

Beethoven's
Piano Sonata, Op. 106,
Third Movement

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IN ANY multi-movement work which creates tension between certain elements and resolves it at the end, certain requirements are made of inner movements. The meaning of the tension is nullified if it is created anew in each movement; therefore the movements cannot be parallel in their significance, but each must show the material of the piece in a different aspect. Such a work is even more aesthetically pleasing if the movements give a sense of progression, and require a certain order for their most intelligible expression. For example, the second movement can isolate a source of tension from the first movement, and by the phenomenological method of varying the context, reduce it to its essential form. The third movement can then show new and unexpected relationships in the material and by so doing prepare it for resolution of the conflict in the fourth movement, etc. In this conception each movement reflects a stage in the dialectical solution of a problem.

It is doubtful that any composer has been as concerned with the creation and resolution of tension throughout a multi-movement form as Beethoven was in his late period. Romantic composers often relied on the Baroque principle of contrast of meter and tempo, or on the shaping of levels of activity to reflect some paramusical, if not extramusical, process. Bruckner and Mahler were sometimes unsure about the best order of the movements in their symphonies. Before Beethoven, "works" were sometimes put together

from varying movements of various compositions. Even the Op. 47 violin sonata from Beethoven's early period exhibits this lack of concern for long-term connections. But in his late ^{period} he becomes more concerned than anyone else has been about why certain movements go together and in what order.

One of the most fascinating solutions to the teleological multi-movement form problem is the piano sonata Op. 106, entitled "Hammerklavier". Its superficially traditional Allegro-Scherzo-Adagio-Allegro form makes its deeper departures from earlier sonata form all the more noticeable; these differences can be overlooked under the stranger surfaces of the two-movement sonatas. This paper will focus on the sonata from its third movement, as the description of a process from one stage in that process.

The point that this movement is more or less in sonata form has been made by enough authors that it need not be belabored here; except to say that the movement is considerably flattened into a binary form by the diminution of the development, in both size and function, to middle 18th century proportions. For ease of reference, the structural divisions are given here with measure numbers:

Exposition	mm. 1 - 68
First theme	1 - 26
Variation and transition	27 - 44
Second theme	45 - 68
Development	69 - 86
Recapitulation	87 - 154
First theme	87 - 112
Variation and transition	113 - 129
Second theme	130 - 154
? (Second and first themes)	155 - 173
Coda	174 - 187

THE MAJOR innovation in Beethoven's late music is that tonality, which was once structure (background), has become thematic. With this word I

mean to include all its Husserlian connotations: foreground, that which has been made an object of attention by varying it against a fixed background. The latter in this case is small-scale musical entities, what we usually call themes.

The first movement of Op. 106 was concerned generally with modulation downward by thirds, and in particular with the clash between the tonic B^b and B^h reached by the series $B^b - G - E^b (=D^\sharp) - B^h$. B^h is first given as the third of G maj. D is also prominent through its presence in B^b maj., G, and B min. triads. The second movement isolates the $B^h - D$ link alone, and within the G maj. triad. In the comic end of this movement, B^h threatens to become a new tonic, but it is somewhat insecurely supplanted by B^b just before a close on a very inconclusive 2nd inversion triad.

The third movement is in F^\sharp minor. B^h seems securely established, for the moment. The melody begins to revolve around B and D, as the tonality will later, as early as m. 3. They are particularly prominent for being added to the dominant triad. In fact, all the harmony for the first thirty-five measures is generated from a series of thirds:

		F^\sharp	A	C^\sharp		
	B	D	F^\sharp)	C^\sharp	E^\sharp	G^\sharp B D
	G	B	D			B D F^\sharp
(C	E	G				

This movement, then, continues the movement by thirds that pervades the other three movements. Beethoven will conclusively prove the derivation of the dominant 9th chord from the descending thirds at the end of the development, mm. 85 - 87. To these melodic thirds is added a tendency to modulate upward by fourths. The significance and relationship of these two tendencies will become clear later in the movement.

Just as the thematic quality of harmonic movement applies here between movements as well as within each one; so are there melodic connections linking the movements. Two important notes act as range boundaries: G in the upper register and E# in the lower. This E#, the lowest one on the piano, makes melodic connections with both adjacent movements. The same note, qua F, is the lower limit of the second movement, which further emphasizes F by ending on three 2nd inversion triads. The low E# is then reached in m.55 and remains the lowest note for the first 62 bars. Emphasized rhythmically just before the end, it is then immediately played as F at the beginning of the fourth movement. This lower range emphasis highlights the enharmonic change E# - F; such changes in meaning pervade the sonata. At the same time, a more immediate melodic link is repeated: the third movement's opening note, A, sounds like the seventh scale degree to the second movement's B^b tonality. Likewise, the fourth movement begins on the seventh scale degree of F#, F = E#. This parallel connection balances the mirrored transformation of E#:

II	III	III	IV
B ^b → A		F# → F	
F → E#		E# ← F	

The upper limit, G, is outlined even more prominently. The peak note of the opening melody; G becomes the highest note of many lines that could easily go higher. Three related instances are given::

m. 22



m. 55

m. 57

In each of these, G is a conspicuous, chosen limit, the highest note of a B A G F# E melody or its retrograde. When these notes are supplanted as limits after the exposition, it is by B in the treble and D in the bass.

Like the opening themes of the first two movements, the main theme here circles a note by thirds on each side. The G maj. interruption is a simplification of this idea, and the line which follows it is an inversion.

I: mm. 1-4
(abstracted)

II: 1-4

III: 2-5

14-15

16-17

Notice the variety in rhythmic placement in the last three examples. This is one of Beethoven's main techniques for creating variety in this movement.

The rest of the first section consists of a series of descending lines prolonging the dominant ninth chord. This line, in its form starting on the fourth scale degree, is derived most closely from the second movement, but has counterparts in the other movements as well:

II: m. 19



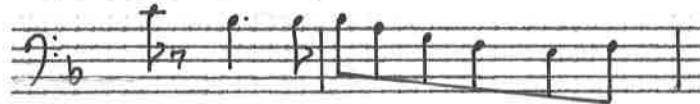
III: m. 10



I: m. 140



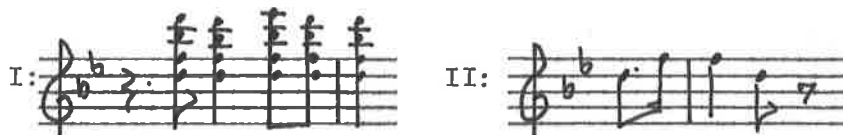
IV: m. 30



The harmonic and melodic materials of the first part are fairly simple. Beethoven achieves variety here by use of rhythm. Similar sets of pitches will be constantly altered in their rhythmic position; e.g., the F# - E# resolutions in mm. 9 and 11. Each time the tonality turns to G maj., the melodic progression C# - D - G can be found, and in a different rhythmic position each time:



A similar effect is achieved with the use of upbeat. As often as not, a chord on a strong beat will be anticipated an eighth note earlier or even two. This is merely a continuation of the method used in the two previous movements.



In the first of these cases the anticipation cannot help but steal some of the accent of the stronger beat. Such is also the case in the third move-

ment. Anticipation of the chord shifts the harmonic rhythm away from the metric rhythm. When this occurs in the middle of the measure, the effect can be hemiola:

entrata.

(> > > >)

m. 4

m. 21

(> > >)

Sometimes the harmonic rhythm is 6/8, but shifted from the meter by an eighth note:

(> > >)

m. 25

This last example has the effect of making the rhythm at m. 27 even more ambiguous by establishing a false beat which continues throughout the second section.

Subtle in the opening section, these anticipations have a much stronger effect in the recapitulation of this section, due to the steady, undifferentiated rhythm.

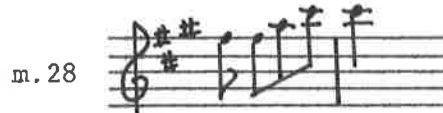
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The effect of these techniques is to create great uncertainty about when the harmony will change, when a note will resolve, etc. Rhythmic variety

keeps the simple harmonic materials from becoming boring. Even on repeated hearings, the harmony has a mysterious, counter-intuitive sound:



THE SECOND section is so clearly based on the first that it suggests a variation form. Each motive has its counterpart in the first section:



Mm. 31 - 33 are a further variation of mm. 28 - 30. This will become important in the recapitulation.

A transition at m. 36 begins a harmonic tendency common in this movement - modulation upward by fourths. The pattern is to raise the third of a minor triad, forming a dominant to the chord a fourth higher. This pattern is rife with large-scale significance. By this means, Beethoven moves through the progression f# F# B e E A D; reaching the key a third

below by a series of fourths.

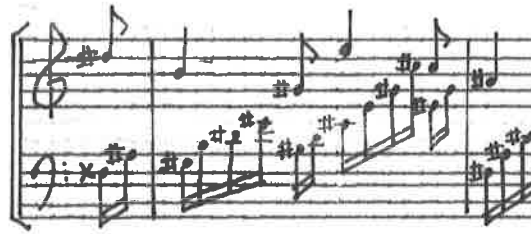
The third section is a tranquil second theme based on the opening bass line in retrograde. It makes much use of the hemiola from the first section in both melody and accompaniment. M. 49 contains a hint that B^b is still lurking in the background. After a scalar passage that reaches the high G, we hear a condensed repeat of the B e A D progression that brought us to D. This progression combined with the D - B connection is a preliminary way of revealing the similarity of function between the falling thirds and ascending fourths in this movement; and it is repeated with more emphasis on the B triad after the first melodically prominent B^b. Many details in this closing section refer to what has just passed. It is worth noting in m. 60 that, for the first time, an enharmonic equivalence is notated between A[#] and B^b - A[#] in B maj. and B^b in D maj. This detail reflects a much larger plan. Mm. 66 - 68 are a sped-up repeat of the scalar rise at m. 53, this time reaching A.

The development is a quick summary, amplification, and justification of most of the harmonic and rhythmic ideas of the exposition. To begin with, the hemiola idea is here used in its largest form, groups of nine eighth notes (divided 4 + 5, yet) spread across 6/8 meter.



More importantly the relationship between the falling thirds and rising fourths is explained in detail. Two of the falling thirds make a falling fifth, the harmonic equivalent of the rising fourth.

m. 80



Note the progression of the minor triad, sharpened third, new triad a fourth higher. This too will have larger structural consequences. The same idea with the counterpoint inverted (thirds on bottom, fourths on top) is prominently displayed in the introduction to the fourth movement.



The upbeat idea is prominent in the development. The raising of the third on the last eighth note of the beat connects this note with the next strong beat, tonally speaking. Finally, at the end, the derivation of the dominant ninth from the series of thirds is strikingly demonstrated.

The development summarizes most of the details from the exposition. Beethoven has apparently now explained most of his mysteries, but over half the movement is yet to come. What hasn't been revealed are the large scale tonal relationships, and particularly the meaning of the neapolitan interruptions.

The first section of the recapitulation follows the exposition quite closely, given the figurative variation. An interesting addition is the A# passing tone in m. 89; another example of sharpening the third to make a secondary dominant. The rhythmic shifts of the melodic notes take on a strange, 20th century quality:



The second section is a surprise - D maj. instead of the previous continuation in f#. Beethoven gives us an interesting hint that this is going to happen: whereas C# is the highest note in m. 26, in this corresponding measure the melody leaps to a high A. In each case the high note is the dominant of the key to follow.

A second surprise follows: m. 117, instead of merely varying the preceding measures, modulates quietly down a third to B min., making the section a fourth higher than its earlier counterpart. Again Beethoven hints at this eventuality, by making many of the melody and bass notes a fourth higher rather than a sixth in mm. 114 - 116.



Increasingly throughout the movement A# has been used as a leading tone to B.- first ornamentally (m. 32), then as a passing tone (m. 89), and now as the bass of a V^6 chord (m. 118). It is as if, after its near des-

struction by B^b in the second movement, B^b has lain dormant for some time, and is gradually coming back to claim its own, increasing its function little by little. It can now be related to the F# tonality and define its relation, qua A#, to B^b. The F# maj. at m. 130 is the first large-scale instance in this movement of a tonality that was minor returning as major. We have seen this many times on the chord-to-chord level, and always with the effect of acting as a dominant to the chord (usually minor) a fourth higher. The frequent appearance of this progression on a detail level brings, if not the expectation, at least a sense of balance and aesthetic fulfillment in the thought that this tendency might also be enacted in the large-scale tonal design of the movement. This is precisely what happens; but not yet. The A# has been introduced very, very gradually, and Beethoven can afford to save its most important function for a few more measures. It is enough for now that the A# occupies a prominent position at the end and lower limit of the second theme (m. 132).

The exposition is followed fairly closely for a while. It is interesting that in m. 145 two enharmonic equivalences are now asserted. B reappears as C^b and resolves to B^b, significantly enough, and E# also becomes F. The recapitulation proper ends with a tonal move to D maj. which turns immediately into B min. After a pause, the B leaps down into G maj. for the repeat of the second theme. This progression, F# D B G, mirrors almost exactly the B^b G E^b B progression in the first movement. This is Beethoven's way of explaining the mysterious G maj. interruptions as having the same relationship in this movement as B did in the first.

A REPEATED method is encountered here that Beethoven inherited from Haydn: the gradual revelation of the significance of a source of conflict or an inexplicable occurrence. This gives sonata form its teleological character, and as a method, bears the imprint of 18th-century epistemology and positivistic ethics. The world, though mysterious and confusing on the surface, is in principle explicable. The relationship between metaphysics and musical technique is unusually clear here. The pessimism which resulted when this world view seemed no longer tenable is reflected in the technique; if not always the mood, of much late 19th-century music. Even Schumann does not always resolve to the tonic at the end.

In this restatement of the second theme, the one departure from previous statements is significant: A# as a neighbor note to B (and accompanied by F#!) instead of the expected A at m. 159. The climax, mm. 162 - 165, involves the strongest statement yet of the rhythmic dissonance, the hemiola; and brings the tonality back through B and D to prepare for the return of F# min.

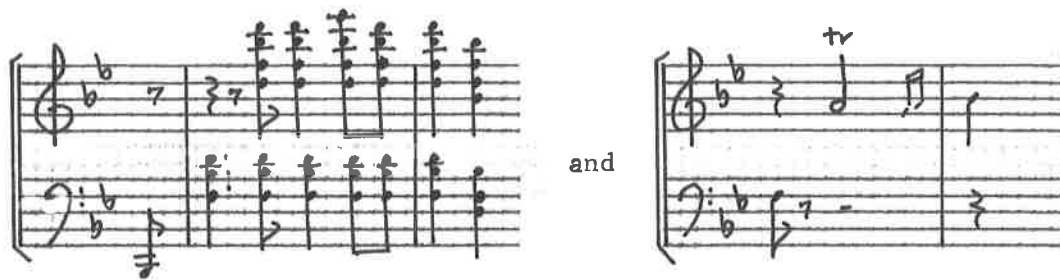
The deviations from the norm in this last restatement of the first theme all have structural significance. The direct descent in the bass from F# to B at m. 167, without D as the usual intermediary, points to the new significance of F# - as dominant to B minor. The A# passing tone has the same function. The exposed G - D in the bass at m. 171 recalls the second theme, as well as bringing G and F# into their relationships with D.

It is only in the coda, at m. 174, that the progression f# - F# - b is brought to complete fruition. Even against this support of the subdom-

inant; however; B resolves back to A#; as it eventually must to B^b. The rhythmic shifts of the opening section are used freely here; and after a final arpeggiation of F# - B - F# - B in the bass, the harmony resolves to F# maj. voiced as a series of tenths, the seminal interval of the entire work.

B has been emphasized and strongly established in this mysterious movement by gradual revelation of F# as its dominant and A# as its leading tone; but in the end, F# serves to support A# instead. What remains to aid the final resolution of the half-step clash is the transformation of F# to G^b; and of Bⁿ to C^b. Both of these transformations will be effected in the final movement.

Throughout this movement, tonality has been treated thematically in a very real way. I. E., it has been made a center of attention by varying it against a fairly static melodic background. This conception is central to the solution of the multi-movement form problem in Beethoven's late music. To unify several movements in a single gesture, the large-scale tonal movement must become thematic. A tonic-dominant polarity conceived as background will not serve. Thematization of tonality requires a certain flatness of melodic detail in order for the tonality to come into focus. The ultimate paradigm of this procedure is the Op. 131 quartet. The normal expectation - that the tonality remain fairly constant and the melodic aspect be the changing element - must be reversed. In Op. 106, the second theme has remained without significant change through three tonalities: D, F#, and G. It is worthwhile to note the relationship of this "motive of tonalities" to two other prominent motives in the piece:



(B^b D E^b and F A B^b) as well as to the F[#] A[#] B relation.

What significance this relationship had for Beethoven is perhaps a matter for speculation. But it is an example of an important aesthetic principle: that the smallest details should reflect the large-scale structure and vice versa. This principle reflects a metaphysical attitude as well, that there is a unity to all experience extending from the longest span of time conceivable to the shortest moment; that universes and grains of sand run by the same rules; that the processes of birth, growth, and decay bring about similar changes in leaves and civilizations. Cage points to the rhythmic expression of this principle in Indian music and applies it to his own technique; and it is Beethoven, after all, to whom Cage points as having made the "mistake" of applying the principle to harmony. Whether this correspondance seems significant or not, there are many others to choose from in Op. 106. It is still the unique balance between small-scale thematic relationships and large-scale thematic tonality that makes Beethoven the master of this conception in the harmonic realm in Western music, as Cage has been its master in the rhythmic sphere.