn tends to render them formulaic. The influence of CPE Bach on Austrio-Germanic composers of the late 18th and early 19th century is profound; underestimate it at your peril.

There are two primary ways in which themes may be developed. The most familiar is the ‘motivic’, or ‘atomic’ technique, in which a primary motif (usually a simple collection of pitches with a simple but clearly-delineated rhythm) winds up as the seed for other themes in the work, which develop out of the potentials of this motive.

3.1  Motivic (Atomic) Development

The archetype for this kind of development is Beethoven’s C Minor Symphony, No. 5. In this well-known work, the seed is the familiar four-note ‘knocking’ theme plus its sequential consequent.

The theme gives way to a rhythmic figure:

As well as a melodic contour:

Which, with the outer intervals expanded,

And the four-note rhythm added, becomes the bridge theme:
Which contains the seed of a critically important two-note motive which will be significantly featured in the development section (Bob Greenberg describes it as a ‘near-death’ experience):

That four-note idea also serves as the structure for the second theme as well:

This should all be fairly familiar stuff, especially if you’ve had a class on the 5th symphony. But it isn’t the only way to do it.

### 3.2 Linear Development

This is my coinage since I’m not quite sure what the official phrase is—if there is one, which I rather doubt.

The idea here is that a theme does not develop from an original seed as in the above, but rather breaks off pieces of itself, which then develop into new themes. This can be thought of as the way that certain creatures can develop, like flatworms, which can be cut in two and then will regenerate the rest of the body and then you get two flatworms where previously you had one.

But unlike the flatworm analogy, the melody actually grows and changes—the part of it that falls off and grows is something new, still showing its parentage clearly but being something else.

Perhaps this should be called evolutionary development since there’s a feel of that about the process.

Let’s look at the theme of the first movement of Symphony 39. The main theme has this outline:

The outline makes it clear that there is an ‘a’ motive (the descending triad) and a ‘b’ motive (the descending scalar passage, which is secondary to the triad.

Now, the first change which is brought to this particular theme is a clear transformation of ‘a’—in the ‘motivic’ fashion of development:
But consider what happens immediately after that. The very end of this melody—the three quarter notes—become in and of themselves an important motive. They grow naturally out of the end of this transformation of the melody, in other words:

\[ \text{Becomes: } \]

Which grows also the woodwind accompaniment at measure 71:

This idea then promotes the use of a marvelous transitional theme:

At this point we’re on a roll with three-quarter-note ideas, which keep steming from this original ending of the second part of the main theme. So for the second theme, we take the above rhythm and smooth it out, then add the stepwise motion of motive ‘b’:

\[ = \]

Should there be any doubt as to the parentage of the second theme, its concluding two-bar unit makes it abundantly clear:

In another part of the second theme, the eighth note flow of the second theme is expanded with the three-quarter-note idea, in measures 112-113:

A lengthening and ornamenting of the three-quarter-note idea is found at 125:

Which, having introduced a dotted eighth-sixteenth rhythm into the picture, takes that rhythm and grows it together with the triad idea (motive ‘a’—unheard since the second group began) and uses that to create a closing figure:
If there has been any doubt all along that Mozart was going to use this kind of grow-it-from-the-tail approach for thematic development, consider the ending of the Introduction and the beginning of the Exposition. The scale degrees 3 – 2 end the Introduction, leaving the tonic itself unstated. However, the tonic is stated—it is part of the main theme:

4 Harmony

4.1 Avoiding the cadence on vi

This symphony contains two movements in first-movement type sonata-allegro form, and both of them are obliged to deal with that stereotypical cadence on the submediant during the development section.

It’s almost funny watching these guys come up with ways to avoid the cliché while at the same time acknowledging its existence. Mozart comes up with two spectacular solutions.

4.1.1 First Movement

Measures 177 – 184 mark the end of the development and retransition into the tonic for the recap. Mozart here pulls a Haydnesque movement to V/vi, but then he veers off in another direction with tremendous sophistication:

Charles Rosen quotes a Clementi sonata that creates a similar kind of avoidance:
4.1.2 Fourth Movement

The technique in the fourth movement is similar, but quite a lot broader and with a sly humor about the resolution. This occurs right at the beginning of the development, instead of at the usual point of being close to the retransition:

```
\begin{music}
  \begin{staff}
    \StaffOpus5
    \Voice1 {\FG \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF \FF ```
  \end{staff}
\end{music}

Here the expected C-minor that would occur following the strong G7 is treated with a deceptive cadence to A-flat major—which is treated as the tonic of a new key. Elinor Armer refers to this kind of modulation as a *plop* modulation—*a* much more vivid and apropos term than the usual terms like *elliptical cadence* or *unprepared modulation*. Mozart just goes to A-flat major, using the hint of a deceptive cadence in C-minor as his only link to sanity.

The fourth movement is strongly Haydnesque in thematic material and in its treatment (monothemathic) and so I’m not surprised by this equally Haydnesque surprise.

4.2 Chromaticism in the Second Movement

There is chromatic harmonic motion in the second movement that out-Wagners Wagner, chromatic to the point at which harmonic analysis is more or less useless.

The first indication that something interesting is going to happen comes at measures 24 – 25, when the A-flat major of the theme suddenly gives way, briefly, to A-flat minor. It is unsettling because it is unexpected, but also Mozart is helping to set his stage for exploiting the possibilities of the key.

Mozart is working within a harmonic scheme which mandates, among other things, a modulation to the flat mediant—which could be C-flat minor, a non-existent key. During the exposition, A-flat major modulates to the submediant of F-minor (measure 30). In the recapitulation, the minor key passage at measure 30 must be maintained (that is, the section will not survive a modal shift into major). Since the previous motion was downwards by a minor third (A-flat to F), Mozart is reversing the motion upwards by a minor third—which leads him to C-flat minor. (He could, of course, move to C minor—but that wouldn’t be sporting enough.)

Since C-flat minor does not exist Mozart will be obliged to work in B minor instead. This requires some use of enharmonic equivalents and the like. Fortunately they’re fairly easy to come by: A-flat minor is, after all, enharmonic with G-sharp minor, an extant key. And G-sharp minor can be used to effect a modulation to B minor quite handily (G-sharp minor, F-sharp major as V, then to B minor as the tonic.)

The motion into B minor takes place quickly, starting with measure 92. But it is at this moment that we suddenly understand that moment of minor at measure 24: it is here in the recap that he will exploit that A-flat minor, using its enharmonic relationship with G-sharp minor. Having done that, the harmonic motion itself is fairly simple, as this distillation of measures 92 – 97 shows:
This is even quite easy to handle in analysis: the enharmonic shift creates a modally mixed submediant (#VI) in the key of B-minor, followed by a mixed cadential 6/4, which then cadences comfortably into B Major. (One could also analyze the passage as being in B Major—thus neither the submediant nor the cadential 6/4 are heard as mixed, with the arrival at the minor tonic a modal shift.)

However, in the return to A-flat major Mozart takes a long, circuitous, and utterly fascinating journey through the possibilities of chromatic harmony. I have generally found attempts to analyze these kinds of progressions using functional analysis symbols frustrating, fruitless, and ultimately singularly unenlightening. The technique can be summed up as:

- Move chromatically in outer voices
- Maintain at least one common tone between any pair of chords

Thus Mozart creates a slowly shifting kaleidoscope of harmonies, which do indeed find their way back to A-flat major, via an augmented sixth chord. Here is the distillation, beginning with measure 99 and continuing through to measure 109, at which point a clear dominant in A-flat major has been reached:

Now, I suppose with enough strain and bother one could manage to give all these chords meaningful labels—but I don’t think they would tell you much of anything about the real motion. The primary key is to see the reverse of the previous action: the opening B-minor triad becomes an A-flat minor triad in first inversion (sixth chord) which then acts as a modally-mixed subdominant to E-flat major, which is V of A-flat. But the real magic lies in the chords in between—a shifting pattern of sonorities, created contrapuntally rather than harmonically. This practice is both ahead of its time (the 19th century would capitalize on this kind of motion) and is also wonderfully archaic as well—being fundamentally the same procedure as that which guided the ears of the great Renaissance writers such as Josquin or Palestrina.