Destination of Etudes: Analysis of György Ligeti’s Etudes No.17 and No.18

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Introduction:
I started to investigate the piano pieces of György Ligeti in 2010 during my postgraduate studies. I performed his etudes (Fanfares, Fém) in concerts more than once. My interest was focused not only on learning and playing these pieces, but also on researching secondary literature on these works. In the analysis of the No.1 etude by instructions in the class, and the No.2 etude, which was in the second assignment, I am curious how Ligeti developed his compositional techniques into his last several pieces. What are the main difference between his early works and last two etudes (both of them composed after the year of 1997).

This paper includes three parts. The first part is the background of the etudes in various periods. How did the etudes develop from Frédéric Chopin, Claude Debussy, and György Ligeti. The second part is the analysis of Ligeti’s last two etudes No.17 À bout de soufflé (Out of Breath) and No.18 Canon. These analyses shape the central part of the thesis, and then compare these two pieces. The last part is the conclusion.
The purpose of this paper is to gain a deeper understanding of Ligeti’s late piano etudes, and give performers an overview guideline from theoretic perspective.

**Background**

The Hungarian composer György Ligeti composed a cycle of 18 piano etudes between 1985 and 2001. They are generally seen as one of his major achievement in his last decades. Also, Ligeti’s three books of etudes for solo piano is one of the most significant piano works of 20\textsuperscript{th} century, combining virtuosic techniques, following in the line of the etudes of Chopin, Liszt, Debussy. His piano etudes were the new landmark of the “etude world”, and he improved the piano technique in a new level. Ligeti’s original intension had been to compose only twelve etudes, in two books of six each, followed the model of Debussy’s etudes. However, he changed his thought because he enjoyed composing this type of music so much. Although the last four etudes in Book III are in the cycle with other two books, Book III is an unfinished one in fact. The composer should compose more to complete as a whole cycle; unfortunately, he was unable to do that till his last year. From the texture, the works in Book III look simpler, and less refined piano technique than Book I and II, but they are the perfect conclusion of Ligeti’s compositional methodology and what he pursued into his piano works.\footnote{Paul Griffiths. *Ligeti, György. No.1. After ‘Le Grand Macabre*. From *New Grove Dictionary of Music and Musicians*, 2\textsuperscript{nd} edition, ed. by Stanley Sadie. New York: Grove’s Dictionaries, 2001. P. 692-3.}

In Ligeti’s early piano etudes, especially in the first and second Books, he traced as a Bartókian play on consonant/dissonant harmonies very carefully. For example, his No.4
‘Fanfare’ consists with the second movement *Vivacissimo molto ritmico* of the Horn Trio (for Violin, Horn, and Piano); No.8 etude in Book II ‘Fém’ (a Hungarian title meaning metal) closes with a collection of chords that recalls the chorale-like opening of Bartók’s Piano Concerto No.3. In Book III, the etudes except No.16 Pour Irina, all of them were written in strict canon, either at the octave or double octaves. Ligeti handles the special demands this close shadowing makes upon contrapuntal and harmonic technique with apparent ease.

**Analysis**

1. **No. 17: À bout de soufflé (commissioned by the BBC)**

This piano etude is a manic piece where vortex-like; the accents of irregular lengths of the phrases are shifted between two hands.

**Structure:**

The musical form of this piece is A-B-A’, although it is a non-stop piece, without time signature and bar lines. The part A is the largest one, from the very beginning to the double eighth-rest in the first line of page 19, before the una corda. Then, part B starts. From this part, left hand leads the music, with right hand following two eighth notes behind, and a cantabile melody playing by right hand appears to stop the strict canon, left hand plays bunch of dyads as an accompany. The last part starts from the last line of

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page 20, the strict canon comes back with the opening thematic mode, also this part is a reduction of Part A. The whole piece finishes on the suddenly subito ppp five chords.

The Musical Surface

No.17 À bout de souffle, two groups of three descending notes - the basic idea - combine together (E flat-D-C, D-C-B) as an opening theme presents and repeats four times at the beginning of this piece. Ligeti uses mainly the white keys plus selective accidentals (frequent E flat and an alternation between A flat and natural) to suggest an Indonesian or Melanesian flavor in the first page. In the second page (p.15), except the E flat and A natural/A flat, some new pitches add in, B flat and an alternation between F sharp and F natural, C sharp and C natural (Figure 1). Some segments of the whole tone scale appear in the third page. The accents present in a regular way, showed on a group of every two attacks in the third line of page 17. The climax should be there with the ascending chromatic scale, however, after the strong E to F, the lines suddenly abandon the intensive accents and chords, both hands only play single notes and keep flow going with longer duration of accent attacks. Because the left hand plays a strict canon one-eighth note behind, this passage sounds like chords repeated with accent (Example 1). In page 18, the basic musical idea returns by transposition or inversion on different pitches, and the register moves higher to build up the real climax, which happens on page 19. After the climax, Part B starts with the left hand leading in a lower register; the volume suddenly changes to pp without any tone color in page 19. A sustained cantabile

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melody played by the right hand is the only section without canon of the whole piece. After repeat the beginning theme couple of times, the strict canon returns till the five chords coda.

![Figure 1. Accidentals (p. 1-3)](image)

Example 1. The regular accents in p. 17

Basic Motive

The whole etude is based on a three-note motive. At the beginning, two groups of the basic motive combine together to create a theme (Example 2). The intervals of the motive contain a semitone and a whole tone. The third group (F-G-E flat) looks like the intervals has changed, but just in different order (original order E flat-F-G). The main theme is strongly presented by couple of times at the beginning (Example 3). The opening nine notes are repeated twice in the second page in different register (Example
4). Also, this theme play an important role from the Part B to Part A’ as a transition. It is changed in different shape, length, register and order, but the strong descending three-note group still could be heard clearly. (Example 5)
Example 4. The main theme are repeated in the 2nd page

Example 5. The main theme appears in the transition and Part A’
Example 6. Inversion of three-note motive

The segments of octatonic, chromatic and whole tone scales

The octatonic, chromatic and whole tone scales could be found not only in the middle voice, but also in the accents line through the whole piece, although it never shows up a complete scale.

In example 7, both hands play F sharp-G-A-B flat (semitone-whole tone- semitone), interrupt by other four notes A-G sharp-F sharp-B flat (the original order should be B flat-A-G sharp –F sharp), afterwards, the octatonic scale return, E-F sharp-G-A (whole tone- semitone- whole tone). Bunch of semitones (around G, G flat/ F sharp, F) follow the segment of octatonic scale.

Example 7. Ascending part of octatonic scale in the middle voice
In example 8 and 9, the examples of chromatic “scale”, the inner voice is consisted by up and down semitones instead of the strict semitone scale. However, the example 9 presents the accents line and inner voice play the double ascending chromatic scale with couple of repeated notes.

Example 8. Semitones in inner voice

Example 9. Accents line and inner voice play double chromatic scale

Rhythm and duration

Here I use the quotation mark on the scale, because sometimes the chromatic scale is not the strict ascending or descending scale, it is just played up or down semitones around some pitches in a narrow range.
The strict canon in an octave present in this etude, which was written in non-stop eighth-note led by the right hand, with left hand following an eighth-note behind. The tempo at the beginning is *Presto con bravura*, which means this is a virtuosic technique piano piece. The duration of the accents at the beginning is in an irregular way, between 9\( \text{♪} \), 7\( \text{♪} \), 4\( \text{♪} \), 5\( \text{♪} \) and 3\( \text{♪} \). However, in page 17, the longest duration appears to prepare building up the climax with the shortest duration 2\( \text{♪} \) and accent on each of eighth-note near the end of part A. There is no any accent in part B until the main theme comes back. The duration of each of dyads in cantabile passage played by right hand is the multiple of 3\( \text{♪} \), for example, the duration of first dyad C-B is 9\( \text{♪} \), the second one G-A is 3\( \text{♪} \), the last one B flat-C is 8\( \text{♪} \), but with a eighth-rest followed (example 11).

\[
\begin{array}{c}
9\text{♪} \\
3\text{♪}
\end{array}
\]
In the coda part, five chords arrest the tempo, and each of them has double length of the one before (example 12).

Example 12. Five chords arrest the tempo in the coda

Dynamics

The whole piece contains a wide range of dynamics from as soft as perform can (ppp) to ffff. **Ben forte** with *sfz* marked by the composer at the very beginning, and the forte lasts the whole part A, suddenly change to very soft, *pp*, using una corda without any tone color (*senza colore*) and very legato. During the cantabile passage, the dynamic of
right hand is *mf* (*in rilievo*) with normal pedal (*tre corde, stop using the una corda*); left hand plays the dyads extremely soft (*sempre pp=ppp senza colore, only a shadow*). When the cantabile melody finishes, the right hand joins in the quiet atmosphere, plays the *p* instead of *mf*; the left hand keeps the *ppp* with very legato sound. Then, a tiny crescendo in the transitional phrase smooth moves to the *mp* in part A’. The range of dynamics in last part is pretty wide. Starts with *mp*, then poco a poco crescendo, to build up to huge loud chords in the end. A subito *ppp* shows up in the last five chords as a quiet ending.

Register

The register of both hands is pretty intensive, because they play the strict canon in an octave through the whole piece.

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Contrapuntal and tonal changing

Ligeti used rigorous counterpoint compositional technique in Part A and part A’, however, the tempo of this piece is *Presto*; we could not hear the whole passage would be repeated, but the main theme (Eb-D-C-D-C-B-F-G-E, missing A) and accents are clear. The pitches at the beginning are around the key of C melodic minor, then modulate to G melodic minor at the end of p.16, move and stop on D melodic minor in the climax. C melodic minor goes back in part B cantabile melody by right hand. Here is the clearest key center of the whole piece. The left hand plays the dyads in *ppp* as a sound effect\(^7\), but melody in right hand is pretty clear B-A-D-C-G-F-G-A-F-G-C. The last five chords at the end of the whole piece are interesting, perfect 4\(^{th}\) F-Bb in left hand (repeat the last dyad of right hand) with tritone D-Ab together, e minor chord, minor 7\(^{th}\) F#-E, minor 9\(^{th}\) C-Db, and last tritone Eb-A, which is the first pitch of this piece and the missing A in the main theme.

No.18 Canon

Originally to be called Casse doigt (Fubger-breaker) – a title used by Jelly Roll Morton – Etude 18 ended up as just Canon.\(^8\) It is composed mostly in dyads trailed by two eighth-note later, this time at two octaves below. The same as No.17, there is no bar lines until the coda. The whole piece has to be performed twice: the first time fast, the second even faster.

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\(^7\) Composer’s instruction: sempre pp = ppp senza colore, only a shadow. Performers play as soft as they can, without any tone color, only the sound effect like a shadow.

The musical surface

Eight perfect 5\textsuperscript{th} dyads played by both hand in most of white keys plus accidentals notes (frequent B flat and an alternation between E flat and natural, F sharp and natural) at the beginning (example 13). However, the groups of perfect 5\textsuperscript{th} dyads show up only at the end of the piece (example 14)

Example 13. The group of perfect 5\textsuperscript{th} dyads in the beginning
Example 14. Group of perfect 5th dyads at the end

The tonal center of this etude is clear. The whole piece starts from A Phrygian, modulates to D Phrygian, more sharp and flat notes added in as a transition move to the three descending accents (Eb, Db, Bb) to define the key of Bb natural/harmonic minor, then modulates to the next descending accents (B, A, G) to return the key of very beginning A Phrygian, but drift somewhere instead of stay in the home key. The coda has combined different types of triad. Right hand as a leader play first, left hand play the canon to follow, the last triad (A-C-E) played by both hands together to make sure the home key – A Phrygian.

Dynamics

The range of dynamics in this piece is consistent except the coda with ppp. It starts with p until the last dyads of the first page, play the alternated ff and p to create a contrast, and then stay in p again. The accents appear unexpected, but the range of dynamics is getting louder, a huge crescendo till ffff in the end.

There is an interesting dynamic sign in this piece – p with accent (example 15). In the first circle, it’s a printing mistake, which the accent mark should be shifted one note former in right hand part. Performers could get the right articulation from the left hand canon. However, the second circle is composer’s mean. The reason of Ligeti used this mark here is these two notes to be repeated (F-G) in an octave, also it’s the only part he used the repeated pitches through the whole piece.
Comparing No.17 and No. 18 Canon

These two piano etudes could be played as a group because of many similarities. First of all, both pieces were written by canon and contrapuntal compositional technique, both of them focus on the white key insert accidentals black keys. The musical structure is pretty similar. No.17 has a larger structure A-B-A’ and coda, No.18 is shorter but perfect 5\textsuperscript{th} dyads show up in the beginning and ending with coda. The codas of both pieces were combined by chords, and in the same dynamic \textit{ppp}. Both of them have tonal feeling: No.17 starts on C melodic minor, move to D melodic minor; No. 18 is A Phrygian, modulates to D Phrygian, but back to the A Phrygian at the end. The tempo for both pieces is \textit{presto} and virtuosic.
However, these two piano etudes have some difference. In No.17, right hand plays one eighth-note ahead than left hand, but No.18 right hand plays two eighth-note ahead. No. 18 was written by strict canon, but left hand plays some different notes in the Part B of No.17 (example 16). Slurs only appear in the Part B and the beginning of Part A’, but No.18 has a long slur from very beginning to the end. The range of dynamics in both pieces is also different: No.17 starts on $f$, and keep in $f$ in the most of part, except the middle part; No.18 starts on $p$ and stay in soft until the $ff$ and $p$ contrast. The register of No.17 is wider than No.18. In No.17, the lowest pitch is D1, and highest one is F6, which cross over the whole keyboard; however, the register in No.18 is more consistent between the middle and high register.
Conclusion

The concentration on canon and white keys and gently inflected modality is unprecedented in Ligeti’s last two piano etudes. Doubtless, he felt that he needed to move away from the tonal and rhythmic complexity of the etudes in Book I and II, but each of them marked “presto” or “virtuoso”. This leaves an open question for the pianists to achieve high virtuosic technique. Essentially, canon and contrapuntal compositional techniques are Ligeti’s final statements as a composer in piano works. Though the No.18 etude named “canon”, actually, both of them sound like “out of breath” because there is no any bar lines between them. They have unified structure, tempo, and style as a perfect ending of Ligeti’s piano works.
Bibliography


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