

1 The Austrian C-Major Tradition

During the final quarter of the 18th century the symphony came to be increasingly associated with the idea of the grand and the festive. Splendor and an elevated, festive style were particularly associated with an Austrian tradition of C major symphonies: the key of C major itself was associated with celebration of festive events, reflected in scoring with prominent brass and timpani parts, and with the use of fanfare-type thematic materials and a generally foursquare, happy mood.

There are plenty of examples. Haydn in his early and middle years provides us with some splendid ones. Consider these:

Symphony No. 20 [Haydn Symphony 20 Opening.mp3](#)

Symphony No. 48 – written for the visit of Empress Maria Theresia to Esterhaza Palace. [Haydn Symphony 48 Opening.mp3](#)

In Haydn's later years, each of the major symphonic groups (Paris, Tost, London) contains at least one big C Major symphony in the festive style. Here's the example from the "Paris" set, Symphony No. 82 ("The Bear"): [Haydn Symphony 82 Opening.mp3](#)

Nor is the festive style limited to symphonies. A Mass in C Major of this era might well be scored with trumpets and timpani and be highly festive in nature. The opening *kyrie eleison* of most masses is generally lyrical or even somber in nature (given the text), but not necessarily with a festive C Major Mass. Consider Mozart's K. 262, the "Missa Longa": [Mozart Mass K 262 Kyrie.mp3](#)¹

Mozart was as much a part of the C Major festival-symphony world as the next guy. Symphony #34 makes that clear enough: [Mozart Symphony 34 Opening.mp3](#)

Thus with these examples behind us, I think it's easy enough to hear how the opening of the *Jupiter* is very much in keeping with a long and honored tradition and is, in fact, a *locus classicus* of its type: [Mozart Symphony 41 Opening.mp3](#)

¹ This is a modern-instrument recording (the only one in this group) and the sudden rise of pitch is dramatic as hell.

2 First Movement

The first movement is 313 measures long. On the surface this appears to be the same luxuriant measure length as we find in the other late symphonies. But playing time is more revealing than measure counting: the English Baroque soloists (who take the exposition repeat) require 11 minutes, 29 seconds for a fairly brisk tempo. (It takes them 6 minutes 49 seconds to get through the first movement of the G minor, 10 minutes 39 seconds for the E-flat symphony.) This is the second longest first movement in all of the Mozart symphonies: the “Prague” (English Baroque Soloists recording) requires a staggering 17 minutes 43 seconds—but I note that they take the second repeat (development-recap), and that the first movement of the Prague has a very long slow introduction. If you were to strip the first movement of its introduction and then that second repeat, it comes in considerably shorter than the first movement of the Jupiter.

So with those adjustments, I’m willing to lay a claim for this as being the longest symphonic sonata form of Mozart’s career.

2.1 Exposition

2.1.1 General Structure

The exposition can be thought of as being in five large sections, each separated from each other by either a long held note or a significant silence. Those sections are:

- 1 – 23 Primary subjects, ending with fermata on V
- 24 – 55 Continuation of primary subjects with modulation to V, ending with nearly a full measure’s rest on V/V
- 56 – 78 Second subject I with cadences, ending with full measure of silence at 80
- 81 – 100 Second subjects II and III, in C minor (minor iv/V) moving to V, ending with nearly a full measure’s rest on V/V
- 101 – 120 Second subject IV (operatic aria) and closing subjects

Mozart establishes the use of silence within the first four measures of the movement: witness the long silence that fills most of measure 2. That is repeated at measure 6. This helps to establish the movement as highly articulated, unusually so in fact—although maybe not so unusual given the festive C-major style, which seems to emphasize a certain articulated quality rather than a more seamless whole. (Go back and listen to the Symphony No. 34 example and notice how much silence fills the opening.)

2.1.2 Section 1: 1 – 23 Primary subjects

The primary subject is noted for its classical antithesis of forte vs. piano—measures 1 & 2 provide the forte, measures 3 & 4 the piano. Thematically, the triplet rhythm will be used throughout the movement, often inverted as four 32nd notes. The dotted rhythm of measure 3 is fully motivic and is used throughout the movement.

With measure 9, a passage of fanfare in the C Major tradition begins and runs its course. Note please that this passage emphasizes the subdominant; that re-affirmation of key that is characteristic of the subdominant is in full view here. It is in this passage that the triplet motive appears for the first time in its inverted 32nd note form.

The section ends at measure 23 with the first major pause of the movement, a long held unison V.

2.1.3 Section 2: 24 – 55 Modulation to V

The section begins with a beautiful answer to measures 1 – 8. The antithesis which was set up between forte and piano is here soothed, rounded off, finalized. A contrapuntal lick in the upper winds (flutes & oboes, 24 – 26) is used to bridge over the separation between the two halves of the main theme—while the theme itself is played piano throughout, without the forte/piano duality of the opening. It's worth mentioning, I think, that this marks the first significant wind passage in the movement.

Charles Rosen on this passage:

...the opening phrase is played twenty measures later with a counterpoint that binds the two halves together; even though both parts of the phrase are now played *piano*, their appearance in this form so soon after the opening is to turn opposition into unity.

This synthesis is, in small, the basic classical form. I do not want to turn Haydn, Mozart, and Beethoven into Hegelians², but the simplest way to summarize classical form is as the symmetrical resolution of opposing forces. If this seems so broad as to be a definition of artistic form in general, that is because the classical style has largely become the standard by which we judge the rest of music—hence its name. It is, indeed, clearly a style that is normative in aspiration as well as achievement. In the High Baroque, on the other hand, there is resolution indeed, but rarely symmetrical, and the opposing forces, rhythmic, dynamic, or tonal, are not very sharply defined. In the music of the generation of 1830³, the symmetry is even less marked or even evaded (except in academic forms, like the Romantic sonata), and a refusal of complete resolution is often part of the poetic effect. Not only, however, does the description fit the large classical form, but, as we have seen, the classical phrase as well: in no other style of music do the parts and the whole mirror each other with such clarity.⁴

The modulation begins with measure 30 and a surprise—a sudden whiff of minor, the first in the movement. The minor turns out to be a whiff indeed and is quickly dropped in favor of an extended passage on the dominant (starting with measure 39), the material being taken primarily from the second half of the primary subject. Towards the end of the modulation, the triplet motive (in its inverted form as 32nd notes) appears to bring us to V/V. A near-measure pause at measure 55 leads us into the next main section.

² Hegelianism sets up intellectual inquiry (or historical process) as a dialectic involving three elements: thesis, antithesis, and synthesis. The thesis and antithesis, as the words imply, provide conflict, while the synthesis emerges from the conflict and opposition of thesis and antithesis. The emergent synthesis is then treated as thesis, which is then placed in conflict with antithesis, with a new synthesis emerging, and so forth. This is a dreadful simplification, but it will serve the present purpose.

³ Rosen here refers to the composers who came into their first maturity around this time, and not those who were born around this time; thus he means Mendelssohn, Schumann, Chopin, Berlioz, etc.

⁴ *The Classical Style*, pgs. 82 – 83.

2.1.4 Section 3: 56 – 78 Second subject I

There's a tiny, almost unnoticeable teaser that prepares the chromatic motion of second subject I. That is found in the bass lines of measures 48 – 49. It's a tiny thing to be sure, but it is doubled—basses, cellos, violas, and bassoons—so it has some real authority. Thus the second subject seems to grow organically out of what preceded—that same Mozartean tendency to spin themes out of the tails of previous materials.

I don't think I'm pulling this out of a hat, either, or just being clever. Look at the bass lines of measures 58 - 59 with their mirrors at 64 – 65. The same figure is reiterated as support of the newly-found continuation of the second subject.

Hearing it is often better than seeing it on paper. So here's the bass line at measures 48 – 49: [Second Subject Clip I.mp3](#). Now here's the spot in the second theme at measures 58 – 59: [Second Subject Clip II.mp3](#). And now hear it all in context with the intervening measures, from 47 through about 59: [Second Subject Clip III.mp3](#)

The *orchestration* here deserves a mention although I'm not going off on an orchestration-orgy as I did with Symphony No. 39. Mozart's operatic sense is highly developed in this symphony, with the various instruments standing in nicely for operatic characters. One of his signature styles is to start a section with one character, who is then joined by another, who is then joined by another, and so forth. (Consider the second act finale of *Il nozze di Figaro*.) This passage has a touch of that—first violins have the theme at measure 56. At measure 62, a solo bassoon joins at the lower octave; at measure 67 the flute (there's only one, remember) joins in to finish the phrase. I don't think it's coincidental that he is using solo winds here. It's also worth noting how the balances of the 18th century orchestra have changed; this passage works with a modern orchestra well enough, but it is at its best heard with the lighter string sounds and more penetrating character of the earlier winds. [Second Group I.mp3](#)

Note that this second subject is a binary phrase (not a period), which then veers off into a new key area—but we haven't the faintest idea precisely which key that will be at the end of measure 79. (The diminished seventh chord in measure 77 has provided the essential ambiguity so that I, for one, don't hear the V43 of measure 79 as compelling a motion to C; I could be happy with A minor, for example.) The mystery continues with the measure-long rest at 80, which could be thought of as the counterpart to the measure-long held dominant of measure 23.

2.1.5 Section 4: 81 – 100 Second subjects II and III

A reminder: *the subdominant re-iterates the key center, affirms it*. Here we have a strengthening that starts with a touch of subdominant minor (81) and then moves to subdominant major (83), all within the dominant key. Although calling the figure at 81 – 84 a 'theme' is a bit much, it's definitely a *figure* that is given a highly exposed place in the music. The exposure is heightened by the quite unexpected minor key. So I am not at all embarrassed to call this 'second subject II'.

A note: I don't see any overt derivation here from the opening material. I suppose one could postulate something from the primary subject (measure 1) as being reiterated in measure 82, but that seems to be stretching credulity a bit in my humble opinion. I do, however, hear a clear extension of the previous measures (78 – 79) with their repeated quarter note figures, which are now extended to whole-half-half, then repeated whole-half-half. This strikes me as much more typical of Mozart's thematic process, as new materials are spun off the tails of previous material.

Be that as it may, there is little if any question about second subject III, which appears starting measure 89: this is only too clearly the second part of the primary subject (measures 3 – 4) with ornamentation. Fun that the ornamentation itself is a diminution of the rhythms of measures 3 – 4, which definitely provide a rhythmic motive running throughout the movement.

The section ends with yet another long pause, this time at measure 100. This pause is a counterpart to the pause of measure 55. (Thus the first two major pauses each have a counterpart later in the exposition.)

2.1.6 Section 5: 101 – 120 Second subject IV and closing

2.1.6.1 Second Subject IV

This theme is taken from an *insertion aria* which Mozart wrote for Anfossi's opera *Le gelosie fortunate* for performances in Vienna in 1788⁵. An *insertion aria* is, as the name implies, an aria written by one composer for inclusion in an opera by another. Insertion arias were common practices at the time—Haydn wrote a good number of them for his Esterhaza operas. The purpose is to replace perhaps antiquated arias with new ones, or to provide some zest for a new production, or to give a singer a better aria, or to give a singer an easier aria.⁶

The practice lives on, by the way. Many movie versions of Broadway musicals have insertion arias, written either by the original composer or (more often) by others. Just as an example, the movie version of *The Sound of Music* contains two songs (“I Have Confidence” and “Something Good”) which were written specifically for the movie and weren't in the original Broadway production. Oscar Hammerstein, the original lyricist, was no longer living so Richard Rodgers, the composer, wrote both words and music. Another example that comes to mind is the (dreadful) movie version of Lerner & Loewe's *Paint Your Wagon*, which contained quite a few new musical numbers written by André Previn and original lyricist Alan Jay Lerner. (In this case, Frederick Loewe was still living but apparently he and Lerner weren't on speaking terms.)⁷

So, here's the relevant section from the aria with the text (the text is *possibly* Lorenzo da Ponte):

⁵ He wrote it specifically for the bass Francesco Albartarelli. Albartarelli had been Mozart's Don Giovanni in the Vienna premiere of 1788 (the opera's world premiere was in Prague), and went on to sing at a number of the Haydn-Salomon concerts in London in 1791-92, as well as for the rival Professional Concerts during the same two seasons.

⁶ I add this last because a number of Haydn's insertion arias were for Luigia Polzelli, a young soprano attached to the Esterhaza opera troupe who became Haydn's mistress—as well as the mother of who appears to be Haydn's only child. Luigia had her good points but clearly she was a mediocre singer.

⁷ It's very easy to discern which songs are Lerner & Loewe and which songs are Lerner & Previn. The good ones are by Lerner & Loewe.

Voi sie te un po' ton do, mio ca ro Pom pe o, l'u san ze del mon do an da te a stu
 diar, an da te, an da te, an da te a stu diar, an
 da te, an da te, an da te a stu diar.

Translation:

You are a bit innocent, my dear Pompeo,
 Go study the ways of the world.

I think that the insertion of this theme—which doesn't have any overt similarity or derivation from any other theme in the movement—is a clear example of Mozart's motion away from the earlier 18th century conception of a symphonic movement as being all of a piece, all of one mood, and towards what would later on become a Romantic conception of symphonic movements—that is, theatrical, almost with a plotline rather than a structure. There is something a bit comic about the use of the melody at this point, a bit frivolous—it's rather unexpected. A touch of the theatrical should hardly be surprising coming from the greatest theatrical composer of his or any other age.

I'd like to offer the thought that Mozart is treating the *entire second subject area* as a mini-sonata form in its own right. Consider the way the second subject moves from statement of subject (measure 55) through a kind of quasi development, even with its own movement away from the main key (81) to a re-transitory passage culminating in a strong dominant (100), and then a return to the tonic (101). He doesn't return to second subject I, but instead gives us second subject IV—an entirely new theme—which emphasizes the harmonic component of the structure rather than the melodic. We are satisfied with the arrival at measure 101 due to Mozart's harmonic preparation of the previous measures. It isn't true sonata form, of course—there's no movement to the dominant and the opposition is minimal. But still I see a distinct similarity.

This is in keeping with the nature of the movement in general, which is structured on a large scale. Consider that there will be a double development, rather than a single one. The sonata structure, once it reaches a very large size, may very well be seen by a composer of Mozart's skill as beginning to require what we might think of as a fractal structure—that is, inner sections have similar structures to outer ones. Some of that is already present in the Classical style—the structure of individual phrases (such as rounded binaries) tend to mimic the larger structures (such as sonata form.) But there's no reason in not wondering how many structural wheels-within-wheels one might be able to find.

2.2 Development

The development is longer than those we've seen in previous symphonies: 68 measures, or slightly over half the length of the exposition. That isn't a Haydn-esque developmental length, but Mozart tends to develop more within the exposition and less within the development.

The development is in three sections and concentrates almost exclusively on two thematic areas from the exposition—the primary subject’s various components (the triplet motive, the dotted rhythm, and the countermelody from measure 24), and the aria theme (2nd subject IV). The sections are:

- 121 – 160: Aria theme, E-flat major to F major
- 161 – 180: Primary subject, false recapitulation in F major, modulating to E major
- 181 – 189: Retransition, return of aria theme, modulation from E major to C major; notable avoidance of the dominant.

2.2.1 Section One: 121 – 160

The beginning is a bit of a surprise as the winds—flute, oboes, bassoons, play a connective melody which moves us to E-flat major. They’re all in unison (challenge!) and the modulation is simply affected without the slightest harmonic device—just four notes, g-f-bflat-eflat.

121 – 132 states the aria theme in E flat major, which is a notably cooler key than either C major or the previous G major. This is not particularly expected, the aria theme having been something of a throwaway in the exposition.

Beginning with 131, Mozart begins to concentrate on the tail of the theme, its last two measures. He repeats the tail at 131 – 132, and then fragments it further starting with 133. (Another example of his tendency to keep his eye on the end of melodies.)

133 – 139 is a rising sequence, moving quickly from E-flat major to F minor, thence to G minor (these are all points within the E-flat major key).

139 – 146 changes the sequence type to descending fifths. Normally the rhythm of the sequence is two-measure units (139-140, 141-142) but at a cadential point (143-144) the harmonic rhythm halves itself to motion in single-measure units (harmonies changing at half-note intervals, in other words), then returning to the same two-measure unit at 145-146, thus affecting the arrival at G minor at 147. There’s nothing unusual in this; speeding up the harmonic rhythm at a cadence is as old as cadences themselves, but it’s gratifying to see it handled with such sophistication. Note that the motion to G minor had already been made as of measure 132, but this sequence helps to reiterate and re-enforce that.

I should mention here that the master plan harmonically is to move Eb Major-G Minor-E Major(!) and from there to F major. Just roll those four tonics around on the tongue a bit to appreciate the bouquet.

147 – 152 moves us into E Major (via D minor-A minor-F major). The F major sonority reached at 152 acts as the augmented sixth of E major.

153 – 160 E Major affecting the final motion to F major. Note here that the tail of the aria theme is repeated almost obsessively, including a rather nifty inversion in the oboes at 155 – 156. The actual motion from E Major to F major is harmonically tricky to pull off—they aren’t exactly what you would call related keys, are they?—but this is another example in which Mozart’s chromatic modulation technique comes into full play:



I should like to point out that E Major is the dominant of the submediant—and so here we have *yet another* technique for avoiding that damned cadence on the submediant during the development! This is in some ways similar to the Clementi example I showed you last week, in the way he approaches V/vi quite clearly, and then backs away from it chromatically, moving off into another direction.

2.2.2 Section Two: 161 – 180

False recapitulation in F Major—rather interesting key to be using, all things considered. Although remember that this is the subdominant (counting from the original C Major) and therefore is quite useful in effecting a transition to C major since it reaffirms and strengthens the idea of C major.

This false recapitulation really shouldn't fool anybody. For one thing, in such a large festive movement it's almost irresponsible to begin the recapitulation in any other way but forte, and here it is piano. For another, this is the second part of the primary subject—the section that begins at measure 24 in the exposition. The wind accompaniment figure that binds together the polar opposites of the primary subject is used from the beginning, together with the piano dynamic throughout. And I do think that the subdominant is sufficiently different from the tonic to be fully audible by all but the dullest ears.

Starting with measure 167 things start to change: a transition to A minor is effected, rather quickly, by moving in a stepwise sequence (167 – 168 outlines D7, 169 – 170 outlines E7).

At 171 we have arrived at A minor—that's the *submediant* key, and it's instructive to note that here Mozart does not worry about avoiding the submediant; the cadence is big and loud and noticeable. I think that this feature combined with the careful avoidance of that cadence previously—see above—accounts for many people (including myself) as hearing this as a *double development*—that is, one that could be considered as starting over from scratch at some point, a point that could have served alone as the development. Consider the idea of beginning the development at measure 161. The exposition would have ended in G major and then this would come in F major with the main theme. Starting the development with the main theme in a different key is a long and honored tradition, although the different key is usually the dominant or the relative minor. Given that there is a sense of starting over at measure 161—the previously avoided primary subject comes into play while the aria theme disappears completely—we have a strong sense of two articulated sections. Especially given that we have not one, but two of those cadences at the submediant, one of them craftily avoided, the other embraced like an old friend.

A nice feature in this passage: the use of the triplet motive together with its 32nd-note inversion, back and forth, back and forth. This is almost just in case you hadn't made the connection between the two before. Classical composers might have enjoyed being *subtle*, but they were never inclined to be *devious*.

2.2.3 Section Three: 181 – 189

This is the retransition to the recapitulation. It is expertly handled (as one would expect). Note that the tail of the aria theme returns at this point, after an absence during the previous section. (It is the change in themes that has prompted me to identify the three sections as I have.) At this

point the almost-inevitable pedal point on the dominant is established (in the horns at 182). Also note that the wind parts are quite similar to measure 155, complete with an inversion of the tail material in one of the wind instruments.

Finally, note that he uses the counterpart to the primary subject (first encountered in measure 24) as the final bit of material to pour us back into the recapitulation.

2.3 Recapitulation

The recap is solid classicism. The material being as strongly varied as it is, with the clear articulated structure of the exposition being so well established, that there really isn't much of anything that Mozart needs to do in a special manner in the recap. The five sections of the exposition can be mapped to the same five sections of the recapitulation, with only key differences—and a slight four-measure extension at the end for extra finality. Here's a table between expo and recap, by section:

Section 1	Identical; could be written with a da capo al segno
Section 2	Recomposed for the lack of a key change but otherwise the same
Section 3	Transposed to the tonic, richer woodwind support, otherwise the same
Section 4	Transposed, otherwise the same
Section 5	Transposed, 4 measure extension for finality, otherwise the same

3 Second Movement

3.1 Beethoven and this movement

Greenberg Rex is apt to point this out to his music history classes—but I think you would have covered Beethoven with Faun Tiedge this last year so maybe you didn't get it.

There is an interesting correspondence here with Beethoven's Fifth. Beethoven, as we all know, wasn't much of a melody writer. Oh, he could write melodies—some of them ravishing—but this wasn't his natural state of existence. Unlike the other two composers of the Viennese triumvirate, Beethoven had to struggle to find melodies. Mozart and Haydn seemed to exhale wonderful melodies with every breath, but not their spiritual heir.

When some aspect of the creative process doesn't come naturally, it is quite common for the author to wind up plagiarizing other people's work, but not consciously⁸. Since the muse in that particular department isn't up to full capacity, the tendency is to use other ideas that are good ones. You find this in a lot of areas, not just music, nor is it necessarily a weakness.

Beethoven's melodic muse was therefore inclined to come up with melodies which were strikingly similar to those from other composers's works—especially ones that he knew well. The slow movement of the *Jupiter*—a work which Beethoven would have scoured, examined, dissected, and vivisected—is such a melody. All you have to do is compare it to the bridge theme of the last movement of the Fifth Symphony, and the similarity is far too striking to be mere coincidence:



Note that I've transposed the Mozart to C Major to make the similarity all the more clear.

3.2 The Structure

Unlike most symphonies, this one has a slow movement in full-drag first-movement sonata form. In fact, all four movements are in sonata form, including the minuet—which is much more sonata-ish than it is minuet-ish.

⁸ The blockbuster movie *Titanic* is a floating update of Samuel Richardson's hoary old *Clarissa Harlowe* (written around the mid-18th century), but I'm willing to bet that not one of the screenwriters had ever read Richardson. The *Clarissa* plotline has been used so many times by other writers that it got to them almost by osmosis.

3.3 Exposition

3.3.1 Primary Group

1 – 10 The primary theme itself is ten measures long, one single phrase although the points of extension are well defined. At measures 6 and 9, deceptive cadences into the submediant help to prolong the theme. But this is a rather coldly analytic way to describe such a beautifully spun-out melody, which seems to grow out like a vine. In fact, this is another one of those instances in which Mozart is growing out his thematic materials—note how the ornaments of measure 5 become thematic material in measure 7 and thereafter.

11 – 18 The repeat of the phrase serves to move us to the dominant at measure 18—at which point we have a surprise. But before discussing that, note the orchestration here—the theme taken in the lower instruments with a counterpoint in the first and second violins—while the ‘brass’ (horn and bassoon choir) acts as the underlying chords. One can only imagine how horrid this could sound played by an inferior group; that beautiful melody in the violas and cellos and then a constant *quack-quack-quack* in the background. It’s also worth mentioning how nicely Mozart is hoarding the sound of the upper winds, so as to use them more effectively at measure 19.

I’d also like to point out that those beautiful 32nd notes of the counterpoint acquire an almost mythic significance during the remainder of the movement, as they go on ever-extended flights of fancy throughout the recapitulation.

3.3.2 Transition to Dominant 19 – 27

The transition is handled with astonishing audacity. First of all, Mozart has reached a clear half-cadence a measure 18, but instead of resolving that, he moves into the *minor* dominant suddenly, without warning. It’s shocking, surprising, and extremely effective.

The material that follows is both ‘filler’ in the classical sense and something else as well—it’s just too complex to be mere filler. That becomes all the more apparent beginning with measure 23, at which point a hemiola is created out of a rising chromatic sequence; not just a hemiola, it leads the ear into hearing this passage in duple meter—more on that below. At this point I think it should be clear that Mozart is inclined towards effecting his modulations with chromatic moving lines, rather than through functional harmonic structures. As one might expect, he works his way to an augmented sixth chord in the new key (C Major) at measure 26, which then resolves into the new key of the dominant.

3.3.3 Secondary Group 28 - 44

The second theme is as beautiful and placid as the primary theme is filled with unease. The use of triplets in the accompaniment—anticipated in the transition passage beginning at measure 20—here are filled out and used fully. (Once again here’s Mozart taking something from an earlier idea and allowing it to grow into something much greater than it originally seemed.)

In a similar manner to the previous passage (measure 23), Mozart creates another hemiola here, this times starting with the second part of the theme, at measure 32. This one is sufficient for the music to sound clearly in duple meter for a while, as opposed to the hint of duple-ality that was created starting measure 23.

Metrically the situation remains a bit unsettled, sounding mostly as though it's in duple rather than triple, until the arrival at the closing theme which is measure 39. At that point triple meter once again asserts itself.

This duple-triple metrical duality provides yet another example of Mozart's compositional process. Just as he works with melodies—spinning off more melodies from the ends of previous ones—in this movement he takes this duple-triple situation and uses it as bedrock for both the development and the recapitulation. It's not to much to say, in fact, that the duple-triple metric duality amounts to a motive that he proceeds to develop and extend.

3.4 Development (45 – 60)

The development is typically Mozartean short and is comprised primarily of the materials from the secondary group.

Metrically it arrives in duple meter as of measure 51 and is highly reluctant to return to triple. In fact, it doesn't really seem to return truly to triple until the beginning of the recapitulation at measure 60.

Please note with some amusement how Mozart handles our dear old cadence in the submediant situation. You know, one could make this into a party game⁹. He arrives at V/vi at measure 56—and stays on V/vi for another measure. But he never resolves it to vi; instead he invokes *its* dominant (E Major) and uses that to start his way down the staircase of a descending-fifths sequence back into the tonic. Oh, he eventually gets to a chord with a D (submediant) root—but it's D Major, and is functioning quite audibly as V/V/V by that point, and certainly not as the submediant.

Maybe some musicologist will discover that Emperor Joseph II gave out a yearly award to the composer with the *Year's Best End-Run Around the Submediant*. Presented at Schönbrunn Palace, all the nobility present, list of the nominees, excitement galore, extensive media coverage, the works.

3.5 Recapitulation

This recapitulation uses a technique which was in very common use during this period. The recapitulation begins, not with the *beginning* of the primary group of the exposition, but with the *second part* of the primary group—in other words, instead of recapitulating measure 1, the recapitulation begins with the correspondent to measure 11. In the exposition, that's the beginning of the repeat of the theme (and shortly thereafter the first intimations of the modulation to the dominant.)

It is not part of the classical idiom to skip over important material—thus creating an imbalance—without rectifying or rounding out the imbalance somehow. An excellent technique here is to use those skipped measures (in this movement, measures 1 – 10) and incorporate all or some of them into a coda. This creates what is known as a *recapitulating coda*, in that the coda itself begins like a recap, and then reveals itself as the coda instead of a new recapitulation. It is not an unusual

⁹ I suppose we don't need to; it's clear enough that culturally that's precisely what was going on in the 1780s and 90s. Everybody plays, nobody loses—with Mozart being the Master of the Revels.

technique by any means; some composers use it almost in preference to any other way of beginning a coda. (Of course you can begin a coda with the primary group, without having skipped it in the recap.)

This technique can be carried still further, in which the *entire primary group* is skipped and the recap begins with the *secondary group*. Mozart has been known to do this—the D Major piano sonata is a good example. Haydn also does this, especially in his earlier symphonies. (Two movements of Symphony No. 21, for example.) The term for this technique is *mirror recapitulation*—so called because the recap reads backwards from the exposition; the exposition is primary group-secondary group, whereas the recapitulation is secondary group-primary group.

One might be inclined to consider these techniques as special effects, a tampering with the materials of sonata form for effect, but in fact they are not particularly adventuresome nor uncommon. What is so often misunderstood about recapitulations is that *it isn't the primary group that needs recapitulating—it's the secondary group that does*. We're so used to thinking of recaps beginning with the primary group that we're a bit blinded to the real purpose of having a recapitulation in the first place.

Charles Rosen explains this with his usual lucidity:

What must reappear in the recapitulation—and this is a rule that holds true from the very beginnings of anything that can be called sonata style—is **the second group**,¹⁰ at least any part of it that has an individual and characteristic aspect, and that does not already have its analogue in the first group. The resolution of this material confirms the articulation of the exposition into stable and dissonant sections. A theme that has been played only at the dominant is a structural dissonance, unresolved until it has been transposed to the tonic.¹¹

3.5.1 Primary Group (60 – 66)

As explained above, only the second part of the primary group is recapitulated—that material which would have started with measure 11 in the exposition.

Rewriting has begun with the very first measure, in which the 32nd note accompaniment pattern of measure 12, but placed in the cellos. The rewriting continues as the violins, instead of entering with the answer to the theme at measure 62, continue onwards for two more measures of ornamentation (taking over the cello lines of measure 61). At measure 64, the cellos continue the theme, as though the violins had not insisted on elongating the proceedings by two measures.

3.5.2 Secondary Development (67 – 75)

This is the first symphonic movement in which we've come across this particular species of sonata-form dweller—the *secondary development* which occurs in the recapitulation. The textbooks would have one believe that just about every sonata form in creation has an instance of the critter, but in fact it arises with late Mozart and Beethoven and is almost completely absent in Haydn—so we haven't experienced it yet. Here we see it in its proper native habitat: it lives in the

¹⁰ My emphasis.

¹¹ Rosen, *Sonata Forms*, page 287.

recap, immediately after the statement of the primary group. Its purpose is to handle the movement to the secondary group, which must be effected without a modulation and can therefore wind up sounding unnecessarily repetitive.

It's perfectly possible to handle this situation with some minor rewriting and re-adjusting; the first movement does that. However, the nature of the material may not allow that to happen without awkwardness—or there might be more potential to be mined out of material. In this case, Mozart is able to take full advantage of the duple meter which he established in the development, combining that with the contrapuntal accompaniment of measures 61 *et al.*, and adding above a little march-like motive which seems if anything to refer back a bit to the first movement. It is this sudden shift into clearly developmental material (even in some cases, *new* material) that marks the difference between the secondary development and the plain old recomposed transition.

Starting at measure 72 there is a return to the rhythms and textures of the transitional passage in the exposition, and a half-cadence which will lead us nicely into the second group.

3.5.3 Second Group (76 – 91)

Remember that quote from Rosen: it is the second group that requires recapitulating, not the primary. Therefore it should make sense that the second group, unlike the primary, is here merely transposed and otherwise not overly recomposed. Re-orchestrated a bit, to be sure. This is the structural dissonance that has required resolution, and so here is that resolution. The triplet rhythm comes stealing in almost like an old friend at this point.

3.5.4 Coda (92 – 101)

The coda, as intimated earlier, begins as though it is a recap in and of itself. Of course it isn't—but it sure comes across as one there for a while. It is almost a da capo back to measures 1 – 10, but with some intriguing and quite wonderful differences. Note that the second two measures of the melody (the answer to the question of the first two) is stripped down to just a few notes—and a single measure. That's measure 94, by the way. After that, the melody continues along the way it did originally, coming to an end at measure 99. At that point all that is needed is a bit of mopping up, which Mozart does by bringing back those soothing, friendly triplets.

4 Third Movement Menuetto

Charles Rosen on the development of the minuet into a third-movement sonata form type:

More than any other type of movement, minuets (and scherzos) demonstrate that the evolution of sonata forms was not the development of a single model, but the transformation of several earlier formal patterns. Retaining its dance character even when it was called scherzo, the minuet was consequently the most recalcitrant of these early forms, the most resistant to transformation. For a long time—well into the late nineteenth century—the opening section before the first double bar tended to be a single period, with no second theme or second group, and no decisive polarization of tonic and dominant; often there is only a simple half-cadence on the dominant or even a tonic cadence, and this opening section only rarely resembles the “exposition” of what was later to become the standard sonata form. However, what followed this opening period generally exhibited, from a very early date, some of the characteristics of “sonata”: thematic development in the second period, with fragmentation of the themes, chromatic and sequential harmonies, and an elaborate preparation for the decisive return of the tonic and the opening bars. We frequently find the same techniques and the same stereotypes in the second half of minuets that we find in other movements, although in minuets they tend to appear on a more modest scale. It would be absurd to ascribe these traits to an influence from a then no-existent standard first-movement form, as the characteristics of sonata appear as early in minuets as they do in other binary forms. Just as what we have called “slow-movement” form (or “overture” or “cavatina” form) is not a first-movement form with the development omitted but the reworking of an earlier and independent pattern, so minuet sonata form is a dramatization and enlargement of an already existing form, made more effective, more public.¹²

Most writers don't appear to have much to say about this minuet. Here is Tovey's remark, in full:

Then comes the bright little minuet with its flowing lines, and its trio which so gracefully agrees to everything as long as it gets its own way.¹³

At least Zaslav has something more concrete:

Even in the Minuet and Trio—the archetypal musical symbol of the *ancien regime*—one hears a host of contrapuntal and motivic complexities murmuring uneasily beneath a galant exterior, and threatening at any moment to break through the façade. The Trio (so often reserved by Mozart for some kind of joke) also has a special character, as it puts the cart before the horse, or, rather, the cadence before the melody it would normally terminate. The rounded binary form of Mozart's minuets in general is here enlarged to such a point that it functions like a monothematic sonata-form movement, with the apposite rhythmic drive and developmental textures. Thus, the earlier symphony scheme of four movements in contrasting forms (sonata—binary—dance—rondo) has now been replaced by four essays in sonata form, by four parallel structures. Besides the Minuet's pervasive chromaticism, so alien to eighteenth-century dance music, another technique clue to the further removal of the dance from its ballroom origins is found in the bass-line, where, for the first (and only) time in a symphony minuet, Mozart writes separate parts for the cellos and for the double-basses (bars 9–13, 52–5).

¹² Rosen, *Sonata Forms*, pages 120-121

¹³ Tovey, *Essays in Musical Analysis*, Vol. I, page 197

That bit about “monothematic sonata-form” is critical to understanding this movement and its significance. A minuet with a sonata-form principle is not going to show the same clear delineation of theme and motive as would a first movement sonata form, of course. However, it is possible to make rough approximations of the primary divisions of sonata form and show how they relate to this movement.

Sonata Form Structure	This Minuet
Expo: Primary Group	1 – 7
Expo: Transition	----
Expo: Secondary Group/Closing	8 – 16
Development	17 – 43
Retransition	----
Recap: Primary Group	44 – 51
Recap: Transition	----
Recap: Secondary Group/Closing	52 - 59

4.1 Exposition

The ‘exposition’ isn’t immediately recognizable as such—the overall single-phrase structure of the minuet has precedence for the listener. Nonetheless, the later treatment of this opening section will make it clear that we are indeed in a sonata-principle mode.

This exposition is a perfect example of the Classical phrase—two equal parts, with the first being a clear division 4+4 and the second, at first glance, seeming to be a longer 8-measure phrase, but which quickly shows itself to begin with shorter divisions (2+2) then followed by the 4-measure ending. We’ve talked about this structure before, so this is nothing new, but here is one of the strongest examples yet.

4.1.1 Primary Group (1 – 8)

The opening phrase (1 – 4) contains an interesting harmonic ambiguity: if the F# on the third beat of measure 1 implies a V/V, then this never resolves to V—the next chord is I supporting an accented 4-3 passing tone in the soprano. It is possible that the ear might provide a spurious V in order to satisfy the requirement; I’m wondering here about slightly imperfect memory anyone might have about this movement, and in playing it by ear or writing out what is remembered, may very well provide a V7 of sorts on the downbeat of measure 2.

In fact, the second phrase (5 – 8) is written so as to resolve the ambiguity of the first phrase. Note that it is a sequence—measures 1 – 4 repeated one scale degree higher. But the sequence is not exact, as it well could have been:



Instead, the F# is retained—this time appearing on the first beat of the second measure. The F# continues to imply V/V—but this time around, it actually resolves to a V7. It is therefore my opinion that the slight change of the sequence for these four measures is an acknowledgement of the harmonic ambiguity in measure 1 – 4, and constitutes a rounding and resolution of that ambiguity.

4.1.2 Secondary Group (9 – 16)

Now, calling this the ‘secondary group’ is a statement after the fact—that is, considering that we know this movement is going to be given a sonata treatment. But to the ear, it sounds like no such thing. It is an intensification and repetition of the primary theme—so much so in fact that the first two measures (9 & 10) are repeated verbatim (11 & 12), with measures 13 – 16 acting as a kind of closing theme.

I find the orchestration here interesting. Zaslaw has pointed out that measures 9 – 12 mark a rare instance of cellos and basses being given their own separate lines. This would seem to imply that Mozart is after an unusually full orchestral sonority, an supposition which is quickly reinforced by a glance at the rest of the instrumental writing. The winds, high and penetrating on a held V/V pedal. The melody doubled at the unison in both violins 1 & 2. Bassoons and violas and cellos doubling the inner line; horns used throughout. It’s a rich, full passage.

The sense of strong closing is palpable at measure 16. This is the first ‘strong’ cadential ending in the section—all of the other phrases are noted for having ‘weak’ endings on the third beat of the measure. Here we reach a solid closing on the first beat, complete with Haydnesque repeated quarter notes in the winds. This ending also introduces the new half-eighth-eighth rhythm which will be used in the development.

4.2 Development (17 – 43)

The development passage—in most minuets we would refer to this as “B”, is here fully realized. The chromatic windings are explored with some leisure here, as is the closing figure (half-eighth-eighth.) It is worth noting that at least the first part belongs primarily to the winds.

4.2.1 End of the Devo/Beginning of the Recap

One of the freedoms of minuet-sonata form is that the formal divisions of first-movement sonata aren’t quite as compelling. The older rounded-binary is still very much present and so we are not quite as obligated to follow the full sonata principle in every aspect.

So, where precisely is the end of the development, and the beginning of the recap? I have placed the recap at measure 44—but it can also be postulated that it starts at measure 28. Thematically there is a statement of measures 1 – 3 and thus the ear certainly hears a return of sorts at that point. It could even be heard as a recap at 28, followed by an extensive secondary development, then reaching the secondary group at measure 52.

But, I have to say I don’t find a recap at 28 convincing. I do think there is a clear recapitulation in this movement, but that it begins with measure 44. I have reasons *against* a recap at measure 28 as well as reasons *for* a recap at measure 44:

- Anti-28: There is no clear resolution into measure 28—the dominant is not clearly resolved.
- Anti-28: Measure 28 is heard over a dominant pedal, and a strong sense of the dominant pervades the statement at measure 28 – 30 and the measures that follow.

- Anti-28: Measure 28 is revealed rather quickly to be the first statement of a rising sequence (28 – 31, 32 – 35, 36 – 40) which points towards developmental rather than recapitulatory structure.
- Pro-44: The cadence into 44 is strong and emphatic, a clear dominant-tonic affair.
- Pro-44: The cadence into 44 is approached as a truly final cadence, including a hemiola in the preceding measures, typical of the practice of the time for minuets.
- Pro-44: The thematic statement is followed, eight measures later, by the same second phrase as in the exposition (8 + [2+2+4]).

Now, with that we come then to the primary objection for the recap *not* being at measure 44 and that is that the ‘primary theme’ is not stated very clearly and is fact canonic, and that it continues in a kind of sequential mode as well. It sounds rather transitional, in fact.

But I do not consider this a major objection by any means—precisely because the nature of the *primary group* is not all that important to the recapitulation in a sonata form. The sonata principle, in fact, does not say much about the treatment of the primary group in the recapitulation. Free treatments of the primary group, even downright avoidance of it, are characteristic of any number of sonata forms. (Note the second movement!) It is the *secondary group* that requires recapitulating, the secondary group that needs the restatement in the tonic. We’ve heard the primary group in the tonic.

4.3 Recapitulation (44 – 59)

4.3.1 Primary Group (44 – 51)

Thus the primary group is given a surprisingly canonic and sequential treatment in the recap to distinguish it from the original. All in the solo winds—risky at the time—including dividing the oboes into two lines, supported by a *single* bassoon—one instrument to a part, in other words.

4.3.2 Secondary Group (52 – 59)

The secondary group is now heard in the tonic, and is otherwise unchanged from the exposition with one important exception: the flute now doubles the theme, at a high register, for yet more emphasis.

5 Last Movement

5.1 Speculations about the fugal elements

The last movement of the *Jupiter* is a fugal sonata form. It is not a fugue *per se*, but it contains constant contrapuntal/canonic/fugal passages, culminating in a miraculous coda. There are six themes within the movement, all of them treated in fugal, canonic, or generally contrapuntal manners throughout. As a rule, only two are heard at a time during the main body of the movement. So we aren't quite prepared for the trump card Mozart intends to play at the beginning of the coda: five of the six themes can be heard simultaneously in invertible counterpoint, which he proceeds to do in a glorious headlong rush into the conclusion. It's glorious writing, miles above the heads of contemporary audiences—the use of grand old contrapuntal techniques to produce a hellzapoppin finale.

Is there any way of knowing why he did this? Romantic hyperbole aside, one must remember that *Mozart did not think of this as being his last symphony*. He was all of 32 years old when he wrote it. He fully expected to be going on writing for a long time. So any explanation that brings in the concept of a symphonic 'swan song' as a plausible motive isn't going to work.

The suggestion has been floated that he was modeling it on the works of Michael Haydn (Joseph's younger brother) a composer whose work he knew well. (The symphony once thought to be Mozart's #37 is actually by Michael Haydn, although Mozart did provide the introduction.) Michael Haydn wrote a fair number of symphonies in the 1780s which have fugal finales. There's nothing wrong with the idea *per se*, although it isn't necessarily compelling. (Joseph Haydn's Opus 20 string quartets have fugal finales, but nobody is bringing those up as models although Mozart knew them well.)

Alfred Einstein seemed to be convinced that this would be the case (although later musicologists, such as Zaslaw, don't buy this as readily). Here's a relevant section from Einstein's *Mozart, His Character, His Work*:

It is quite certain that we would not have possessed the finale of the 'Jupiter' Symphony in its particular form, in its contrapuntal texture, had it not been for the finale, entitled *Fugato*, of a C major symphony of Michael's, dated 19 February 1788. Here no doubt is possible:

MOTO VIVACE

And if this should still be thought an accident, there is the rhythmic motive, which appears at first in the horns:



Or a counter-motive to the principal theme:



—further, the play of syncopation, the introduction of groups of rapid eighth-notes; the juxtaposition of all these motives. Of course these are only stimuli, nothing more. The two movements are worlds apart: Michael Haydn’s, the ‘learned’ if also the forceful and healthy work of an honest master who knows his craft; Mozart’s, a miraculous blending of styles, but beyond that the crowning of a life of symphonic work—triumph and self-justification in a sphere inaccessible to all that is earthly. In a deeper sense, Mozart had nothing to learn from Michael Haydn.¹⁴

Some recent research has brought up something else which is rather illuminating, and that is the Mozart appears to have started writing another Mass in the late 1780s. This makes sense given that he was making a move into liturgical music at this point and would have, had he lived, become the Kapellmeister of St. Stephen’s in Vienna. (That’s not speculation: he was made assistant to the current Kapellmeister with right of succession in 1791.) Alan Tyson has brought to light a number of sketches from this period for a Mass.

What this indicates is that Mozart was thinking along liturgical, Mass-like, i.e., *contrapuntal* lines at this time. The Imperial Theater—scene of most opera in Vienna—was closed in early 1788 due to war¹⁵ and economic problems, and with it opera in Vienna went into a fallow period.¹⁶ So he wasn’t thinking in operatic terms, and may well have been thinking more along the lines of church music.

One interesting hint of his thinking along these lines has to do with “theme 1”—about which more later—which is used in the old Fux *Gradus ad Parnassum* (which everybody knew), and which pops up all over the place in works from the Baroque through Brahms. He might well have been thinking about taking what was then a very old tradition and imbuing it with modern sensibility.

All speculation, of course—but interesting.

¹⁴ Einstein: *Mozart, His Character, His Work*, pages 127-128

¹⁵ Austria was at war with France (and Napoleon) for most of the late 18th century and early into the 19th, including the entire period of the French Revolution and the Terror of 1795-76.

¹⁶ That’s why he got involved with Schikaneder in 1791 and why we got *The Magic Flute*—Schikaneder was running what we might think of today as a dinner theater out in the suburbs.

That presented, I must say I don't find the argument particularly convincing. Mozart was far from new to the idea of fugal finales and there is in fact quite a nice one in the Quartet K. 387, which just happens to be the first of the so-called "Haydn" quartets—those he wrote after meeting Haydn in Vienna and studying a number of Haydn's quartets. K. 387 was written in 1782, six years prior to the *Jupiter*. The quartet finale even melds fugue with sonata form, as does the last movement of the *Jupiter*, although not at such an exalted level. The fugal finale was an accepted practice in this period—consider Michael Haydn's symphonies, Joseph Haydn's Opus 20 quartets and symphonies 95 and 104 (which is partially fugal), Mozart's K. 387 quartet and the *Jupiter*, then jump ahead to Beethoven with the fugal finales of the sonatas Opera 101, 106, 110, and 110—not to mention a number of string quartets as well. Mozart is employing an alternate method of structuring a sonata finale which he had not yet used in a symphony. That isn't to denigrate the achievement given that this is one of the most stupendous technical achievements in all music, but perhaps the *Jupiter's* special position as having become the last Mozart symphony more or less by accident has led to a natural desire to seek some special reason for his having used such an unusual structure for his finale. Nobody seeks a special liturgical reason for Haydn's having written fugal finales for the Opus 20 quartets; we all know there are going to be tons more. But what if the finale of the very last Haydn quartet had been fugal? Would we be speculating that he was having a fit of religion as a premonition of his forthcoming demise?

5.2 Opening Motive

This four-note do-re-fa-mi motive has a long and honored history. To begin with it is a stock figure in the teaching of species counterpoint given that it lends itself very nicely to being set in note-against-note style, or two-notes-to-one-note style, or multiple notes (four to one, eight to one, etc). The counterpoint learned by composers of this era—Mozart and Haydn as well as their pupils—was the Fux *Gradus ad Parnassum*, which makes extensive use of the motive and which in fact teaches us the 'species' of counterpoint (note-against-note, two-to-one, etc.)

In addition to its textbook-reminiscent quality, it is derived from Gregorian chant and was well-known in the 18th century as the beginning of a hymn, *Lucis creator*.

So it tends to pop up in the most unlikely and interesting places. First, it pops up in Mozart himself. How about the *Missa brevis*, K. 192 (186f), Credo, which has a continuation that seems strikingly prescient:

The image displays a musical score for the Credo section of Mozart's *Missa brevis*, K. 192. It consists of five staves. The top staff is the vocal line with the lyrics: "Cre do, cre do in u num De um. Pa trem o mni pot en tem". The four lower staves represent instrumental parts, all marked with a forte (*f*) dynamic. The bottom staff includes figured bass notation: *f*, 4, 3, 6, 6/5, 4, 3, 7.

How about Symphony No. 33, in which it appears during the development of the first movement (the example shows only a section of the passage in which it figures so prominently—see the score for the whole thing):

The image displays three systems of musical notation for the first movement of Symphony No. 33. Each system consists of four staves: Violin I, Violin II, Viola, and Violoncello. The music is in 3/4 time and features a key signature of two flats (B-flat and E-flat). The first system shows the initial entry of the theme, with the Violin I part playing a long note and the Violin II part playing a rhythmic pattern. The second system continues the development, with the Violin I part playing a long note and the Violin II part playing a rhythmic pattern. The third system shows the theme being played by the Violin I and Violin II parts, with the Viola and Violoncello parts providing harmonic support.

For your listening pleasure, how about the last movement of Haydn's Symphony No. 13? [Haydn Symphony 20 Last Movement.mp3](#)

5.3 Thematic Materials

The thematic materials—five primary themes—are here shown in their combinations (that is, the way they fit into the contrapuntal texture):

In discussions of the movement I'll refer to the themes by their numbers above—1, 2, 3, 4, or 5. Note that theme #5 is only the first four notes; it is followed here by a transposition of theme 3, which shows how #5 is further fit into the counterpoint. Also note that theme #3 is shown twice—first on the subdominant, and then on the tonic.

In addition to the five 'contrapuntal' themes, there is a sixth theme which comes and goes; it is not used particularly contrapuntally (and not in the all-important coda), and also changes its form as required. This is it:

These themes aren't mixed around gratuitously by any means. Each one has its own place within the sonata form structure:

- Theme 1 is the primary subject
- Theme 4 is the second subject
- Theme 2 is the closing subject
- Themes 6 and 2 act as cadential figures, appearing at important cadential points
- Theme 5 tends to act as a counter-subject to both themes 2 and 4

5.4 Exposition (1 – 157)

5.4.1 First Group: 1 – 35

1 – 4: Theme 1 with accompaniment

5 – 8: Theme 6. If the Tyson supposition about the Mass fragments is correct, then these two themes together form the phrase for “Credo in unum deo” in the never-completed Mass.

9 – 18: Repeat of 1 – 8, using the extended version of theme 6 for conclusion.

19 – 35: Cadences, using theme 2, moving to a strong half-cadence at 35.

5.4.2 Transition to Dominant: Fugal Section 36 – 73

In this first fugal section of the movement, theme 1 is treated as a fugal subject with a countersubject—a countersubject which does not enter into the large-scale fugal treatment of the coda.

36: subject, violin 2

39: answer, violin 1

43: subject, viola

46: answer, cello 1 (no bass)

50: subject, cello 2 (no bass)

53: the subject is stated in the tonic, strongly doubled with winds and basses, still heard with the countersubject.

56: Theme 3 in its first appearance, treated canonically between violin 1 and cello/bass. The accompaniment, in the winds, uses the rhythms of theme 1—enough to remind us.

62: First appearance of theme 5, in inversion no less.

64: Theme 2 is treated canonically; flute/violin1/violin2 versus oboe/bassoon/viola/bass. Arrives at a strong half-cadence on V (measure 73), preparing the second theme.

5.4.3 Second Group: 74 – 135

5.4.3.1 Second Group Part I: 74 – 114 Theme 4

Theme 4 reveals itself (for the first time) as the secondary theme. It is accompanied by theme 5 (measure 76, oboes), theme 3 (measure 77, bassoons), and theme 2 (measure 77, flute).

The theme is restated at measure 80; starting with measure 86 theme 2 in the flutes enters into a canon with bassoon 1 (which enters at measure 87), while the violins provide a counterpoint derived from the tail of theme 4.

94: Theme 4, minus its tail, is treated canonically (flute/oboe1/violin1 vs. oboe2/bassoons/bass). Theme 4 reacquires its tail at 99, and then the canon expands into a fugal treatment (a stretto, no less!):

98: subject, violin1

99: beat 1, subject, violin2

99: beat 3, answer, cellos/basses

100: beat 1, answer, violas

The stretto continues to measure 109; at 110 the tail takes over and becomes a transitional passage

5.4.3.2 Second Group Part II: 115 – 135 Theme 6

The canonic treatment starting at 115 is not given to theme 6—violin 1 has theme, with fragments of its first part in the winds and accompaniment. It arrives at a strong cadence on G major at measure 135.

5.4.4 Closing Group: 136 – 157

Theme 2 is used as a cadential theme; it tends to pop up whenever it's time to bring some important section to a close. Here it is given a rich contrapuntal/canonic treatment within an elaborate sequence which retains a pedal point throughout—a sensed pedal point, not an overtly stated one.

Note the inversion of the tail of theme 2—measures 137-138 in the violins and similar passages.

Also note that theme 1—rhythmically at least—weaves in and out; see the brass at 142 – 144, for example.

The exposition is ended with two simple, rather bald statements of theme 2—first in solo oboe, and then in solo bassoon.

5.5 Development (158 – 225)

The development, although on the short side, is nonetheless filled with energy and interest. I find it interesting that in this development Mozart restricts the melodic materials almost exclusively into themes 1 and 2, although there are some hints of theme 4 here and there. It falls into five main sections.

5.5.1 Section 1: 158 – 172

Themes 1 & 2 are treated contrapuntally, moving to a half cadence on vi (there's our submediant arrival—this time handled quite frankly and without any deception. After the treatments in earlier movements, one might here think that Mozart has decided that this movement is complex enough without dealing with the good ol' cadence-on-vi stereotype as well.)

5.5.2 Section 2: 173 – 189

Here a rich contrapuntal treatment of theme 2 is combined with a descending fifths sequence:

- A minor (173)
- D minor (177)
- G major (179)

- C major (181)
- F major (183 – 4)

The arrival at F major is treated like a momentary pause; there is a sense of hovering here, as well as a fairly extensive reinforcement of the key (which is, after all, the subdominant) at 187 – 189.

5.5.3 Section 3: 190 – 204

Here the contrapuntal treatment and harmonic rhythm slows, being broken by dialog passages between strings and winds. It is here that I detect just a whiff of theme 4—see the bassoon, measure 190, 2nd oboe measure 195.

What's more fun about this passage is that the descending fifths sequence of section 2 is here slowed down and inverted: it becomes an *ascending* fifths sequence:

- F major (189)
- C minor (192)
- G minor (196)
- D minor (201)

5.5.4 Section 4: 205 – 219

Mozart is on his way to a pedal point on V/iii—having reached it (210), the harmonic rhythm—which has been slowing down steadily since section 2, nearly comes to a stop.

5.5.5 Section 5: 219 – 224

This is the retransition into the recap. He begins it holding onto V/iii—B Major. He now needs to move to G major, the dominant. To do this he uses what should be by now a familiar technique: chromatic lines (measures 219 – 223), culminating in an augmented sixth chord (222), which then resolves properly to a cadential 64 (223 – 224). At that point, the resolution into the recap at 225 is inevitable and obvious to all.

5.6 Recapitulation (225 – 336)

As one would expect, the recap is interesting and exciting but does not contain any major items that one has to point out. It follows the established techniques quite well. It does not contain a secondary development: the second statement of the primary theme is used to kick off a recomposed transitional section to the secondary group, but it is not in the nature of a new developmental section.

The quiet ending of the exposition is retained in the recap. Obviously we can't end a piece like that, and there is no way he's going to do it.

5.7 Coda (337 – 394)

The coda is glorious; it is here that Mozart lets us know his master plan. All through this movement various themes have been treated contrapuntally. However, he has not let on that all five of the major themes can be combined *together* into one contrapuntal texture. It is here in the coda that he will show us how it's done.

First he has to get there. A sudden interruption and quick motion to the subdominant (387 – 340) prepares us for something new to happen. A canonic passage, piano, in all whole notes (marvelously slow and static), is actually an inversion of theme 1 (look at the violin 1 line: it's a true contrapuntal inversion, in which the intervals are retained but their direction reversed.).

With measure 343, we're off on the big contrapuntal coda.

- Theme 1 acts as the main fugue subject
- Theme 4 acts as countersubject 1
- Theme 3 acts as countersubject 2
- Theme 5 acts as a floating countersubject to all the above themes

There's an article out there that analyses this fugato passage as an *ars combinatoria*—that is, combining melodies contrapuntally via chance such as throwing the dice. It's a compelling idea given that Mozart, as we all know, was rather addicted to games.

The fugato passage ends at measure 373, and proceeds to use themes 6 and 2—the ones most commonly used as conclusions—as the final conclusions. It's worth noting that a hint of theme 4 appears in the winds in the final four measures.