On Kurtág's Dodecaphony

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The first studies by Hungarian musicologists on Kurtág's music, foremost by György Kroó and János Kárpáti, mention only casually his use of 12-note rows. This reticence is probably due to hidden implications of official policy that still then, in the early 1970s, considered the strict use of rows to be a mechanical, inhuman technique of composition. But it can also be evaluated in a broader aesthetic framework that had its roots in the views of Bartók and Kodály. It is well known that while Bartók displayed sympathy toward Schönberg before 1920, he was in no way inclined to follow him on his path to dodecaphony. In 1943 in the Harvard Lectures Bartók formulates reluctantly when he says: Schönberg's early compositions "may be still more complicated because of the use of the system, but their style of expression is in its main features the same which he started with his 3 pieces for piano".[1] Kodály writes sharper, almost with aversion in one of his personal notices probably in the 1920s: "Schönberg is pure abstraction".[2] Whether Bartók and Kodály are right or not in their judgement, it is anyway characteristic how they differentiate between expression and system or abstraction.

The belief that the 12-note system is a burden that limits the unfolding of expression has accompanied Hungarian musicology for a long time. In his survey of Hungarian music of the 1950s and 1960s György Kroó writes:

> Dodecaphony … is no spiritual nutrition, no vitamin, as Kodály would say, it means finger exercises, studies, stairs that can only lead to a Parnassus of technical aptness and secure construction.[3]

And writing about Kurtág he asserts:

[1] Bartók (1976), p. 359.
[2] Kodály (1993), p. 28.
[3] Kroó (1975), p. 87.

Studia Musicologica Academiae Scientiarum Hungaricae 43/3–4, 2002, pp. 235–252
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> His way is an example of how an artist surmounts the bonds of tradition and technique and breaks through toward freedom of expression.[4]

Given this context it is evident why Kroó and Kárpáti in dealing with Kurtág's music suppressed his by far not so infrequent use of rows in the pieces of the 1960s. Nowadays, it is no new or amazing information that Kurtág indeed inserted 12-note movements into his compositions in the 1960s. There remained, however, still a tendency to underestimate Kurtág's achievements in dodecaphony.[5]

As Simone Hohmaier has pointed out, the notion that it is possible to think "about music in intervallic relations,"[6] seems to permeate the output of several Hungarian composers in the 1960s. And this notion stands not far apart from the Schönbergian system. Otherwise, it belongs to the recurrent clichés of writing about Kurtág that while he defined his individual style in the late 1950s, one of his eminent models was the music of Webern. This impact was confirmed by Kurtág himself when in a 1993 interview he said to Ulrich Dibelius that in his Paris years in 1957–58,

> I began to copy Webern's scores and to study Jelinek's 'Anleitung zur Zwölftonkomposition'. I noticed row charts for everything I copied and I marked row processes.[7]

Then why did he not actually become a serialist? It is certainly not possible to answer such a hypothetical question. My topic is therefore not the co-existence of 12-note rows and free atonality in the early output of Kurtág, but instead his actual methods of using this system in those movements where he did so. At the same time, my observations cannot avoid to touch such questions: How did experiences with 12-note rows influence Kurtág's use of free atonality, and how was his dodecaphony influenced by his characteristic technique of free atonality? My quest does not aim at completeness. I shall instead concentrate on one hopefully characteristic example.

In the published compositions of Kurtág, this technique first appears in the *String Quartet*, op. 1. While all the movements are pervaded by procedures where the musical identity of specific interval relations has a substantial function, strict 12-note structures appear only in movements 2, 3 and 5. Already Kroó and Kárpáti, and then Stephen Walsh and Peter Hoffmann

[4] Kroó (1975), p. 134.

[5] Characteristic is the inaccuracy of the otherwise lucid Peter Hoffmann, when he states, 'Confession' in *Bornemisza-sayings* is Kurtág's single preoccupation with 12-note rows; cf. Hoffmann (1992), p. 131.

[6] See in the present volume.

[7] Dibelius (1993), p. 90.

pointed out the symmetric overall structure of the *String Quartet*, where movements 2 and 5 are linked through a common use of ostinato techniques. According to Simone Hohmaier, it can be added that the ostinatos are in both cases built upon 12-note aggregates.[8]

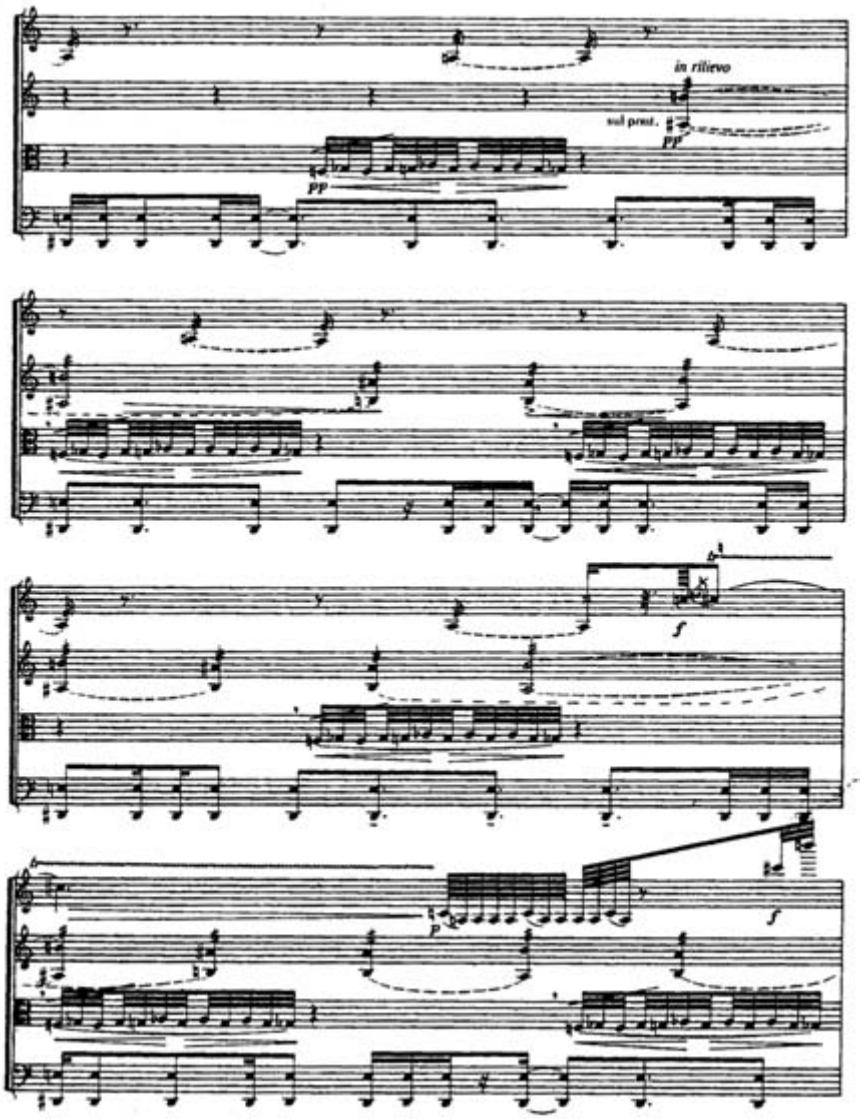
In movement 2 a consistent application of the 12 notes is only characteristic in the final, truly ostinato section, while in earlier parts of the movement other interval relationships, such as pillar tones and neutralised chromatic procedures, prevail. In respect of this movement I use the term 12-note aggregate because it is not possible to identify any horizontally depictable interval succession. The ostinato part (bars 20 through 38, for the beginning, see *Example 1a*) assigns pitch class cells to each of the participating four instruments, each having two or four pitch classes, respectively.

Example 1b shows a reduction of the ostinato with concrete pitches. White notes mark the pitches of the cello and the second violin and black notes the pitches of the viola and the first violin. This differentiation seems to be suitable because the instruments with two pitch classes display a relatively stable, chordal presentation of their pitch sets, while those with four pitch classes present their cells in a horizontal, melodic way. It is, however, impossible to assemble an unambiguous 12-note row from this constellation. The successive appearance of the cells, that inhere adjacent chromatic pitches (with the exception of A in the first violin) builds up an ascending chromatic scale from D# to D that fits well with the previous parts of the movement.

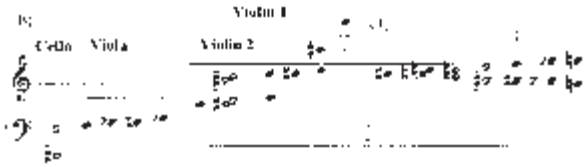
On the other hand, it is easy to sort out a different consistent construction that lies more hidden than simple chromatism. This is a characteristically Kurtágian funnel-like structure.[9] In this case, starting from C#, i.e. the last sounding pitch class of the twelve, the funnel opens up to G, to the polar opposite pitch class to C#, a tritone apart from it. In this construction (*Example 1c*) the differentiation of pitch classes assigned to chordal and melodic representations is still obvious and the apparently irregular overspreading of first violin to A acquires its explanation. In terms of the funnel this tone is matched by F in the viola, in another melodic motion. Taking a central symmetry of a fun-

[8] Hohmaier's admirably meticulous analysis of these movements approaches from a different direction then the present paper does; cf. Hohmaier (1997), especially pp. 38–49.

[9] This phenomenon is differently denominated throughout the literature. István Balázs uses the Hungarian word 'tölcsér', i.e. funnel, while Rachel Beckles Willson designates it as a fan and Dina Lentsner as a wedge (see in the present volume). Every proposal in this manifold terminology links the graphic depiction in the score with everyday objects that all have in common that they open out symmetrically from one point.



Example 1a: String Quartet, op. 1, second movement, mm. 20–23



Example 1b: Reduction of Ex. 1a; *Example 1c:* Funnel-like structure of Ex. 1b

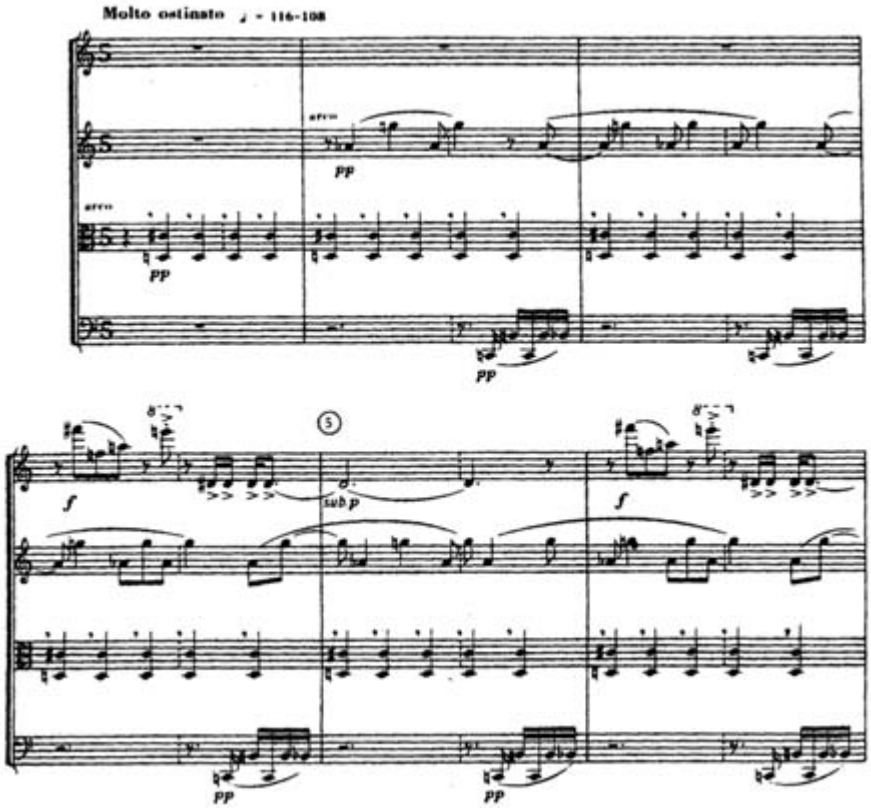
nel and partitions of the chromatic set to even numbers (2, 2, and 4, 4), such an intersection is unavoidable.

There is unequivocally a minor inconsistency in these two ways of analysis: a chromatic scale embraces the pitch classes from D# to D, while the mirror symmetry of the funnel is centred on C#. This contradiction is solved in a very subtle way: Kurtág links the pitches C# and D as a trill. Although D, as an appoggiatura, precedes C#, it still retains its conspicuous position as the highest pitch of the chromatic scale, both here and as a two-octave higher echo. Actually, the presentation of pitch classes C–C# and D builds a small melodic motive C–D–C# that draws the attention exactly to a funnel-shaped construction.

The discerned part of the *String Quartet* shows a characteristic Kurtágian concept of handling 12-note aggregates. Splitting up of the whole set and assignation of its generally chromatic cells to different types of motion and timbre are phenomena which can be considered as substantial elements of Kurtág's style in this period, and to some extent up till now. This technique, applied on 12-note aggregates, doubtless has close similarities with late Webern, with the exception that Webernian segmentations always originate from a clear-cut 12-note row. This is always revealed in the course of the composition through the use of inversions, retrogrades and transpositions. The 2–4-note cells themselves may and usually do appear in different row forms, but their succession makes it always clear which row form is actually played.

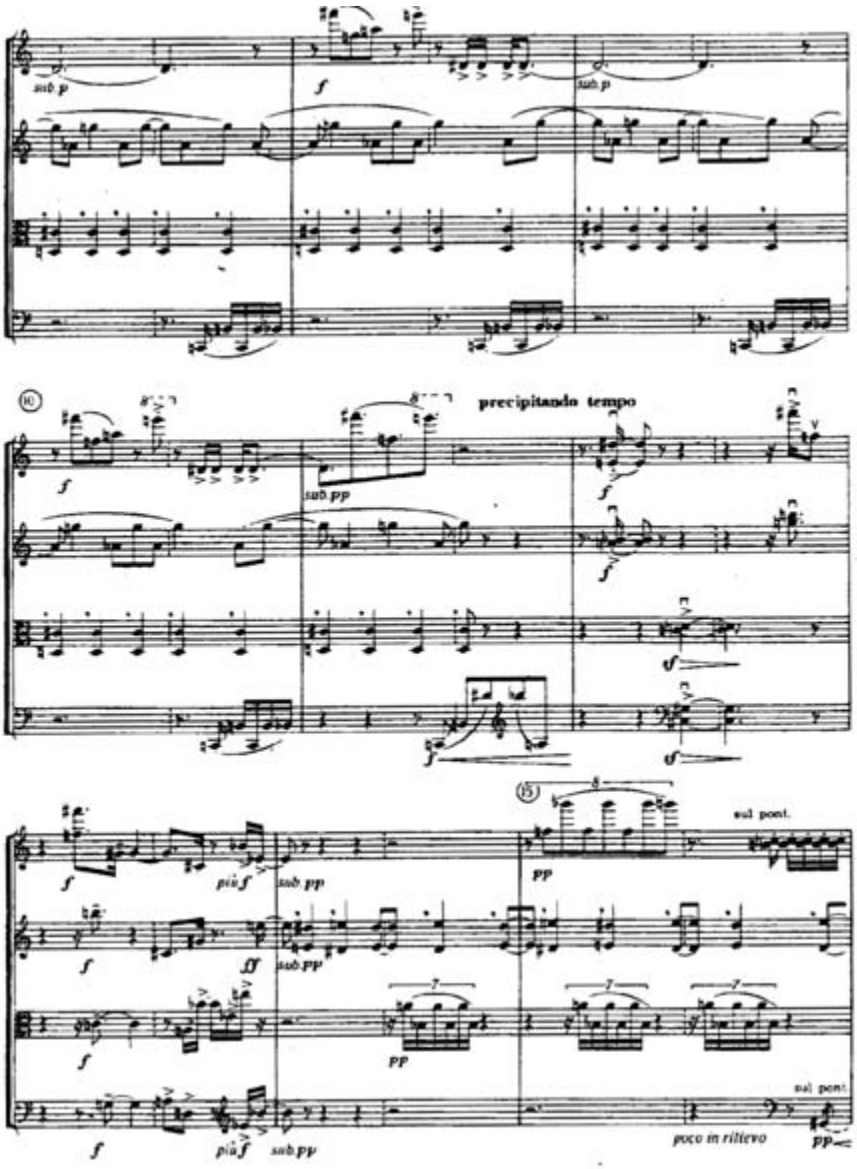
At the beginning of movement 5 of the *String Quartet* we seem to have a very similar constellation as in the ostinato of movement 2 (*Example 2a,* see pp. 240–245). In a condensed time-space appear all 12 pitch classes, and all of them are consistently assigned to one particular register. Segmentation appears again in opposing chordal and melodic procedures and through instrumentation, but it is in this case as 2, 2, 3, and 5 in the order of the joining instruments. Carrying out the same reduction it is obvious that even in the absence of any chromatic line, a funnel-like underlying structure is still to be achieved without contradiction (*Example 2b–c,* see p. 246). The result is different from the preceding one, because this time central symmetry is focused on a pitch class-pair and not on one single pitch class, and so the intersection between first violin and cello results from the unequal segmentation of the whole set (3 pitch classes to 5 pitch classes).

After four complete statements of the 12-note aggregates, in bar 11 a change occurs in the process that affects the two melodic parts (*Example 2d*, see



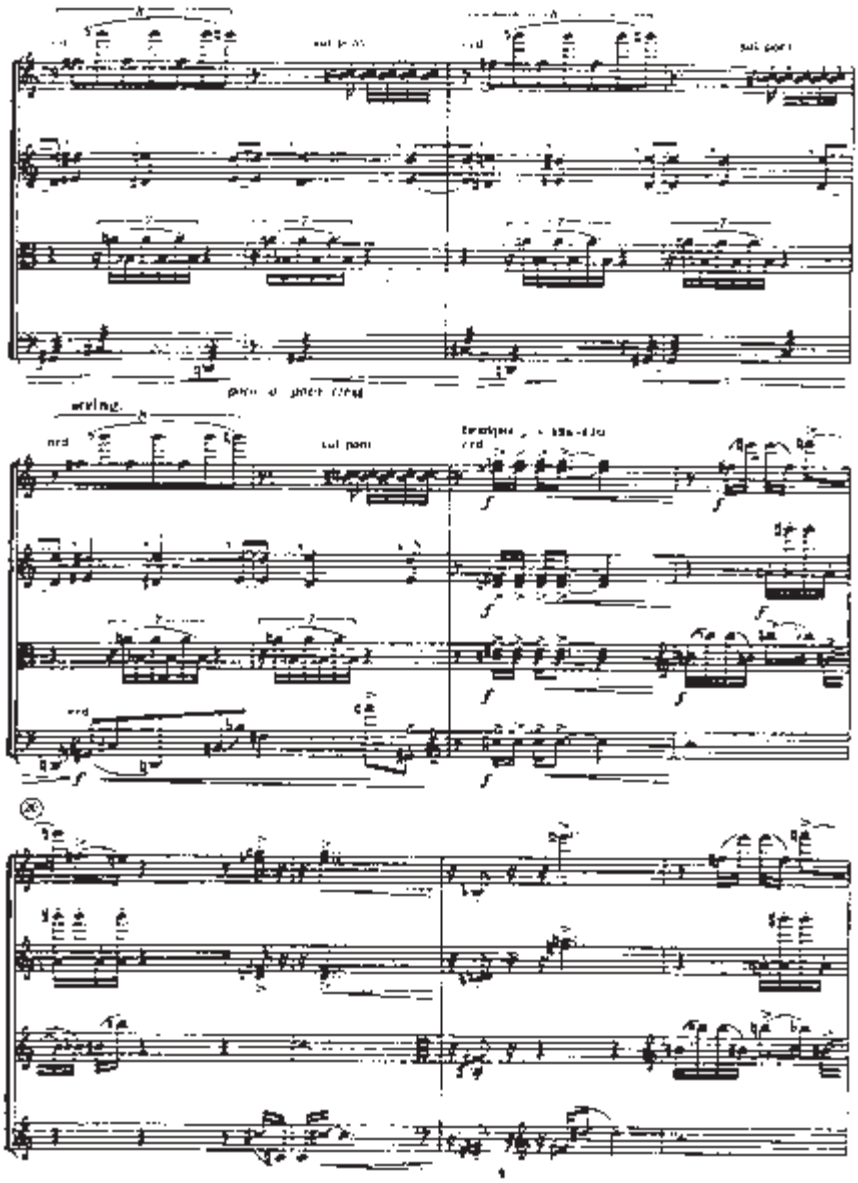
Example 2a: *String Quartet*, op. 1, fifth movement (*cont.* pp. 241–245)

p. 246). Pitch classes D# and A are transferred to the cello and their succession is also modified. This operation does not concern the funnel-like basic structure, because the relationship between white and black notes remains unaltered. In which system can it then be described? Notice that the eight pitch classes that make out the consecutive cells of the first violin and the cello in both diagrams are transpositions of each other at a distance of 6 semitones. After the double line in *Example 2e* (see p. 246) you can follow these parallel lines where the lower line represents the unaltered ostinato pattern and the upper line the situation in bar 11. Before the double bar-line the static figures of the second violin and the viola are notated, where we may, however, be in doubt about their sequence. But it is certain that these four pitch classes remain constant in both versions of the row. This is due to the fact that they consist of two pairs of pitch classes that lie a tritone apart (D–C# and G#–G), so that transposition through a



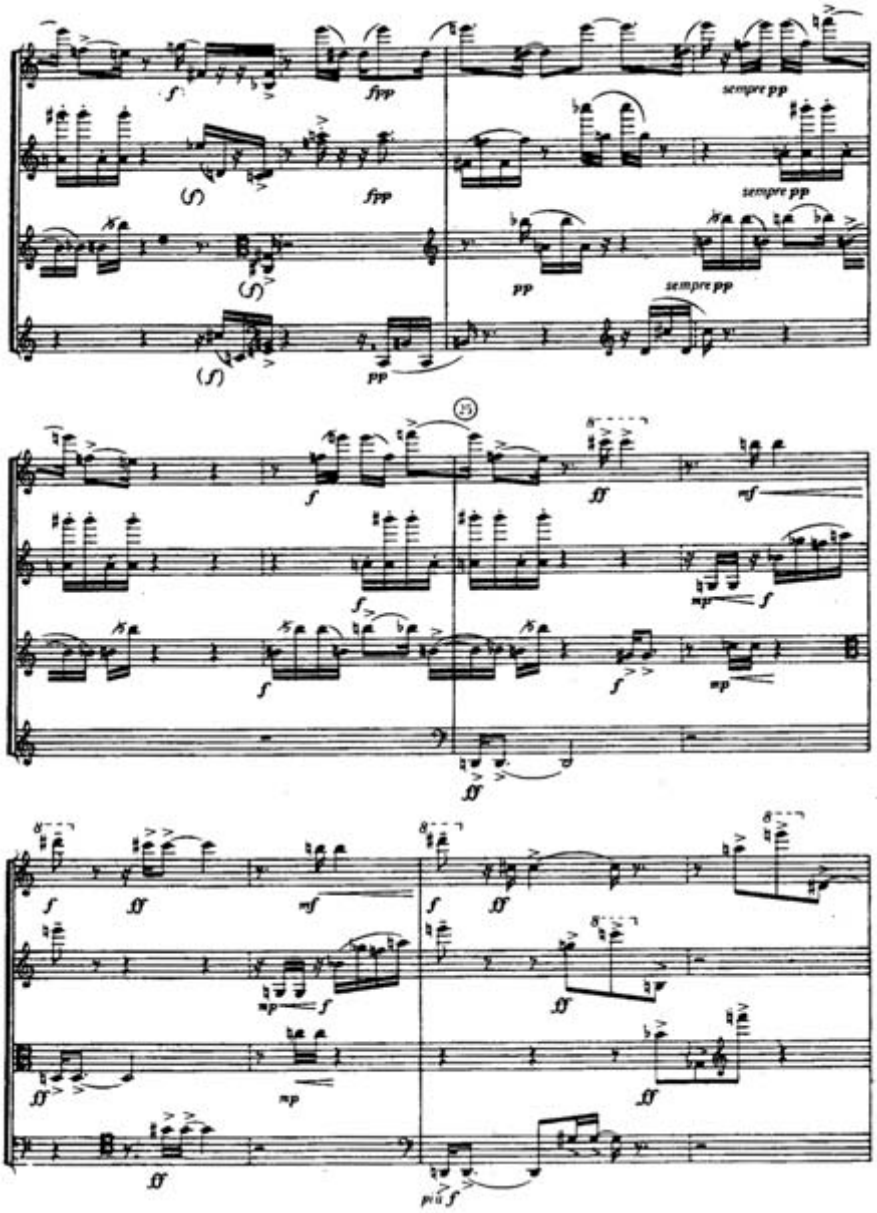
Example 2a (cont.)

tritone does not affect them, only interchanges their sequence. Through modification of the ostinato pattern in bar 11, the movement first unveils itself as originating from a 12-note row (*Example 3*, first line, see p. 247).



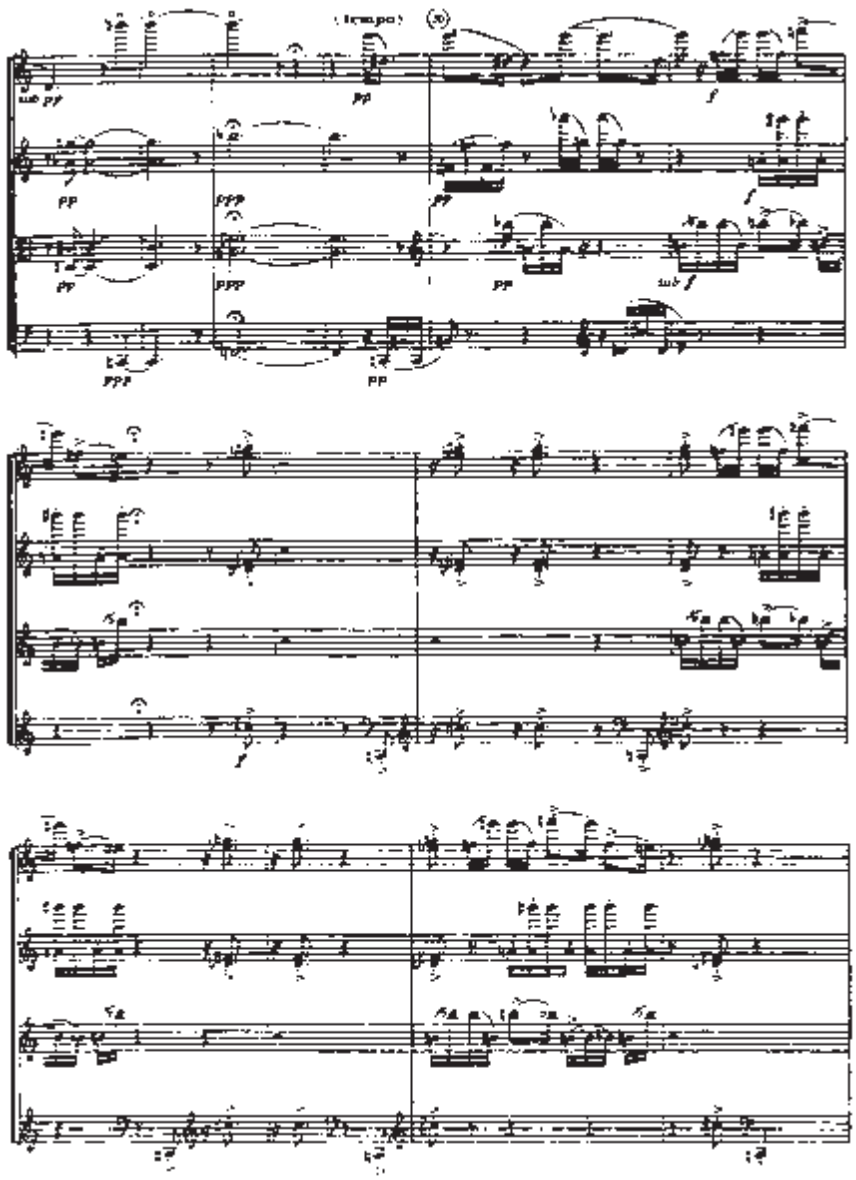
Example 2a (cont.)

After having defined the row, it is apt to analyse what kind of material it submits to the composer. Among 11 intervals of the row, we find 6 minor seconds/major sevenths, 3 perfect fourths/fifths and 2 major thirds/minor sixths. This selection of intervals is characteristic in the generally restricted



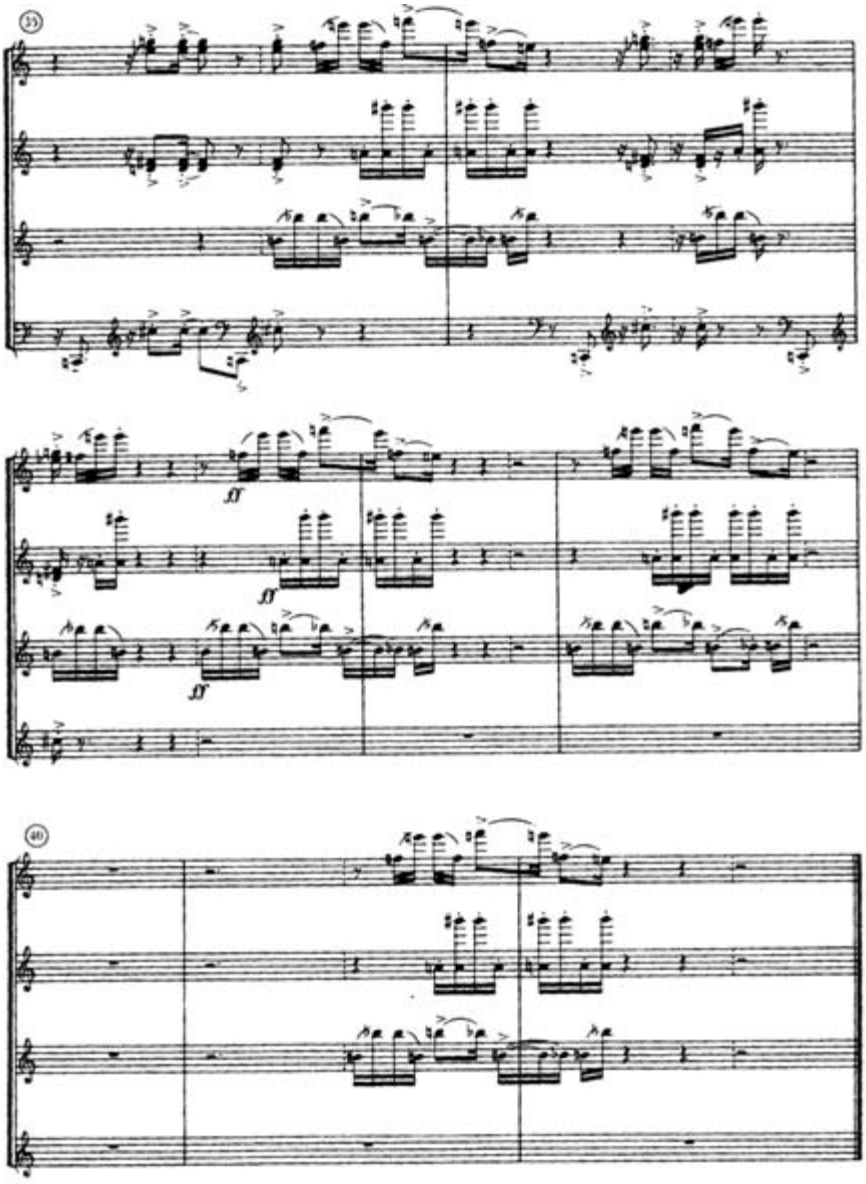
Example 2a (cont.)

amount of interval classes (3 from a possible 6) and in an overwhelming quantity of minor seconds. On the other hand, knowing Kurtág's predilection for this interval, it is remarkable that no tritones are to be found in the



Example 2a (cont.)

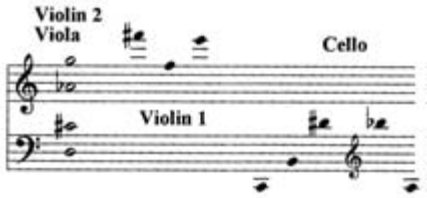
row. But we have just discerned tritone-pairs in the set of the first four pitch classes! Well, this reminds the analyst that he should not restrict his horizon to adjacent pitch classes in defining the interval resources of a row. It is a truism that through pairing non-adjacent pitch classes, the composer can gener-



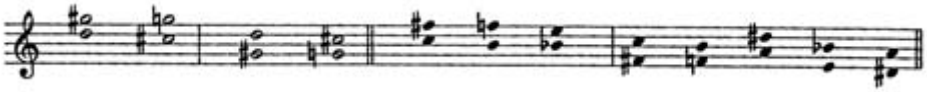
Example 2a (cont.)

ate any interval classes in the framework of any row sets. These more remote connections, however, do not belong to the preconditions that a row set offers to the composer. It falls to the composer's choice to decide which actual interval classes he stresses through deliberately arranged motivic material.

Example 2b: Reduction of Ex. 2a, mm. 1–10; *2c:* Funnel-like structure of Ex. 2b



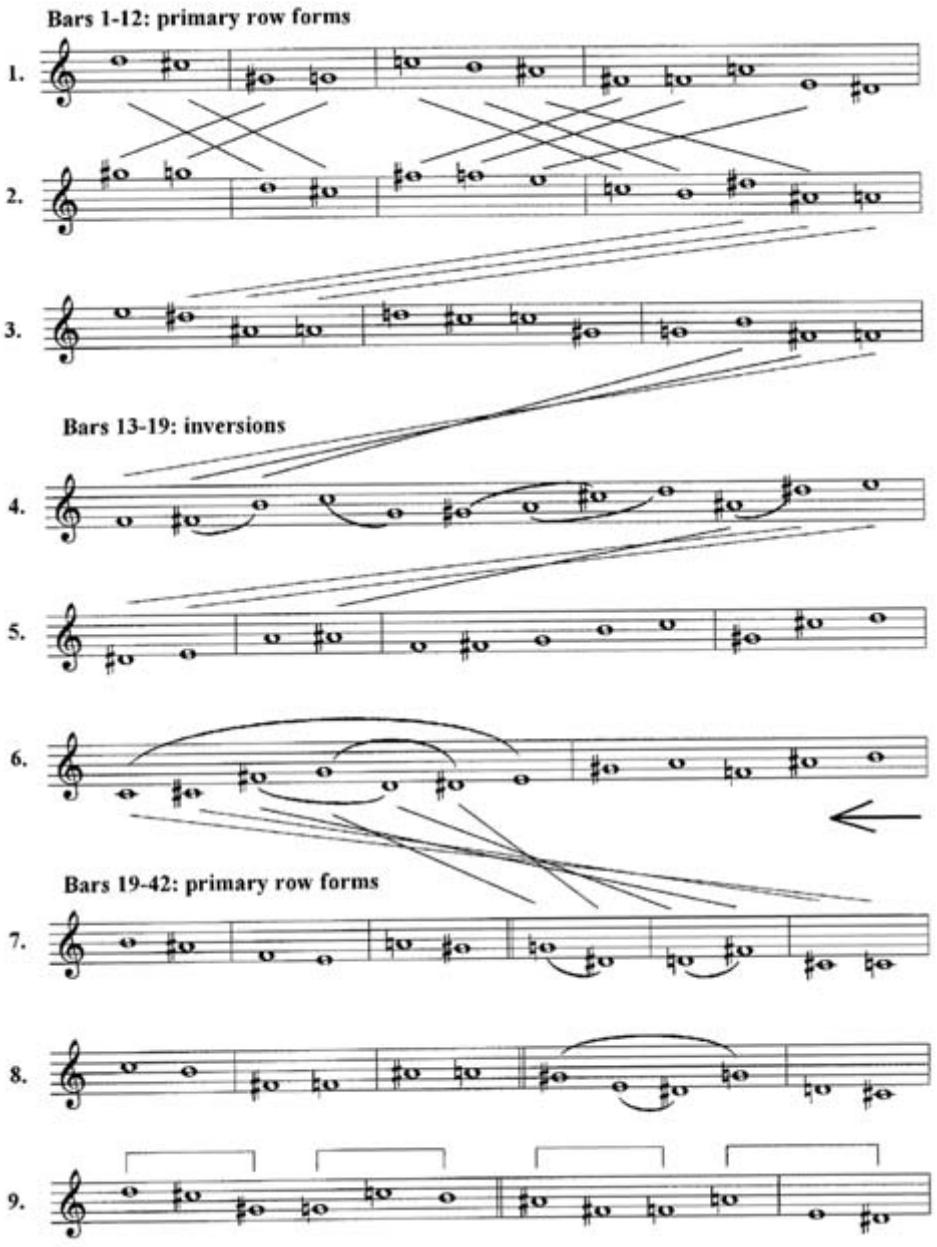
Example 2d: Reduction of bar 11 of Ex. 2a



Example 2e: Comparison of ostinatos in bars 1–10 and bar 11

It is helpful now to return to the first ostinato section and to investigate which interval classes appear here as motivic. This is first of all the first two cells of viola and second violin, respectively that together represent minor second/major seventh pairs that lie a tritone apart (D–C# and G#–G). The first four pitch classes of the row are presented here in a symmetrical construction of major seventh–perfect fifth–major seventh, while – transposed one or two octaves higher – two intersecting tritones (D–G# and C#–G) and, at the extreme edges, a perfect fourth (D–G) also emerge. The third cell in the cello draws our attention to tones 5 through 7 of the row, a descending chromatic segment that is continued by the first violin with the line from F# to D#. This latter is, however, interrupted by A, that emphasises, first of all, the major third between the adjacent pitch classes F–A.

In the following I shall pursue the process of the movement in terms of row manipulations and motivic material. For this purpose I have noticed all row forms occurring throughout the movement (Ex. 3). To obtain an overall picture, it is worth mentioning that in respect of row forms the movement can be divided into three sections, each using three different row forms. This is quite a limited amount of the possible 24 primary and inversion forms (retrograde will not figure now as autonomous). The actual amount is even less,



Example 3: Row forms in Ex. 2a

given that no.1 and no. 9 coincide. This already suggests a sense of recapitulation at this point of the movement. Sections 1 and 3 are similar also in the

sense that both use primary row forms, while in the middle section, as a mean of contrast, three different transpositions of the inversion appear. Retrograde does not play any prevailing role, only row no. 6 appears as a retrograde of the inversion (marked by an arrow).

The relationship between row no. 1 and no. 2 has already been described. I only want to repeat that the first four pitch class sets remain in both transpositions unaltered, although via interchanging the parts of viola and second violin; in the ostinato the previous one has pitches 1 and 2 of the row, in bar 11 pitches 3 and 4, and vice versa. The earlier 3-tone chromatic line of the cello is assigned to the first violin in bar 11, and the 5-tone zigzag melody of the first violin happens to be played by the cello. It is, however, worth mentioning that even after this interchange happens, the violin and the cello play actually only tones that they played also earlier, because the pitch class content of the 3-tone cell of the one version is comprised in the 5-tone cell of the other one. All these similarities, including the continuous texture, result in the row transposition appearing only as a smooth modification on the motivic level. But one encounters a completely new situation in bar 12. As the row chart indicates, the content of this bar is a further transposition of the primary row. What substantially changes, is, apart from the appearance of a chordal texture, the segmentation of the row. The first four pitch classes appear in a similar way as before, this time condensed into the space of a major seventh. This chord is still a symmetrical arrangement of two perfect fourths linked with a minor second; tritones are still hidden within the chord. Second and third segments consist of four pitch classes each, producing chords that are inversions of each other (cello and viola upwards: C#–G#–C–D, first and second violins downwards: F#–B–G–F). These complexes themselves are not symmetrical: among the consisting intervals, besides major seventh, minor ninth and tritone, a perfect fifth (C#–G# and H–F#) and a major third (G#–C and G–B) are also present.

Conspicuous means of linking row transpositions are common pitch classes, appearing in different roles in different row transpositions. I have already shown this in respect of rows no. 1 and no. 2. In row no. 3, three of the first four pitch classes are identical with the closing pitch classes of row no. 2 (compare tones of the cello in bar 11 with the first chord in bar 12). A similar link appears between rows no. 3 and no. 4, the first being one of a series of inversions (see F–F#–G–B twice at the end of bar 12 and the beginning of bar

13, three of them are, in addition, in the same register). This repetition of the same pitch class set stresses once more motivic continuity against disjunction between row transpositions, or, as in this case, row forms.

In bar 13 perfect fifths and fourths of the row prevail: F#–B (first and second violin), G–C (cello, viola), D–A (cello), C#–G# (first and second violin), Eb–Bb (cello and first violin), the third and fourth of which link non-adjacent pitch classes in correct temporal intersection. The beginning of row no. 5 repeats pitch classes D#, E and A#/Bb from the end of row no. 4. The row progresses as a second lengthy ostinato, occupying most of the middle section (bars 14 through 18). Segmentation of the row happens similarly as in bars 1 through 11: viola and second violin have stable dyads, this time in oscillation of two different chordal structures. One of them is still symmetrical; two tritones (Bb–E and A–D#) are linked with a perfect fourth (E–A). Its asymmetrical modification lays a perfect fourth (Bb/A#–D#), a tritone (D#–A) and a perfect fifth (A–E) one upon the other. The overall impression is, however, still an accordic background to melodic motions. The latter, differing from the first ostinato, is segmented as 5-tone and 3-tone cells. A further undersegmentation can be noticed in the first violin, opposing the chromatically adjacent tones F–F#/Gb–G and another minor second, B–C. This undersegmentation of row no. 5 stresses the motivic connection of minor seconds.

In bar 18 this ostinato begins to be dissolved in a similar way as in bar 11. It happens for the first time that two row forms overlap. This procedure has been anticipated through the substantially independent melodic motions in first violin and cello in bars 13–17. They handled their cells without respect to actual succession in the row. With the first D of bar 18 the cello closes the row, then hastily repeats its cell (G#–C#–D) to break through to a momentous solo that involves the row form no. 6. As mentioned before, this is the single retrograde form in the whole movement, and also an example where two row forms are not connected through common tones. Not only pitch class repetitions are avoided, but also the continuum of the cello line seems to neglect the border between row forms. After five tones of the row form no. 6 the solo suddenly breaks down, the remaining seven pitch classes are condensed in one single chord where in assignation of pitch classes major thirds prevail. Conspicuous among these are those in the two violins that echo one of the basic elements in the overall motivic structure of the *String Quartet*. Two major thirds, registered a minor ninth apart, has been the fore-

most chord in movement 1 and has played an important role in every succeeding movement. This element is actually inherent in the row as tones 7 through 10 (in row no. 6 as E–G# and A–F) but here it is acquired from the tones 3 through 6. These connections were mostly hidden up to this point as segmentations divided them, but in the third section of the movement they become more and more prevalent.

This longest section is characterised by a more whimsical arrangement in comparison to the model ostinato–dissolution in the previous sections. It is row form no. 7 that predominates here, but not as a continuous ostinato, rather as outbreaks of vigorous gestures. It is actually only the first half of row no. 7 that participates in this ostinato. Notes 1 through 6 are assigned to the upper three instruments, each having pairs of minor second/major seventh. To anticipate the further course of the movement: this row-half acquires independence, and in its altogether 12 statements from bar 19 through bar 42 it appears six times without the second half of row form no. 7, also in the closing moment of the movement. Here, however, in bars 19/20, the second half of the row follows it. Notice that the latter is arranged in a similar way as the seven-note chord in the preceding bar.

That the pitch class content of the second row half is identical with that of the first row half of a transposition (in this case halves of row no. 6 and no. 7 have this connection), is a commonplace in 12-note technique, labelled in Jelinek's treatise (that Kurtág mentioned as one of his guides to serialism) as 'Komplementärformen'. In the case of Kurtág's row, it is a primary form (row no. 7) and its inversion transposed a minor second upwards (row no. 6), that have this feature. What is striking here, is that this relation has not been unveiled up to this point. I think it is Kurtág's aspiration to keep it secret for a long time. Actually, in bars 12 and 13 the transition from primary row forms to inversions happened in a similar way that, however, remained hidden through different segmentations. And if we look back to the row forms no. 1 through no. 6 it becomes clear that segmentation into two halves has not yet occurred. But from bars 19/20 on, row form no. 7 appears exclusively in segmentations 6 to 6, or, as mentioned before, only the first half-row.

I want to point out only two more features in the closing section: after a statement of row no. 8 in bars 23/24 that present the whole row as a uniform succession of minor seconds/major sevenths, in bars 25–29 the predominant row form is no. 9, that is identical with no. 1. This recapitulation is obscured in every possible way: this section cannot be addressed as an ostinato, no

consistent segmentation occurs, the four repetitions of the row are broken by remarkable textural changes in bars 27 and 28/29, respectively. But despite all these manipulations, the row is still identical with that of the first ostinato, so in row terms this section is doubtless a kind of 'tonal' recapitulation.

And we can still detect inconsistent segmentations in these bars: in bar 25 (and repeated in bar 26), 6 single pitches are followed by a four-tone motive in the second violin and the 2 missing tones in the next bar. In bar 27 the row is divided in four 3-tone cells, and in bars 28/29 again as 6, 4, and 2. This drive towards symmetrical segmentation (that was already anticipated through the half rows of row no. 7), is obviously characteristic for section 3 and reaches its peak in bar 27, in the most Webernian texture of the whole movement. It is as if Kurtág wanted to get rid of his obsession of unequal segmentations and return to Webernian crystallic symmetry.

But symmetry cannot have the last word in this movement. After a short recapitulation of bars 23/24 in bars 29/30 Kurtág returns to row no. 7. The opposition of the two row halves are stated repeatedly (bars 30 through 37) until the first half remains almost abandoned. Concerning the second half-row, that at any rate appears four times in this section with increasing clearness, its is worth repeating that its major thirds links the movement with other parts of the *String Quartet*. In the penultimate movement of the composition it is, however, still determined to retreat against the victorious phalanx of minor seconds.

Row analyses certainly have their own restrictions. Rhythmical relationships have been completely neglected, chordal structures could have been scrutinised in a more detailed way, and gestural aspects, that always have a most prominent role in Kurtág's music, have not been referred to at all. Despite these obvious limitations, I think, there is still something to be summarised:

We have seen unordered 12-tone aggregates in movement 2 of the *String Quartet* and their segmentation through register, instrumentation and timbre. We have recognised that handling 12-tone rows may happen in a very similar way. We have followed Kurtág's path in acquiring different motivic elements from the row, and we have noticed that while doing so he is inclined to join specific row forms through homogeneous interval classes. We have observed the resemblance of different ostinato patterns, and also how a three-part form can be suggested by means of row recapitulation without concrete motivic connections. And above all, we have proposed an inte-

gration of the movement into the overall narrative of the composition, while demonstrating how major thirds gradually emerge from insignificance and display an importance that they possess in the overall structure of the *String Quartet*.

These phenomena are characteristic of Kurtág's music, regardless of whether the piece is composed with a 12-note row or without such a consistent system. The transition between them proves to be only a gradual one. Gradual but not insignificant, because the presence of a row on the one hand restrains the composer in assembling interval cells but, on the other hand, it secures a specific sense of 'tonality' in motivic connections.

I hope to have illustrated one point quite clearly: for Kurtág's dodecaphony represents no hindrance of expression, and not even that of construction.

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