## MUSIC AND PATTERN II

Domenico Scarlatti: Sonata in F sharp minor (Longo no. 32)
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A year ago I wrote an article Music and Pattern ${ }^{1}$ ) in which I tried to examine a piano piece by Robert Schumann, on the basis of the self-sufficient patterns (or symmetry-patterns as I called them) that are present in it.

The pattern was determined as an infinitely repeated structure sufficiently represented in a piece of music to be recognized as such.

Theoretically, any connection of tones can be regarded as representing a pattern, insofar as, in itself, it carries the possibility of repeating itself in two directions (in the direction of time: the successive repetition, and in the direction of space: most typically, the octave doubling). Our task then will be to examine in what way and to what extent composers develop this possibility, latent in tone-connections, so as to make the patterns appear.

The connection $A$ to $B$ in example 1 is understood to represent the pattern of example 2. The composer may choose to execute this pattern as shown in example 3.


Ex. 1
Ex. 2


Ex. 3

In this article a piano piece by D. Scarlatti will be subjected to treatment (Sonata in F sharp minor, Longo no. 32). It is here printed in its entire length as example 4:


E


Ex. 4.


1H5:1

Ex. 4.

In our context this sonata primarily illustrates how various combinations of the same few elements can produce different patterns. The principle is so marked in this piece that it must be regarded as its main structural idea. Ourside the said patterns, the piece contains only a few cadences and a final arpeggio chord.

The elements that form the patterns are two in number, both shown in example $5 \mathrm{a}-\mathrm{b}^{2}$ )

Ex. 5 a-b.


Through combination and repetition in time and space of these two elements, Scarletti creates, in the course of the sonata, 4 different patterns that are executed 9 times in all.

The elements have two built-in layers of tempo, semiquavers in one voice, quavers in the other.

The semiquaver movement in the two elements ends in two different intervals which at the same time form the frame interval, one a fifth, the other a fourth. The figures being otherwise identical, I have called example 5a the "fifth-cell", and example 5b the "fourth-cell".

The final tone of the semiquaver movement everywhere forms the point of departure for the first tone of the subsequent element - either at the prime or at the octave. Example 6 a-b will show how this is established:

Ex. 6a.


In this way the final tones of the elements are constantly conducting the tonal development, while the rest of the semiquavers can be regarded as being derived from them. I shall therefore call these structure-carrying tones structural tones and the rest derived tones.

The quaver movement, shown in example 5 , is automatically dependent on the semiquaver movement: in the fifth-cell the quavers move from the octave and/or the tenth stepwise to the fifth above the structural note. In the fourth-
cell the quavers move from the octave by thirds down to the third above the structural note. Thus the quavers can also be regarded as derived from the chain of structural tones.

In the graphic delineations the two elements are represented by the following figures:

$$
\text { Ex. } 7 \text { abb }
$$



It will appear that only the semiquaver movement is delineated. To delineate the quaver movement as well would present a crowded picture. Besides, it is unnecessary, since, as has been shown, it can be regarded as automatically derived from the structural tones.

We shall now proceed to the practical investigation. The framed capital letters refer to the division of the sonata made in example 4.
(A) Bars 1-3

## Pattern I

The pattern behind these bars arises simply as an alternating succession of the two elements. This means a continuous repetition, for each two quarter beats, and at all octaves, of the figure shown in example 8.

Ex. 8


Graphically rendered, the pattern looks like example 9.

The pattern is tonally static, as appears from the horizontal construction lines suggested in the picture. This must obviously be so, since the fifth-cell and the fourth-cell alternate, and a fifth plus a fourth are an octave.

## Execution

The semiquavers are led through a distinct curve, outlined in example 9. Start-

ing at a neutral pitch, it quickly rises to $\# \mathrm{f}^{2}$, and then descends through three octaves down to \# C and \# F .

The quavers only join in from bar 2, following their automatic course in relation to the semiquavers. On the third beat of bar $2(a-a)$ there is a choice between repeating the same tone, and octave transposition. Scarlatti chooses the latter, thereby producing a pregnant melodic arch (example 10) which will become significant in the second part of the sonata.

Ex. 10.


The only chromatic alteration is \#e, a leading-note of common appearance in F sharp minor. It is a derived (not structural) tone.

## Intervention

After the two bars the pattern shifts to pattern II. The point of intervention
has probably been chosen from metrical considerations. - There was one bar of semiquavers only. Then one bar of semiquavers plus quavers, and now a third bar presenting a new pattern. An underlining of the metre of the sonata (4/4).
(B) Bars 3-4

## Pattern II

This pattern results from the sole use of fourth-cells, thus repeating itself at each quarter-beat:

Ex. 11


This pattern is not tonally static, like the first. Its tonal progression can be seen in different ways according to which lines you draw, but the simplest way is to regard the pattern as making a stepwise descent for each two beats (see the horizontal "ladder-steps" of construction-lines in example 11) the sum of two fourths being a seventh, i.e. a falling second.

Between patterns I and II there is a transition belonging to both patterns. This common figure, as I call it, is shown in example 12. It is here of two quarter beats' length.

Ex. 12


## Execution

The structural tones of the semiquavers are executed in one stretch from the beginning of the bar, simply as a chain of ascending fourths. The e is here natural, it has become a structural tone.

The quavers form their own pattern, one that later in the piece will turn out to be a fixed element in pattern II:


Ex. 13
but the last two notes are in this instance transposed to the upper octave in preparation of the succeeding intervention in the form of a cadence.

## Intervention

On the first note of bar 4 the pattern is interrupted by a cadence in A. At this point we were faced with a conspicuous and vulnerable link in the chain of fourths of the structural tones. After $d^{1}$ in bar 4 we should have continued either with the leap of a tritone to $\# \mathrm{~g}^{1}$, which would have jarred with the chain of perfect fourths, or with $\mathrm{g}^{1}$, which would involve considerable tonal intricacies. Scarlatti cuts through here simply by interrupting the pattern.

## C Bars 4-4 $\frac{1}{2}$

The cadence is an efficient interruption. There is nothing left of our pattern.
But both the upper and the lower part sum up the tonal events of the preceding bar.

Ex. 14


## D. Bars $4 \frac{1}{2}-7 \frac{1}{2}$

## Pattern III

This pattern is more complicated. It consists of a repetition for each four beats of the following four-linked chain:
fifth-cell - fourth-cell - fifth-cell - fifth-cell

Ex. 15.


Three fifths plus one fourth making two octaves plus one second, the pattern will rise by one diatonic step per four beats. This will immediately appear from the horizontal construction lines in example 15. In so doing, the pattern retreats tonally through the regions just traversed by pattern II.

## Execution

As for the semiquaver movement, Scarlatti here chooses an execution suitable to bring out the structure of the pattern. Its progress is divided up into three descending chains, each consisting of four elements. In this way the special qualities of the pattern are brought out with pedagogical lucidity. This is true
both of the build-up and compass of the repeated structure, and of the rate of ascent of the repetition. Note how the rests notated in the middle of the bars simply result from the structural tones being played by the right hand.

As regards the quaver layer, its execution only further supports the clear exposition in this section of the structure of the pattern; for this layer, too, is built up of three identically shaped sets, each of two beats' duration.
Each of these sets has been given melodic life through the employment of both of the former possibilities for the execution of the fifth-cell.


It should be noted that the first quaver of each set ( $\# \mathrm{c}^{2}$ in bar $4, \mathrm{~d}^{2}$ in bar 5 , and $\mathrm{e}^{2}$ in bar 6) fall outside the automatic dependence of the quaver layer on the semiquaver layer. The regular execution could have been, e.g.:

Ex. 17.


But Scarlatti chooses, at the asterisk, $\mathrm{d}^{2}$ instead of $\# \mathrm{f}^{1}$. Why? It may have been in order to avoid having three accented fifths in succession:

Ex. 18.


But Scarlatti is not usually restrained by such rigid rules. It is more probably due to a wish to strenghten the parallelism between the three sets of quavers as much as possible. The \# $\mathrm{c}^{2}$ in bar 4 grew out of the cadence (and so indirectly repeated the $\# \mathrm{c}^{2}$ on the last beat of bar 3 ). Now this $\# \mathrm{c}^{2}$, which is actually alien to the pattern, is generously included in its rate of ascent, becoming $\mathrm{d}^{2}$ in bar 5 , and $\mathrm{e}^{2}$ in bar 6 .

It would be outside the scope of these reflections on pattern to discuss in more detail what causes the chromatic alterations that occur in these bars (\#a, \#b, \#d), but briefly they can be characterized as secondary dominant
features serving partly to stabilize each of the three identically shaped sets in the direction of relative autonomy, partly to further emphasize their identical structure. It is worth noting, however, that there are still no chromatic alterations in the chain of structural tones.

## Intervention

During its tonal return journey, this pattern has not only got as far as \#f (bars 5-6), but has continued to the other side of the tonic, and now, in the middle of bar 7, it has reached a point equally vulnerable as the one discussed above in connection with the interruption of pattern II. In the chain of structural tones we have got as far as to the diminished fifth:

Ex. 19.


But here an intervention takes place instead, in analogy with bar 4, in favour of another execution of pattern II.
(E) Bars 7 7 - $-9 \frac{1}{2}$

## Pattern II

Here the common figure between patterns III and II is short (example 20). It is only of one quarter beat's length, and the transition has an abrupt effect.

Ex. 20.


Pattern II has already been described above. But this time (see example 21) the pattern is carried through where it stopped the first time. Between bars 8 and 9 we find the leap of the tritone $d-\# g$ in the chain of structural tones, so that the chain keeps within the diatonic range of F sharp minor.


Ex. 21.

## Execution.

Behind the execution one is sensible of a simple system:


Ex. 22.

According to this system, the pattern, which actually repeats itself at each beat, is executed by two beats at a time, making the stepwise descent of the pattern appear distinctly. As to the semiquaver movement, it is executed by letting the elements start at the same note that the former element ended on, or at its lower octave, alternately. We are already acquainted with the model of the quavers (see example 13). It is here attached to the semiquavers in such
a way that as much contrary motion as possible is involved.
In the execution, however, Scarlatti somewhat modifies this simple system. He sets the music an octave up so as not to end at the low range of example 22. As to the quavers, the transposition occurs at once when the quaver chain is set an octave up from the tone \# $\mathbf{c}^{1}$ just after the middle of bar 7 . As regards the semiquavers, the octave transposition occurs at the e of the bass in bar 8, where the tone is repeated instead of leaping down an octave, as seen in example 22. These two simple dislocations at the same time create a far more varied and lively section than the execution in example 22 would have afforded.

The only chromatic alteration at this point is \# e, which forms part of the dominant function in F sharp minor. However, the tone \# $\mathrm{e}^{1}$ in the middle of bar 7 acquires formal significance by emphasizing the tonal shift from the ascending pattern III to the descending II.

## Intervention

In the middle of bar 9 where the pattern reaches the tonic, it is stopped by a cadence.

## F Bars $9 \frac{1}{2}-10$

In build it is completely analogous with the cadence in bar 3 (but nevertheless its harmonic functions are different. The cadence in bar 3 was a full close to A , whereas this one is a half close in \#f).

The cadence does not here, as it did the first time, seem to sum up the preceding events. But a closer look will reveal that, after all, it does, at least to a certain extent. The main principle of the cadence, the stepwise descending bassline from \# f to \# c was already seen as a leading principle in pattern II, bars 7-9:


Later in the sonata this connection will be seen confirmed.

## (G) Bars 10-10 $\frac{1}{2}$

## Pattern I

We know the pattern already, but here it is moved to the dominant region. A suggestion of it is all we get - without its attached quaver movement - before it is dissolved.

## (H) Bars $10 \frac{1}{2}-12$

The dissolution assumes the shape of an arpeggioed \#c chord, i.e. an animation of the chord which ends the first part of the sonata.

I Bars 12-15 $\frac{1}{2}$ (approximately)
Pattern IV


This pattern repeats the following chain:
fifth-cell - fourth-cell - fourth-cell

In pattern III it was a four-linked chain that was repeated. This chain has only three links. Yet pattern IV is undoubtedly the most complicated one in the composition. Why? For two reasons:
a) The three-linked chain lasts 3 beats, while the overall metre of the sonata is $4 / 4$. This brings about polymetre.
b) The pattern has a descending motion, but the descent is very slight, only one diatonic step per 6 beats (see the horizontal construction lines in example 24). This produces rather large units to be held together. During the 6 bars the structural tones move to 1) the fifth, 2) the octave, 3) the fourth, 4) the octave, 5) the fourth, 6) the seventh (the sub-second), a confusing enough pattern by its motion of two-steps-forwards-and-one-backwards, especially when heard in a $4 / 4$ metre.

## Execution

In the execution of this section Scarlatti clearly had a double consideration to serve. On the one hand it is important not to disguise the structure of the pattern by its execution, but on the contrary to emphasize it in order that the listener may, if not follow it, then at least have the feeling of an organizing principle behind what happens. On the other hand, Scarlatti obviously did not want the pattern laid out quite so pedantically as in the case of pattern III (bars $4 \frac{1}{2}-7 \frac{1}{2}$ ), but gives freer scope to its latent variety of transfers of register and associative connections.

Let us have a look at the chain of structural tones, which, as we know, governs the semiquaver movement:

Ex. 25.


If, as shown, the tones are divided up into $5 \times 3$, the principle behind the execution will appear. The first three stand apart, being a mere resumption of the little bit of pattern I from bar 10. (They stand apart also in the sense that they are presented without accompanying quavers). The other three-tone chains are arranged in such a manner that each chain has a fixed direction, 3 notes down, 3 notes up, 3 notes up, 3 notes down. It is interesting to notice that the direction does not simply change for each 3-tone unit, down-up-down-up, but that a kind of retrograde repetition is suggested instead: down-up-up-down, up-down-down-up, up-down etc.

The quaver movement specially shows the variety mentioned above. In a way, its execution can be understood from a fairly simple point of view. The first $2 \times 3$ beats go like this:

Ex. 26.


The division of the chain into $2 \times 3$ appears to make sense. The two figures thus produced are identically shaped, with one modification: the execution of the fifth-cell alternates between the two possibilities contained in example 5 a (see the asterisks in example 26 , tenth-fifth the first time, octave-fifth the second). Through this alternation the $2 \times 3$ beats become one sequence (i.e. $1 \times 6$ beats), and this sequence forms the basis of the continuation:

Ex. 27.


Example 27 takes roughly the same course, and - especially - shows the same alternation between the two possibilities of the fifth-cell. By so dividing up the quaver movement into 6 beats at a time in the execution, Scarlatti manages to emphasize the slow descent of the pattern, one step per 6 beats.

But by now other modifications have been added. The two connections indicated by asterisks in example 27 have been transposed an octave up in relation to the regular continuation of example 26.

The effect of this is an emphasis on one of the above mentioned associative connections in the pattern; the purpose of this transposition will be more fully discussed in connection with our treatment of the next pattern.

But even though, as shown, the execution of the quaver movement in this section can be given a comparatively simple explanation, this fact should not blind us to the many other associative possibilities that contribute to the richness of the section. I may mention:
a) the connection back to the melodic arch with the octave leap at the beginning of the piece, which becomes a subtlety on the part of Scarlatti, especially in view of the new polymetre-context:

Ex. 28.

b) melodic relations forming across rhythm and metre:

(13)

Ex. 29a


Ex. 29b
c) the wide melodic arch in bar 14 , which may be regarded as a variant and an extension of the arch in bar 2 and bars 12-13:


Ex. 30.
Finally, the chromatic alterations of the execution must be taken into consideration. First, it is necessary to notice that the structural tones are still keeping within the diatonic range of $F$ sharp minor. But among the derived tones several are extraneous, e.g. \#b, \#e, \#a, \#d. They are common dominant effects, serving among other things to strenghten the autonomy of the 3-tone chains of the structural tones, and their mutual analogy. So, to a considerable extent, the alterations serve to emphasize the structure of the pattern. The 4g in bar 14 is of special interest, an instance of Scarlatti's particular cheek. This tone too, emphasizes the $3 / 4$ repetitive structure of the pattern, and it turns up in analogy with the preceding groupings:

Ex. 31.


A continuation of the idea would have implied $c^{2}$ instead of \# $c^{2}$ on the first beat of bar 15 . That Scarlatti avoids this, is probably due to the fact that at this point the music is retracing its steps to more civilized regions.

## Intervention

At the end of bar 15 there is an intervention in favour of yet another use of
pattern II. The point of the intervention has been chosen from the relations between patterns IV and II at this place, as I shall presently try to show.

JJ Bars 15 $\frac{1}{2}-16 \frac{1}{2}$

## Pattern II

## Ex. 32.



There is a gentle transition between pattern IV and pattern II, the common figure lasting three whole beats:

Ex. 33.


Since pattern II is stepwise falling (one diatonic step per 2 beats), it here continues the falling movement of pattern IV, and even hastens it:

Ex. 34.


It will appear that, tonally, patterns IV and II here together cover the distance traversed by pattern II alone in section E. Here too the movement is carried through entirely, to the structural tone \#f, the chain of structural notes always keeps to the diatonics of F sharp minor, and the tritone $\mathrm{d}-\mathrm{\# g}$ gurns up in bar 15-16.

The carrying through of the tonal movement implies yet another well-known feature. Earlier on (example 23) it was demonstrated how the stepwise diatonic descent from $\# \mathrm{f}$ to $\# \mathrm{c}$ had acquired a certain independent status in the composition. As clearly shown in example 34, we find the same idea again here, this time carrying the whole development of the two patterns.

From example 34 it can now also be seen what Scarlatti achieves by intervening in pattern IV at this particular spot: in this way the $3 / 4$ polymetre is carried as far as $\# \mathrm{f}$, right to pattern I in the middle of bar 16. It becomes apparent if we try to see what would happen by an earlier, respectively later, intervention in pattern IV:


Ex. 35.


Ex. 36.
The abbreviated version (ex. 35) would have consisted of ( $4 \times 3$ ) +4 quarter notes. The extended one (ex. 36) of $(6 \times 3)+2$ quarter notes. Scarlatti's choice alone accomplishes the ( $6 \times 3$ ) quarter notes without any remainder. To achieve the same result again, he would have had either to abbreviate pattern IV down to $(2 \times 3)$ quarter notes, which would have prevented the pattern from being properly laid out, or to extend it up to ( $8 \times 3$ ) quarter notes, and such a drastic extension would not only be trivial, it would also involve considerable problems by the very slow winding up of the tritone in the chain of structural tones that would ensue.

## Execution

The structural tones continue the three-at-a-time principle shown in example 25 . This further underlines what I said above, that the $3 / 4$ beat polymetre is carried through to the structural tone $\# \mathrm{f}$, and that the bars $12-16 \frac{1}{2}$ must be understood as one movement. (Ex. 37).


Ex. 37.

Now let us have a look at the quaver movement. It follows the already wellknown figure first seen in example 13. Still, there is something to discuss. As mentioned earlier on, the tone $\mathrm{a}^{2}$ in bar 15 is an octave transposition in relation to the execution of the preceding bars:

Ex. 38.


This is not in itself surprising; otherwise the movement would be in danger of getting very low down. But the turn also becomes part of a striking formal and melodic connection. We have seen above (example 27) how Scarlatti transposed the quavers b-\#g in bar 14 an octave up, apparently at random. The purpose is now obvious. Patterns IV and II become melodically linked together, their merging into one movement is underlined, and at the same time, the way in which it is done is peculiarly fit to emphasize the special character of each pattern in relation to the other: what pattern IV takes three beats to carry out, pattern II accomplishes in one:

Ex. 39.


Ex.
So, the concentration of the pattern movement that takes place from pattern IV to pattern II stands out distinctly, demonstratively, and with intensifying effect.

## Intervention

When the pattern arrives at the structural tone of $\# f$ (the tonic), pattern I takes over.

## K Bars 16 $\frac{1}{2}-18 \frac{1}{2}$

## Pattern I

The tonally static pattern I enters as a stabilizing factor. The common figure is of two beats' length :

Ex. 40.


## Execution

In their execution these bars repeat the first two bars of the composition, with their emphasis on the regular $4 / 4$ metre; there is consequently no need to show another graph of the pattern (see example 9), But an interesting novelty has been added: the stepwise descending fourth $\# f-\# c$ that manifested itself before as an independent idea has here been added as a quaver counterpart to the first four beats, the ones that were quaverless in bar 1. This idea then, here receives its final confirmation.

As a consequence of the new counter-part to the pattern, the second beat of the beginning must here become e instead of \#e

## Intervention

Pattern I is checked by a cadence, at the same point where it was interrupted the first time by pattern II.

## L Bars 18 $\frac{1}{2}-19$

This cadence, in F sharp minor, does not have the character of summing up, to the same degree as the other cadences. Still, I cannot help connecting it with two other places in the earlier course of the sonata:
a) connection to bar 3:

Ex. 41.


This is a reasonable association, the preceding bars being the same in both cases.
b) connection to bar 15-16:

Ex. 42.


This may seem more far-fetched, but it can be substantiated, partly by the conspicuous character of the two connections in bars 15 and 16, partly by the fact that later on (bar 20) the cadence assumes a shape that has more likeness to it:


Ex. 43
(21)

In view of this, it may perhaps, after all, be permitted to look on this cadence as a summing up, not of a few bars, but of the whole piece?
(M) Bars 19-20 ${ }^{\frac{1}{2}}$

## Pattern I

## Execution

At first sight this would seem to be a mere repetition of the execution of Pattern I in section K, but Scarlatti has removed two beats from it, with so much subtlety that the place where it happens easily escapes the listener's notice. It is the fourth and the fifth beat that are taken away. Such a thing could naturally only be done because the pattern repeats itself unchanged at each two beats. It might have been done without cheating, thus:


But the repetition of the tone $\# \mathrm{c}^{2}$ would have been noticed at once as jarring
heavily with the treatment of quavers in the rest of the sonata. Instead, Scarlatti resorts to an auditive illusion. He exploits the similarity:

Ex. 45.

and continues from the figure in 36 a as if it had been 36 b :

Ex. 46.


The abbreviation here made in the execution of the pattern has, among other things, the consequence that the melodic arch with the octave leap - the one we know from bars 2, 12 and 18 - appears surprisingly early, and so still can be experienced as fresh and new.

## Intervention

Here the same intervention occurs as after section K .

N Bars 201 $-21_{2}^{\frac{1}{2}}$
A cadence in F sharp minor. We recognize it from bar 18, but here it is performed twice, which compensates us for the two beats left out in bar 19 .
(0) Bars $21 \frac{1}{2}$ to the end

Dissolution of all firm substances into an $\# \mathrm{f}$ arpeggio chord. It is entirely analogous with the \#c arpeggio chord in bars $10 \frac{1}{2}-12$, only there is a change of hands at another place in the arpeggio (but in both cases so that the left hand begins on \#c).

Somewhat surprisingly, perhaps, the analysis of this sonata from a pat-tern-conscious point of view, has shown us Scarlatti as a composer who works with logical construction and strict economy.

The two halves of the sonata, of precisely the same length, we found to be composed of patterns, simple and complicated, but all built from the same two basic elements.

We investigated the execution of these patterns. The execution was never random, it could always be motivated. It seemed to be a rule that in the execution Scarlatti did not work against his patterns, but with them. In several cases we could draw up explanatory models that seemed to show specifying patterns in the execution (see examples 22, 25, 26-27).

We saw how an alien element ( $\# \mathrm{c}^{2}$ in bar 4) would be seized by a pattern and swept along in its movement. And we saw, conversely, how an idea (the stepwise descending fourth) would grow out of a pattern and afterwards become independent.

We saw how consistently Scarlatti combined a rich and inventive use of chromatic alterations in the derived notes with a strict use of diatonics in the chain of structural notes.

Finally, it was demonstrated how the different patterns were employed in accordance with their characteristics. Pattern I was the tonal stabilizer, first and last. Pattern II was the flexible one that could get around briskly. Pattern III was the firm one (at least in Scarlatti's execution) with the long, unerring strokes. In this pattern lies the centre of gravity of the first part of the sonata. And pattern IV, finally, with its poly-metrical basis, was the dialectic one, full of contradiction and variation. It made its appearance where historically much later sonatas have their development section, and in it lies the centre of gravity of the second part of the sonata.
1.9.1977.

Translated by Gunver Krabbe.

## Notes

1) Musik og Forskning 3, Copenhagen 1977, p. 96.

In the spring of 1976 a small seminar group at the Music Institute of Copenhagen University had been trying, under the heading of 'Experiment in Musical Morphology" to renew their relations with musical analysis, and the article 'Music and Pattern' was originally one of my contributions to the work of the group. The present article is based on such another contribution, and I would like to acknowledge my debt to the group for suggestions and criticism during our discussions.
2) I shall not here go into the question of how - according to what procedure - the two elements in example 5 can be extracted from the piece. I shall, however, suggest how the elements can be demarcated. The semiquaver movement of the elements consisting of an ascending third followed by a descending third is never cut by Scarlatti, it is an unbreakable connection. That means our dissecting knife can only cut just before the movement of thirds (where the piece employs two possibilities, i.e. the prime and the octave), or just after the movement of thirds (where the piece likewise uses two possibilities, i.e. ascending fifth or fourth).

Let us next examine the following examples from bars 2-3


Ex. 47.
A comparison between those two places together with example 5a-b) shows the builtin necessity of the upper part quavers to be iambic, which leaves us only one place to cut, i.e. just before the movement of thirds (see the asterisks, example 47).

## RESUME

I forlængelse af en tidligere artikel (Music and Pattern, Musik og Forskning III, København 1977, s. 96), hvor jeg forsøgte at analysere et klaverstykke af Robert Schumann udfra de selv-tilstrokkelige mønstre som var at finde deri, søger jeg i denne artikel at gennemføre en lignende undersøgelse af en af D. Scarlattis sonater. Det forekommer mig at undersøgelsen i høj grad viser synsmådens relevans også i dette tilfælde.

Noget overraskende, måske, lærer vi Scarlatti at kende som en komponist der arbejder med logisk konstruktion og yderst stram $\emptyset$ konomi. Vi ser ham bygge sonaten op af fire forskellige mønstre, som alle kan føres tilbage på de samme to simple elementer, og vi ser hvordan han i brugen og i udførelsen af disse mønstre tager størst tænkeligt hensyn til den særlige karakter hos hvert af dem. Vi følger hans opfindsomme og konsekvente arbejde med tonalitetsbegrebet, og vi ser hvordan på den ene side et "fremmedelement" kan gribes af et mønster og føres med, og hvordan på den anden side en toneforbindelse, skabt i et mønster, kan udskilles og opnå selvstændigt liv.

