A paper by Nicholas Kitchen about manuscript markings in Beethoven in general and in particular about their use in Op. 131, expanded from a paper presented for the Boston University Beethoven Institute in April 2017

I am honored to share with you today some of the exciting surprises that have come from rehearsing and performing directly from pdf files of Beethoven's manuscripts.

The Beethoven editions I first encountered (at least for quartets) were the Joachim-Moser editions, which I now see as lovingly mauled editorial efforts. Regardless of any editions, I heard beautiful performances of Beethoven's music, treasures in my memory that continually inspire my current endeavors to try to bring the beauty of his compositions to life.

But the particular beauty of Beethoven quickly demands from us the realization that the details of our interface with the markings in his music DO matter a great deal, and that they mattered a great deal to Beethoven himself.

Studying at Curtis, I witnessed the transition to Henle Urtext as the trusted source of learning about Beethoven. My single most inspiring class was one led by my teacher Szymon Goldberg, where all of his students had our Henle piano scores of all ten Beethoven Sonatas (we also consulted Joachim’s solutions to certain issues) and all together we went through all ten sonatas multiple times, with all of us taking turns performing different Sonatas. Mr. Goldberg made vivid to us the concept that
Beethoven’s markings were living instructions from one virtuoso performer to another, and he had a nice saying: "The composer wants the performance to succeed even MORE than you do".

I was also included in Otto-Werner Mueller’s analysis courses and conducting courses, leading to a quite different view of interaction with Beethoven’s markings, particularly related to the way Mueller prepared his own parts for the orchestra and his memorable use of “f only”.

With both of these teachers it was inconceivable not to work from the full score, and this led me eventually to see the computer with page-turning pedal as a great tool to being able to use the full score in a much more powerful and convenient way in everyday rehearsing and practicing. With the computer, it is quite effortless to have multiple editions open in a rehearsal or practice session, and to compare them with a few keystrokes.

What was unexpected but natural was to realize that some of the sources that could be open on the computer might be not just be pdfs of printed full scores, but also pdfs of the original manuscript, or an early edition, or a corrected copy.

Working with manuscripts, and particularly Beethoven manuscripts, turned out to be like swimming next to a whirlpool. I have most definitely been sucked into the whirlpool! But being pulled in has resulted in working with a new set of information that has been
quite thrilling. I am very excited today to look at this information together and search for what its meaning might be.

I started with a few manuscripts and gradually started to see marks that were not in print, I call them "manuscript markings". I thought these marks might be random, but with time I have come to think that they are intentional and meaningful musical markings. Tantalized by what I was seeing, I would have to say I caught “manuscript fever”. I have sought out as many Beethoven manuscripts and primary sources as possible in order to see from the broadest possible viewpoint what the consistent patterns might be. The more that I see, the more I come to the opinion that these marks were a very systematic and detailed way for Beethoven to lay out in his own mind the subtle dramatic and expressive architecture of his works. Whatever the meaning might or might not be, the marks can be seen in consistent form in scores that span 25 years.

Let me share a list of the opus numbers in which I have seen the significant use of these manuscript markings. Actually, when I make this list, I am really referring principally to the use of the extended dynamic system, because, in fact, the "manuscript marking" use of swells and staccato that I am describing is in ALL the manuscripts that I have seen. Regarding the dynamics, in some cases like Op. 69 I, a single manuscript marking dynamic (in this case "ffmo") is used in a choice spot in the music. In others, the number and variety are extensive. In some cases, the manuscript may have been lost, but it is conspicuous that the manuscript markings make it into the work of copyists - often in a corrected proof.
In the following list, I choose to put the opus numbers in descending order, because in later works he seemed to use the markings even more extensively. Here is the list of Opus numbers:


For various opus numbers, it is not just that the manuscript markings have made it INTO the corrected copy, but they have done so in a spectacular way! The ones of this nature that I have had the chance to study are Op. 125 and Op. 55. Other times, the manuscript markings have made it into the copyist's work terribly inaccurately or with only moderate accuracy.

Once we have looked at the specifics of manuscript markings, I look forward to featuring here a few pages of two opus numbers that Beethoven copied out himself, Op. 77 and Op. 135 (parts). Interestingly, the manuscript markings are used robustly in these copies he made himself.
So I would like to speak about three subjects:

1. What are the manuscript marks and what might they mean?

2. How wide-spread is their use and what might have inspired their use?

3. How are they used specifically in Op. 131?

So, What are the manuscript marks and what might they mean?

What I have observed is that there are three areas where the minute details of what Beethoven marks in the manuscripts are musically significant and not fully represented in print.

1. Expressive swells
2. Staccato markings
3. Dynamics
**EXPRESSIVE SWELLS**

Let’s look at expressive swells first, as these are the simplest, and frankly, I do not understand why they are not printed the way that they appear in the manuscript. In early editions the exact swells are much more accurately represented than in modern editions.

Look at this page from Op. 132 I ms 84-87.

It seems that the four connected "diamond" swells, and the four disconnected pairs (swell up and then swell down) are drawn quite intentionally, as distinct types of swells.
And now, look at this page from Op. 79 II ms 1-14: The swells are clearly disconnected in the first three lines and clearly connected in the fourth.

If one begins to think that the connected swell is only used within one bar, one doesn’t have to look far to see diamond swells over many bars. For one, look at the Op. 127 example just below.
Here is Op. 127 I ms 215 - 217, including this note in the margin identifying the closed swell in reference to the closed swell that stretches across the turn of the page.
And now look at this careful correction in Op. 131 No. 4 ms 140

To me it seems that we should print these connected swells as Beethoven marked them in the manuscript. It seems to me that for Beethoven the difference between connected swells and disconnected ones was definite.

Now regarding the meanings of these swell markings, I will share my personal opinion as a performer, tested, for better or worse, in my own rehearsing and performing.
With swells, I read the opening swell as a surge up in expressive intensity and the closing swell as a event starting from high expressive intensity and transforming downward in intensity. Though these markings are very likely to affect loudness I do not see them as instructions of loudness but rather instructions of expressive intensity. This is why it is not illogical that these marks are often on single notes in the piano.

Regarding connection of disconnection, when they are connected, the surge up and the downward transformation are joined into one event as if they are under a slur. When the swells are disconnected they are two events. a surge up in expression, and a separate transformation down in expression.

As I said, it is my opinion that we really should print the details of connection or disconnection as Beethoven marks them in the manuscript.
MINUTE AND EVEN ECCENTRIC DETAILS THAT ARE PRINTED

In contrast to the details of expressive swells that are NOT printed, I would like to point out a number of minute details that ARE very faithfully printed. One is Beethoven's careful delineations of tied notes and dotted figures that reach across bar-lines.

Look at Op. 132 III manuscript ms 94-97 and Henle ms 94-97. Every detail of the wonderfully particular and eccentric rhythmic notation has been preserved. (I might just note that for me what has not been preserved in these four bars is the details of the crescendo reinforcing marks in the first two bars.)
Also, consider, here in Op. 130 I ms 43 (44 for Henle)-48, the faithful printing of distinctions of "sf" and "f":

I might also note here that I read the staccato marks a little differently and take particular delight in the manuscript marking in the first half of ms 47. Notice the larger staccato marks in vln 1 and the four small staccato marks in the other three instruments.
Slurs that have extremely fine and eccentric logic are also preserved.

Observe Op. 74 IV ms 122 - 127

I love that these details are preserved. Often it is not easy for the performer to know easily what these eccentricities mean, but there is no question that we are participating in a process where Beethoven is searching for means to express the curiosities of his detailed sound imagination. Even if we do not have an exact and easily expressed logic, we must work with the eccentricities and allow them to affect the complexity of our own vision.
Regarding the expressive swells that I mentioned previously and the staccato and dynamic markings that I am about to speak about, my opinion is that these marks from the manuscripts deserve the same inclusion in our printed material as some of the minute details I just mentioned that are already faithfully printed. I would love for the manuscript markings I am bringing up here to be part of the way we build our understanding of the details of these pieces. Reiterating, I believe the preservation of what I am calling the "manuscript markings" is no less fruitful than preserving eccentricities in slurring or ties, or "f" and "sf".

So, moving along, the next area of manuscript marking is the details in lengths of staccato.

**STACCATO**

Let's look at a few pages of manuscript:

Here is Op. 24 the "Spring" Sonata I ms 60 - 62. I think is is clear to see the long staccato marks in the first two bars and the dots in the third bar. This distinction is clear and comes many times in the movement.
Observe the mixed lengths of staccato in bar 3 of the 8th Symphony, Op. 93
Now let’s look at Op. 127 I ms 141 - 143 and observe the varied lengths of staccato

In my opinion these are not accidental varieties in length. I have heard the argument that these different lengths are just the result of sloppy penmanship. But I doubt this, and let me explain why.
I doubt this is because of the nearly flawless consistency of the way Beethoven draws dots in portato. In the thousands of dots that Beethoven draws to indicate portato, Beethoven succeeds EVERY TIME in penning exquisitely equal dots. Just look at measure 78 from Op. 130 III:

Later we will look at an even more remarkable collection of portato dots in Op. 131
Now look at one of the letters where Beethoven clarifies how important the distinctions of different staccato are to him. Here is the letter Beethoven writes to Holz, the second violinist of the Schuppanzigh Quartet in August of 1825 (you can see the whole letter on the Beethoven Haus site). Holz was copying parts for Op. 132, and Beethoven writes two separate sentences to clarify that dots and strokes are NOT equal, and NOT interchangeable. Notice, just after the "s" edit mark, that there is even a very long stroke, and next to it a smaller one.

Combining what I see in the manuscripts and letters such as this, I believe our editorial efforts must take a more complex approach to dots and strokes ("strokes" being what I am calling "line staccato" markings).

In my personal reading, there are 4 types of staccato: dot, small line staccato, medium line staccato and long line staccato. I find if one looks for two categories - dot and stroke - there are many insoluble puzzles, whereas this is not the case if one uses four categories.
In terms of meaning, I think the length of staccato indicates the intensity with which the attack is made. A dot is short and light, a small line staccato similar, but with slightly greater intensity in the attack. Medium line staccato is a bit more intense and long line staccato is the most intense. These intensities are not related to dynamic. You can have a long line staccato in the softest dynamic (see Op. 127 IV manuscript ms 109 vl 1 and vl 2 for one example). The staccato can have various possible lengths (duration), but the written length of the staccato mark seems to give a definite instruction regarding the energy of the articulation used at the beginning of the note.

And now let’s move on to the third category of manuscript markings, the dynamics.

**DYNAMICS**

An interesting lesson to myself comes from remembering that when I first read Beethoven manuscripts, I did not see what I am about to describe. My brain, working with the categories that it already had mapped, looked at the dynamics I am about to point out, and only saw the one’s that I was already familiar with: "ppp", "pp", "p", the "mezzo" and "poco" dynamics, "f", "ff" and "fff".
But that changed with a question at the Taos School of Music. I was coaching a group on Op. 132, and we were looking at a pdf of the manuscript together, when the cellist asked “what is that MO?”. We looked at bar 103 in the first movement and indeed in all four parts the dynamic is not "ff", it is "ffMO".

At that moment, I didn't make a very coherent response, but within a few hours it was as if a card deck that was all face down had been instantly turned face up. I saw all, or at least most, of the distinctions I am about to describe.

Now, stepping back for a moment, I want to suggest that ANY expression mark that Beethoven uses seems to have a few characteristics:
1. His use of the mark is vivid, though he may display, side-by-side, stubborn enthusiasm for employing the marking and accidental carelessness in completing all the implementations of the marking.

2. Musicians all see the marking, but see different meanings in that marking, and naturally argue quite passionately about their particular point of view!

So, taking these characteristics into account, let’s just say start by saying that whatever the meaning of the marks we are about to discuss might turn out to be, they are present in a majority of the opus numbers (see the list above for a reflection of my own experience). This alone leads me to the conclusion that we must discuss these markings, whatever strikingly different conclusions we all might each come to regarding their meaning.

So allow me to share with you my own view:

The manuscript dynamic markings I have observed are modifications of the dynamics we are familiar with.
The printed spectrum that we know is "ppp", "pp", "p", the "mezzos" and "pocos", "f", "ff", "fff":
The manuscript marking spectrum that I am describing now is:
"ppp///", "ppp///", "ppp", "ppmo", "pp///", "pp", "p///", "p///", "p" the "mezzos" and "pocos","f", "fo", "for", "forte", "ff", "ffmo", "fff" (note that in typing I am representing the lines on the stem by forward slashes ("/")) after the dynamic

To jump right into meaning, my own reading of the meaning of the special marks is that the addition of one line or two lines in piano is an indication of emotional intensity. If an analogy was made to a way an actor speaks, "pp" would be whispering, "pp/" would be whispering with some excitement in the voice, "pp///" would be whispering with great excitement in the voice. In forte, as more letters are added to "f" to form "fo", "for" and "forte", the differences indicate the intensity and importance of the moment marked.
In both soft and loud music, the use of the last two letters of "pianissimMO" or "fortissiMO" mean that the local area under this marking is extremely important in the overall drama and also has a special intensity. Interestingly, there are some times that Beethoven in "pp" uses the MO and the two lines simultaneously like this example from Op. 96 IV ms 162.

Pointing ahead to Op. 131, there are no uses of "ffmo" in Op. 131, but uses of almost all of the other dynamics, including one particularly vivid use of "ppp/".

But let me move around to a few pieces to show the musical contexts that have given me information to start to feel what their meaning might be.
Op. 97 III ms 141. The haunting harmonic shift in the violin entrance is given extra emotional intensity through the use of "pp//". One line later, the questioning three notes in the piano are also given an emotional framing by the use of "pp//"
A particularly beautiful use of "ppmo" is in the violin concerto Op. 61 II ms 61 - 63, where in the magical section of "perdendo", the end destination is an exquisite "ppmo".
A similar "ppmo" endpoint is in Op. 95 II. The cello makes its "pp" scales move further and further down tonally beneath floating suspensions in the upper three instruments. All of this is regular "pp", but when the viola finally pivots to the new section on Bb in ms 77, it is "ppmo".
The 9th symphony starts with "pp//"
As does the "Waldstein" Sonata Op. 53
And in many instances the "goodbye" bar of a movement is "pp//". Here look at the final bars of both movements of Op. 111.
We can also see this in the "goodbye" bar of Op. 30-1 I:

And Op. 30-3 II (actually this is "p/" in violin and right hand keyboard, and regular "p" in left hand keyboard)
If we enter the world of Op. 127 IV, Beethoven sets the emotional tone for the 6/8 at the end of the piece by emphatic, repeated use of "ppmo". Here is one example, IV ms 269-270
The mark "sempre pmpo" is also prominent (marked 8 times) in the mysterious Introduction to Op. 59-3 I.
If we allow sung text to lead us to what these markings might signify, then let’s look at the “et incarnatus est” in the Credo from the Missa Solemnis Op. 123 III ms 126. Where this moment of miracle occurs in the text, the moment is embraced with the dynamic "pp/".
Just take a short step over the floating moments in the third movement of Op. 125 ms 117-120 and you can see Beethoven emphatically clarifying the use of "pp/" with his red wax pencil.

I think that Beethoven had a process of writing out manuscripts that more or less notated the pitch events first and then passed over the material multiple times providing performance guidance through dynamics and expression marks.

I do not think this order was strict but I do believe it is fair to say that there was a crucial and probably fairly lengthy part of his compositional process where he chose the expressive marks for the work that had recently come to a convincing shape for him.
Clearly at this stage he was also open to making major changes of a structural nature (like his elimination of the large repeats in Op. 59-1) but I think is is fair to guess that an intense process occurred where Beethoven molded in his mind the delivery of the content of the piece and it was at this moment that he added the dynamics and expression markings, probably adding more with each pass and coming back to revise them numerous times.

I think the use of the special manuscript marks were tools he felt compelled to invent to reflect the complex shading that was in his imagination.

So what we are allowed to see by reading these manuscript markings as we play the music is a more detailed map of his architectural thinking regarding effective performance of the musical material.

Let me give you two examples of the manuscript marking illuminating this dramatic architecture: Op. 111 II and Op. 130 II.
In Op. 111 we have the theme. Notice the prominent use of diamond swells (preserved in early editions)

For variation 1 there are no surprises in the marking, and this is true for variation 2 as well.
The first signpost of architectural thinking is the opening of Variation 3. This is marked energetically “for”.

This is the first of three for sign-posts of “for” that lead to one climactic use of “forte”.

For the performer, responding to this marking of extra energy and importance for variation 3 is hardly uncomfortable, given its rambunctious nature.
An extraordinarily important emotional moment of the movement is where we enter the 4th variation. And what do we see as the dynamic as we enter variation 4? "pp//"

As we move through this variation, there are various "pp//" and "pp" marks, but most often, "ppmo" is what holds the variation together and this is where one feels a connection to the special intensity and importance of "ppmo".
Then we come to the second sign-post at ms 26 of variation 4 - the d natural trill which marks the entry into improvisational territory. Here is the second “for”, marked after the fact with a different pen.

This page is a marvel of different possible paths, but in the chosen path notice the "pp/" on the Bb 7 bar (line 3, variation 4 ms 30), a poignant use of "pp/" if there ever was one.
The triple trill in ms 32, (with various possible dynamic schemes tried) then takes us to the second sea of improvisatory detours, all richly adorned in "ppmo".
Out of all this harmonic dreaming, the river of C major emerges as the entrance into variation 5, and here as the triumphant C major arpeggio is sung, we have the third sign-post “for”.

The marvelous scene of what follows lead us to the moment just before the end of the movement where the delicate 32nd notes reach into the top register. This is, naturally "pp//".
The scale returns to earth, and we reach our final sign-post. It is marked on the musical motif that will instigate the concluding echoes of the whole work and it is the motif of the upbeat figure from the opening of the movement - and what is it marked? "forte". Those echoes, as we have already noted, end in "pp/".

Similar to other important Beethoven works, these sign-posts point us towards Beethoven’s fascination with the gravity of the final gestures, whether the gesture is a few bars, such as here in Op. 111, or a whole movement such as the Grosse Fugue or the Finale of the 9th Symphony.

To see a much more miniature architecture delineated by these sign-posts let's look at Op. 130 II.
We start "pp//" and rise to "f" (dipping into diamond swells along the way). Ms 1-16:
In the trio we enter f and rise to this mighty temperamental marking at the first ending.

Ms 23:
The second part of the trio dips into "p/" ms 25, and "pp/" ms 32, to set up its crescendo
And this crescendo arrives at “fo” at the last statement (ms 40) and the last statement in turn substitutes "ffmo" (ms 46) for the repeat of the same 7 notes that were marked so temperamentally before in ms 23.
We then move into the return and he creates a flat area of "ppmo" (marked just for the violins in ms 72 and extended by erasures to cover ms 72-87).
The "p" in the first violin in ms 88 starts the dynamic rise that now reaches "fo" instead of "f" in ms 94. This "fo" is followed by the brusque joking that ends the movement.
We could skip along from movement to movement and opus to opus and find the same architectural mapping. Sometimes the architectural sing-post is just one marking. Thus, in Op. 69 I the only special manuscript marking dynamic is the clear use of "sempre ffmo" in the last bars of the movement (ms 253) where the cello and piano join together in the last statement of the main theme.
For special single features, also look at the use of "ppp/" right before the glissandos at the end of Op. 53 III, ms 461
Or "ffmo" on the first note in Violin I of the "Coriolan" overture Op. 62
Or the pp// on the pivot chord after the first song of Op. 98.

But before going to Op. 131 I would like to share my own theory of where this system came from, and I think at least an important part of it comes from Haydn.
Let's step into Haydn Op. 77-2 written in 1799. Notice the "forte" at the first bar and the unmistakable differences in staccato length on this first page.

But this is only part of what is significant in considering what may have helped inspire Beethoven's development of his manuscript marking dynamics. What I think is particularly significant is the way Haydn manipulates dynamic markings to show us a special energy in "pianissimo".
Enter the second movement of Op. 77-2 and we are in a rambunctious F major long line staccato world. But what happens when we go to the Trio? We go into the smooth and soothing world of Db major. How does Haydn indicate the dynamic here? "pianiss." written four times.
And then the pianissimo at the transition back to the main scherzo? Just regular "pp".
One could feel that because it is at the head of a section, the dynamic for the Trio was marked differently. But let’s move over to the third movement. We see at the last bars of the movement the use of regular "pp" and then the special instruction to the two violinists: "pianiss.". Haydn seems to give us a clear message that these moments marked "pianiss" must be played with a special energy!
Step over to Beethoven now. We see that he uses "/" frequently to abbreviate a word. "/" is used hundreds of times used to abbreviate the word "Allegro".

Well, perhaps Beethoven is working with the logic of a more fully written out word being a way of ascribing more importance, just like Haydn, where "pianiss." is more intense and important than "pp".

Of course if we are looking at "p", "pp" and "ppp" and their full words "piano" and "pianissimo" and "pianississimo", there are a lot of structural confusions to how extension and abbreviation would work mechanically - p, pia, piano, pp, pianiss, pianissimo, ppp, pianississ., pianississimo... If we stay with the idea that Beethoven was searching for ways to make distinctions analogous to what Haydn was doing, I can see him overcoming the mechanical confusions of abbreviation by using the lines on the letter stems as a more mathematically-based intensifier. This results in a rudimentary numerical system not unlike the single and double lines on a stem that can turn a half
note into eighth-notes or sixteenth-notes. This system would result in what we see: "p", 
"p/", "p//", "pp", "pp/" "pp/", "ppp", "ppp/", "ppp//".

[Interestingly, As Jens Duffner wrote about, the "/" mark also works its way into the
"N.B." shared between Beethoven and his copyists in margins. Perhaps at that level of
their use they have become entirely intensifiers and left behind their abbreviation
function.]

In "forte" one is dealing with a single word and it lends itself well to “f”, “fo”, “for”, “forte”.

And it seems Beethoven needed EVEN greater expressive range, so he borrowed the
last two letters of fortissiMO and pianissiMO and created the poles “ffmo” and “ppmo”.

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For a nice instance of “ffmo” let’s look at the last entrance of the orchestra in Op. 61, III ms 348.

Here we see "ffmo" with the red wax pencil giving the highest intensity to the orchestra entrance before the "perdendo" that goes to the end of the whole work.
For another nice "ffmo" lets look at the first exchange in the introduction of the 7th symphony. Here it passes between the two violins. (I apologize that this is a little hard to see because of the microfilm version)

Speaking of "ffmo" let's have that be our turning point into Op. 131. But before we go there, I had said that I would share a few pages of works where Beethoven himself did the copying, and where he very robustly used the manuscript markings.
Beethoven himself prepared the fair copy of the Fantasia for solo piano, Op. 77. You can view the whole manuscript on the website of the Beethoven Haus. Here just let me show a sampling of pages:

ms 1 p/

And ms 27 - 37 pp/ and pp// and also a closed swell
ms 78 - 84 p/, pp/ and pp; ms 85 - 89 pp/ and ppp/; ms 237 - end p// and pp//
And closer to the world of Op. 131, look at just one page of the parts of Op. 135 that Beethoven himself wrote out for the members of the Schuppanzigh Quartet. Notice the pp// on a page from the cello part mvt. Ill ms 13 - 32:
Now, finally moving on to Op. 131, as I have mentioned, it happens that in Op. 131 there is no use of "ffmo". But there is ample use of nearly every other manuscript mark, and the markings give us wonderful information to help us in shaping our dramatic presentation of the piece.

Having got some general sense of all of these special manuscript markings, let’s start a walk through Op. 131.

The expressive swell is, in fact, the very first marking we encounter in Op. 131.
But let's observe how differently swells can be used by taking a look at No. 1 ms 112. (Beethoven created the "movements" of Op. 131 by his marking of numbers, No. 1, No. 2, No. 3, etc. in the corrected proof. So when I list "No. 1" or "No. 4" that means, respectively, movement 1 or 4)

The crescendo continues in violin 1 (we assume), there is a swell up added in violin 2 and viola after crescendo and then a clear swell DOWN in the cello after crescendo and "sf".

In this example, consider the emotional temperature of the section that we are looking at. It is so high that though there are contradictory upward and downward motions, they are all within a musical tumult.

Details such as this one are faithfully and precisely printed in the Henle score, and the details of these markings create a beautiful effect when we as performers respond to them in their full complexity. But the complexity of this example points to the extreme possibilities of seemingly contradictory layering in Beethoven's internal hearing. It also turns us, as performers, away from overly literal or mathematical readings of expressive markings.
Now look at No. 1 ms 120-121

Here we encounter our first special dynamic marking - a pianissimo where the stems of the two letters "p" are crossed by the two lines. They appear clearly in violin 1 and cello and seem a little faint or disrupted by erasure in violin 2 and viola.

Are the two lines meaningful?

As I have already explained, I think they are.

As mentioned earlier, I think that Beethoven had a process of writing out manuscripts where he more or less notated the pitch events first, and then passed over the material providing ever more detailed performance guidance through dynamics and expression marks.

I think the special manuscript marks were tools he felt compelled to invent to reflect the complex sound "shading" in his imagination.

So (forgive me for restating) what we are allowed to see by reading these markings in the manuscript as we play the music, is a more detailed map of his architectural thinking regarding effective performance of the musical material.

So, what musical effect did he want on this last note of No. 1 and why did he need "pp//"?
I think he needed a special shimmering of the sound as the C# hangs in the air.

And when the the group falls back into the music by starting No. 2 - what is the dynamic? A different dynamic: "pp" with one line through the stem - "pp/"

What is the difference? Reiterating the points made earlier, I believe the use of additional lines gives the player an instruction related to heightened emotional content: So "pp" is very soft, "pp/" is very soft with a somewhat heightened emotional content, and "pp//" is very soft with an extremely heightened emotional content.

So, in the Borromeo Quartet, we try to start No. 2 very soft but with a slightly more "real" sound than the one we just used for the shimmering last note of No. 1. This is a very agreeable distinction to try to make and one that complements well the whimsical humor of the opening of No. 2.

There is a small inconsistency here in that the second violin, perhaps for the last note of No. 1 and definitely for the first note of No. 2, is marked "pp", and does not have the lines that would make "pp/" or "pp//". This could be a mistake, just like the vestigial reinforcer lines that one sees in the cello part in the first three bars of No. 2, or it could be an intentional layering between the instruments. In every category of dynamic Beethoven shows a patchwork of complete thoroughness and accidental carelessness. With regard to dynamic markings that we DO print, there are many careful evaluations that have to be made by an editor to decide which inconsistency is accidental, and which is an intentional refinement. I believe the editorial challenge is no different with the manuscript markings than with the printed markings. A lot of careful judgements and choices must be made. In my own judgement, the exceptional dynamic in violin 2 in No. 2 is probably an oversight.
Next let's visit a vivid mark in No. 2 ms 66.

There is an old mark that has been scraped out, and in its place Beethoven has marked vividly, in all four parts, "cres" and "for". What is even more vivid about this is that in violin 1, violin 2 and cello in ms 62-65, there are crescendo reinforcers that have been scraped out. They remain in the viola, but I think that this is probably a mistake.

Removing the reinforcers and using "for" points to a vision of a bracing and brilliant rise in dynamic without the need to continue crescendo, except in the way it might be caused by repeated "sf".
Let’s take this moment to look again at the chart of manuscript dynamics and explore difference between “f” and “for”.

You see the one line and two lines in use on "p", "pp" and "ppp". Again, what we in our quartet have found is that reading these lines as adding emotional intensity agrees well with the musical content.

But considering the treatment of forte, here it seems that higher importance and intensity are signaled by adding more letters. “f” is intensified to become “fo”, which can be intensified to become “for”, which can be further intensified to become “forte”.

So in the example of Op. 131 No. 2 ms 66, Beethoven has elected to make a dramatic jump, going all the way to "for" in and extremely short span of time.
No. 2 ms 191-198 moves through a particularly rich dynamic sequence. After the outburst of "ff" the subito piano in violin 1 gets a "p/", adding to the energy of the subito effect. This is followed by "mezza voce".
And finally, for the last two chords, we go to "pp//" ("pp/" in violin 2).

I can tell you that it is so exciting to put this heightened expression in these last chords, and it makes an even more dramatic rhyming connection to the two forte chords that start No. 3.

This page also perhaps reminds us of the clue for why Beethoven might have adopted the two line and one line modification of the piano dynamics. Notice the arrow pointing to the two lines that abbreviate "Allegro moderato" at the start of No. 3: "Allo// moderato"

Again revisiting some of the points made above, if Beethoven, like Haydn, was working with the concept of greater importance being indicated by writing out more of the word "pianissimo", the two lines could be a shorthand for this. And it may be that once he worked with the idea of two lines, he invented a further refinement by distinguishing between one line and two. This would have some connection to those extremely fine distinctions he often spelled out: "poco forte" versus "mezzo forte"; "poco crescendo" versus "piu crescendo", a dotted quarter versus quarter note tied to an eighth.

So, to me, it seems quite in keeping with these other fine distinctions that Beethoven would invent a further refinement of the basic "ff", "f", "p", "pp", and "ppp".

Looking at the various manuscript markings - swells, staccati and dynamics, we see these marks in various forms in the work of copyists and some features make it into various printings (early editions have very accurate printing of closed swells) but it is quite clear why these are not in the basically wonderful current editions of Henle. If one reads the Forward to each of the volumes of the complete works (as I did using a turtle German) it says clearly: When we see various dynamic abbreviations ("ppmo", etc) we change them to standard dynamics. When we see staccato marks of inconsistent lengths we basically standardize them. When we see swells that are closed or open, we make them all open. So there is no mystery as to why these
manuscript marks are not in Henle editions, but I am bringing up the notion that perhaps these decisions are worth revisiting.

Now we enter the variations of Op. 131. I would love for you to quickly notice on the following pages that most of the swells of the theme and first variation are connected "diamond" swells.

No. 4 ms 13-22 (theme)

No. 4 ms 33-40 (variation 1)
Entering variation 2, No. 4 ms 65, we encounter a very nice use of manuscript dynamics. What could be more delightful than to play the tip-toeing chords with heightened emotional intensity? And indeed, that is what the "pp//" happily asks us to do!

Let’s move on to the second half of variation 3. Before looking at it, let’s take a moment to consider lengths of staccato. It is very well known how upset Beethoven could become about someone not observing the difference between dots and strokes (recall the letter to Holz mentioned above). This usually suggests the idea of two categories: dot, and line staccato. Reiterating, I find, reading the manuscripts, that what proves effective is to read four categories: dot, short line staccato, medium line staccato and long line staccato.
Here is a page I made to try to illustrate the different types of staccato:

The instruction these marks give us is to give a “bite” and an impulse to the note. The longer the line staccato, the more “voltage” the "bite" has. Often, but not always, the bite also makes the note short. These marks are independent of dynamics, so, there are often long line staccati in pianissimo.
Now let’s look at No. 4, ms 114-129,

We see the sloppiness of staccato marking here but we also see that the to unify all of these marks, one way or another, is probably turning away from information that may have been important to Beethoven. The basic logic seems clear in bars such as No. 4 ms 119, where the quarters are long line staccato, and the eighths are medium line staccato.

But here, certainly, sloppiness creates a terrible puzzle!
This is a topic treated with a somewhat similar logic as the one I have just expressed by William S. Newman in his book "Beethoven on Beethoven" pages 139-146

We saw the frustrating sloppiness of the line staccato marking in variation 3. There is one point of view that says that all of this variety is random sloppiness. But when making conclusions about Beethoven's sloppiness it is important to look at variation 6 - and countless other examples like it.

No. 4 ms 186-190

On this page of the manuscript there are no less than 90 carefully drawn portato dots in just four bars of music. The rest of the variation is similarly careful. There are omissions, but the carefulness is obvious. This is one of thousands of examples that could be given of Beethoven's precision in marking portato. Wouldn't we be lucky if Beethoven had been equally precise when he notated the third variation!
The next special dynamic is a particularly nice one! In No. 4 ms 230 violin 1 goes to the absolute extreme of softness - "ppp//". Even the penmanship is vivid, and I can tell you it is a wonderful sensation to try to make this trill teeter on the brink of vibrant inaudibility! And it sets up so beautifully the surprise of the quick turn to Allegretto that follows.
Let’s look to the last lines of No. 4 to see one more type of detail of the manuscript markings that gives us insight and inspiration. The scale in No. 4 ms 265 is one of the most audacious and ecstatic of Beethoven’s ideas in Op. 131, but as the energy of the scale spills into the next bar, notice the two crescendo reinforcers used during the high A in No. 4 ms 266. It is very clear the extra energy this is hinting at, and we as players are only too happy to oblige in trying to bring it to life!
No. 5, the Presto, jumps in with gruff medium line staccatos

On page after page there are beautiful small touches that come from special manuscript markings but let's just look at a couple of them.
Choosing a particularly nice one, let’s look at No. 5 ms 131 and 139. We are now in the wacky lunacy of the skipping writing in violin 2 and viola, and let’s notice that the subito piano fake-outs in violin 1 are marked with "p/", and the one in 139 even has three reinforcers on the crescendo in ms 138, as well as a four bar slur!
Let’s now look at the third repeat of the fundamental scherzo material and look at the moment where Beethoven gives us a hushed version of what has come before. Look at the turning point, No. 5 ms 347. The “sempre piano” is written over what seems to be an erased “f”.

And directly following this in ms 349, we have a dramatic use of "pp//" followed by "sempre ppmo" at what was usually the crescendo starting with G# major.

Once again this special intensification is so welcome and exciting to try to play.
Now we arrive at No. 5 ms 469 and we have some truly spectacular details of marking.

Even though comparing the manuscript and the corrected proof is not the goal of this paper, observe in the corrected proof where we have the addition of “sul ponticello” (and later the "da capo per l'ordinario" No. 5 ms 487).

We, of course, see the “sul ponticello” in print. What we don't get to see in print is the spectacular use of special dynamics that is in the manuscript.
In ms 469 the cello blasts in not with "f" but with "for" (squeezed in with quite a bit of effort!). Then “dimin” with two reinforcers in the cello leads us, at No. 5 ms 471, to the very special “ppmo”. And this "ppmo" is marked in all instruments - in violin 1 it is even “sempre ppmo”.

Obviously this coda was a section on which Beethoven lavished an enormous amount of attention!
One of the next markings I find quite evocative from the manuscript is in No. 6 ms 28. Here, before the subito piano, Beethoven squeezes two crescendo reinforcers into one eighth-note of music, and he does this in both violin parts.

Now we blast into the last movement. I find the march that starts this movement quite terrifying, even brutal. There is no question that the intensity of this movement is going to be a powerful answer to all the music that has come before. No special marking is used - simply "ff", and as I have mentioned it is interesting that whereas Beethoven uses "ffmo" so creatively in other pieces, there is no "ffmo" in Op. 131.

Beethoven takes us to visionary extremes in this movement. The march has a brutality present nowhere else in the work, and the answer to this is the angelic music that comes at No. 7 ms 56. In between these extremes is the third "character on the stage" - the lamenting theme that is the cousin of the fugue theme of No. 1.

After meeting all three "characters" we return again to the brutal march (No. 7 ms 78), now in F# instead of C#. But this time the march leads to the climbing whole note scales. Beethoven is going to have us work with these grand whole note scale lines all the way to the end of the movement.

At No. 7 ms 124 the whole note line becomes soft and nicely embroidered with eighth-notes. With crescendo, the mode changes to minor, and we maneuver into a menacing oscillation featuring G# and A (the same pitches that in the fugue theme of No. 1 started our story with so much angst 35 minutes before)
This high-tension set-up dips near the bottom of the dynamics in 155 when violin 1 goes to "pp//" and violin 2, viola and cello go to "pp/".

Then, using the G#-A engine, a terrifying crescendo thunders into something like a recapitulation. The G#-A might disperse at this moment, but in fact it holds on with relentless fury for four more bars.

Turning for a moment to our "third character on stage", let's take a moment to remember the way the opening theme of No. 1 and the lamenting motif of the last movement first heard in No. 7 ms 21-25 are rhythmic and intervalic cousins.

The same four-note pitch set is the central idea of each, G#, A, B#, C#, and they both have the basic short-long-long-longer, short-short-short-short-short- syllabic shape (they employ different endings). The different order of the intervals makes the fugue subject of No. 1 a powerful and distressed statement, whereas the cousin theme in the last movement seems to evoke something more lamenting and resigned. I want us to remember this in order to notice the way the lamenting idea sets up the drama of the very end of the entire piece. The circular interval order of No. 1 has now transformed to a scalar motion in the lament of No. 7, and scalar motion large and small is going to dominate the drama of the end of Op. 131.
To approach the conclusion of the movement let's step in at the soothing “in tempo” at No. 7 ms 254. Notice that this moment is made even more special with "p/" in all four parts.

And this soothing music is now going to have an interesting trajectory. It is going to slide down by sequence to a return of the material that opens the movement, but this material this time will be electrifyingly soft. And the special dynamics call attention to this, by putting "pp//" in No. 7 ms 262 in the descending cello scale, and marking, at the return music, “sempre ppmo” in violin 1 and “sempre pp//” in the cello.

I can tell you these instructions are SO welcome as a performer. The charged emotional state at this moment in the music is one of my favorite moments in the drama of the whole work.
The cousin of the fugue theme returns with different swell markings and the instability sets up the declamation that happens in No. 7 ms 289, where (what can I say!) all Hell breaks loose with the "ff".
Now one cataclysm leads to another as we tumble through the next 20 bars. Notice that in this super-charged environment we have in ms 306 in violin 2 and viola the same repeating-note ties as we have in the Grosse Fugue. Both this and the Grosse Fugue seem to use this device to help in creating extreme energy.

And all this leads to music that declaims at a voltage that I really think can hardly be equalled by any music of any time. The slow scales in whole notes against the quicker dotted rhythm scales (No. 7 ms 313) is gigantic music.

Well, what turn do you take next after such gigantic music?
You take a quick cadence and turn sharply to introduce the breath-taking scales in D Major in No. 7 ms 329.

And how do you mark such a moment dynamically? with "pp//" in violin 1 and 2 , "pp/" in viola and "pp" in cello.

This is music that can't be more thrilling, and it turns the corner to cadences of forbidding stern-ness.
And what happens in No. 7 ms 347? We screech to a halt at the precipice. And what is the marking? In violin 1 we have a shuddering jump to "p/".

The juggernaut has been stopped, and in the drama we don't know what will happen next (well, like all familiar great dramas, it FEELS like we don't know, even though we likely know very well!).
What does occur in No. 7 ms 349 is a return to the lamenting cousin of the fugue theme of No. 1. But now it is drawn out into a long sighing figure in violin 1 and viola.

In No. 7 ms 363 that long sighing figure ends in the stasis of a diminished seventh chord marked by a closed swell in No. 7 ms 363 and 365. And after this we are going to provide the epilogue to the huge musical statement of this movement as well as the entire piece.

The quartet exits the diminished chords in No. 7 ms 367 and Beethoven clarifies the hushed emotion by the dynamic "pp/" in violin 1, viola and cello and "pp/" in violin 2.

This starts the "Amens" of C#-F#. There are four and then the tempo goes to "poco adagio" in No. 7 ms 377.

Three more "Amens" occur in the slow tempo, and then the rocket launches at No. 7 ms 383. This rocket takes us, in Tempo Primo, to the last resounding chords in C# Major.

Thus ends a statement in music that we, I hope and trust, will marvel at for centuries to come.

Regarding the marks we have looked at together in this paper, my purpose here is to chart them and share how they have come not just to be interesting, but extremely helpful to me and to the Borromeo Quartet as performers. I love the inspiration that comes from these marks. I imagine, as with every mark that Beethoven made in his music, there are many interesting, compelling and perhaps contradictory ways to see these marks, but at this moment these marks are not part of the conversation and not in any printed material we use. I would love to see the day when they are something players and musicologists can bring into the rich discussion that is always brought about by our delving into the details of the astounding creations of Beethoven.