

## Converter System writing and isobematic language in Christopher Bochmann's ESSAY XVIII

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**Abstract:** *Christopher Bochmann, one of the most prominent composers and pedagogues of our time, is the only composer in Portugal, at this moment, to include in his catalogue 4 works that integrate the Accordion in the midst of contemporary music. Using isobematic language as a starting point and form of expression, Bochmann composed for Solo Accordion, Accordion in Chamber Music, Accordion in Ensemble and Concert for Accordion and Orchestra. In this article, we are going to investigate the work Es-say XVIII and how the composer organizes the form, structures the musical ideas and builds the idiomatic writing for Accordion using the converter system.*

**Key-words:** *Christopher Bochmann, Essay XVIII, Accordion, Analysis, Contemporary Music*

### 1. Introduction

The work Essay XVIII is an original work for accordion, composed by composer Christopher Bochmann, in Viana do Alentejo, on April 11, 2015. Originally written for accordion, the work was dedicated to the accordionist Gonçalo Pescada and premiered at the Cine-Teatro Louletano on October 31, 2015.

Regarding the general structure, Essay XVIII is a work written in a single movement without bars, divided into sections over 20 pages lasting approximately 9'. In table 1, information about the structure appears:

Andamento	n.º systems / pages
Furioso	4 systems / 1 pages
Meno mosso: Moderato	17 systems / 3.5 pages
Furioso	2 systems
Piú mosso	26 systems / 5.5 pages
Furioso	1 system
Meno mosso: Moderato	17 systems / 4 pages

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<b>Andamento</b>	<b>n.º systems / pages</b>
Molto Vivo	12 systems / 2.5 pages
Furioso	1 system
Lento tranquilo	13 systems / 3.5 pages

Table 1. *Structure of the work Essay XVIII*

In Christopher Bochmann's extensive catalogue, Essay XVIII was the first work for accordion.

Like other works by the composer, Essay XVIII is based on series of numbers to organize the proportions of his compositional process. These series are based in the relationship between numbers in which the sum of the previous numbers reveals the next number, e.g. 1, 4, 5, 9, 14, 23, 37, etc.

In a broad sense and similar to the group of *Sequenzas* by the composer Luciano Berio, the work Essay XVIII for solo accordion is part of a group of pieces for solo instruments that take the specific characteristics of the instrument as a starting point for the composition.

In Maia (2018), Christopher Bochmann states that “There is no conscious intention to explore all the hypotheses, nor to write virtuosic music, although this sometimes happens”. In this sense, the piece meets the definition of an essay, that is, “brief literary composition on a given theme or subject, generally in prose, of an analytical, speculative or interpretative nature”.

Like a true essay, Essay XVIII meets idiomatic writing for accordion, creating new challenges, new fingerings and new approaches at a technical and interpretative level. Each one of the nine formal sections in which it is structured, the work introduces and develops, in a particularly consistent way, specific aspects of the instrumental domain.

## 2. Sound, technical and timbre potentialities

Essay XVIII, as the name of the work indicates, is an essay, in this case written for a solo instrument, which highlights the mastery of the instrument and the player, seeking to use all the technical and sound possibilities inherent to each instrument, in this specific case, the accordion.

In terms of structure, the work is divided into nine sections. Each section alternates tempo indications: *furioso*, *meno mosso moderato*, *furioso*, *piú mosso*, *furioso*, *meno mosso moderato*, *molto vivo*, *furioso*, *lento tranquilo*.

In terms of tempo: vivo (♩ =88), lento (♩ =56) and moderato (♩ =66) these are the reference standards that can be observed and adjusted throughout the work.

Regarding form, the first section begins at a Furioso tempo with a cluster on both keyboards, performed in a simple bellow shake. In this introduction, the composer precisely indicates the number of movements to open and close the bellows (14, 9, 5, 4, 23), according to the sequence used in this work (fig. 1).

To Gonçalo Pescada

## ESSAY XVIII for accordion

Christopher Bochmann

Fig. 1. Essay XVIII - beginning of the Furioso section

The clusters are static, that is, in the same texture and location, contrasting only in the use of dynamics (*f*) with crescendos and decrescendos. Between each initial impulse (beginning of the bellow shake) a suspension signal is indicated. To this end, each group must be preceded by silence.

After the introduction of 4 bellow shake impulses, the first melodic motif appears, in an ascending direction, in parallel movement between the two keyboards with a total of 9 notes (fig. 2), duplicated on the left-hand keyboard in a major 6th interval.



Fig. 2. *Essay XVIII - parallelism at the distance of Major 6th*

In turn, the melodic interval relationship (horizontal plane) results in the following: minor 2nd, major 3rd, perfect 4th, augmented 8th, major 11th, major 6th, augmented 8th, major 11th. Therefore, in isobematic language it will be: interval 1, 4, 5, 13, 14, 9, 13, 14. All of these intervals belong to the sequence used with the exception of int.13 – which is easily formed by summing 9 with 4.

The ascending melodic motif leads to a cluster performed in a bellow shake (fig. 3) with a duration longer than the previous ones, in a movement that appears in a crescendo and disappears in a fade out due to the action of the bellows.

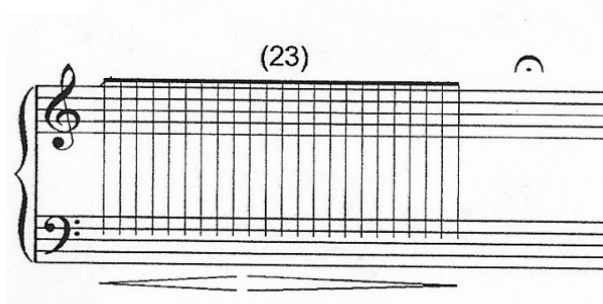


Fig. 3. *Essay XVIII - cluster in bellow shake (23 movements)*

In the third line of the first page, two small phrases appear (fig. 8), a kind of insistence on the previous motive, in ascending and parallel movement (major 6th distance – int.9) but the first motive performs, on both keyboards, a descending 14M interval (interval 23), a note that will give rise to the next motif. The second motive is made up of 4 notes (major 3rd, major 6th, perfect 4th – int.4, 9 and 5) in an ascending movement that rests on the B note.





Fig. 4. *Essay XVIII - parallel motives*

The resting point of this introduction culminates in a parallel vertical structure (C #, D, F #, A #, B) in vibrato, *p* dynamics and dolce articulation (fig. 5). The vertical structure is acoustically balanced by the action of interval 1 at the extreme's sides. In the vertical plane, we observe the following relationship: intervals 1, 4, 4, 1.

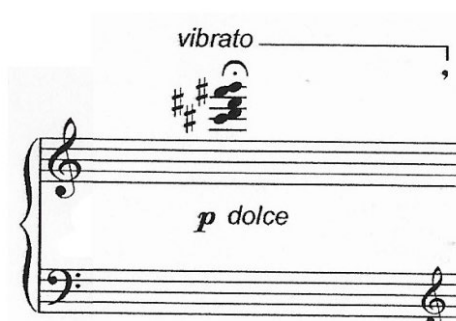


Fig. 5. *Essay XVIII - 1-4-4-1 chord in high range*

The vertical structure (intervals 1-4-4-1) appears in a high pitch (fig. 5), contrasting with the sound of the bellow shake clusters, performed in a low register, transporting the listener to a sound and timbral contrast between high and low sounds.

In the fourth line of the first page, we resume the previous speech with a motif made in parallel lines in a major 6th interval, for a total of 14 notes (fig. 6).

Fig. 6. *Essay XVIII - parallel motives*

This motif is performed in *ff* dynamics, giving way to the G note (above middle C) which will be performed in portamento.

In turn, portamento (fig. 7) will give rise to vibrato always in *p* dynamics and *dolce* articulation, ending in a vertical block (acute tessitura) consisting of an interval of minor 2nd, major 3rd, major 3rd – int.1, 4, 4, that is, the same structure as the previous vertical block (fig. 8) without the top note. This vertical structure transports the listener to a suspenseful sound that concludes the introduction.

Fig. 7. *Essay XVIII - portamento*Fig. 8. *Essay XVIII - 1-4-4 chord*

In the work *Essay XVIII*, the *Furioso* sections function as a kind of refrain that separates larger sections with different characteristics. On page 2, the *meno mosso* section begins: *moderato*, with articulation always *legato* and *mp* dynamics (fig. 9). In the first phrase, the speech develops with the main line on the keyboard of the right hand in a wave-like movement and the left hand plays an independent role with the introduction of small thematic motifs that are transposed.



Fig. 9. Essay XVIII - beginning of section *meno mosso: moderato*

Gradually, this role disappears, giving way to a dialogue (fig. 10), increasingly intense with the realization of motifs in opposite movement. It is also worth highlighting the introduction of some motifs (left hand) which, due to their arrangement on the keyboard, end up having the same fingering (idiomatic writing), helping the performer's memorization and execution process.



Fig. 10. Essay XVIII - *dialogue*

The *meno mosso: moderato* section ends on the second staff on page 5. For this purpose, the composer uses a minor 2nd interval: E-F, interval 1 on the left-hand keyboard. This interval appears in comparison with a succession of halftones (fig. 11) in the descending direction, right hand keyboard, reaching D# which will set the tone for the following section.

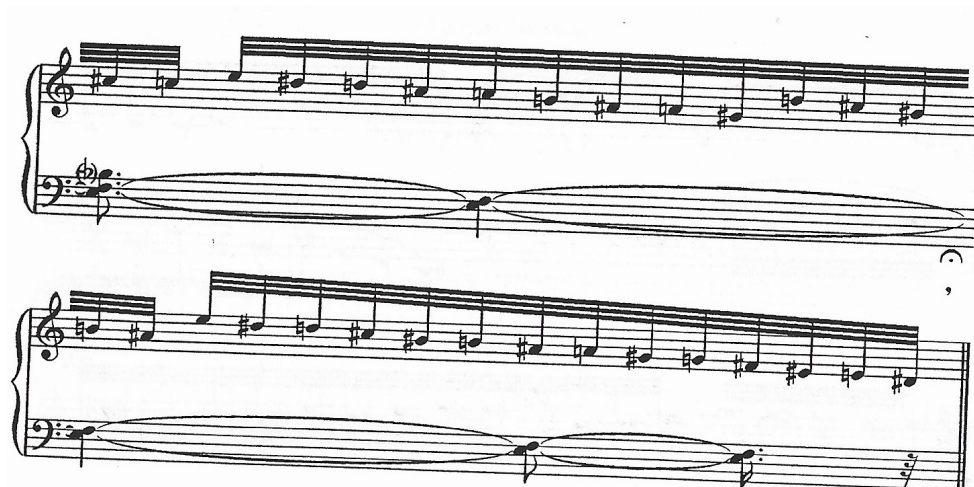


Fig. 11. Essay XVIII - end of section *meno mosso: moderato*

The introduction of the Furioso section (fig. 12) begins with the D#, performed in portamento, followed by vibrato in dolce articulation. By contrast, it will resolve into a vertical structure with a high tessitura (A#, B, D#, G). Like the beginning of the work, the Furioso section on p. 5 will include bellow shake movements across the cluster (on both keyboards) in the low range.

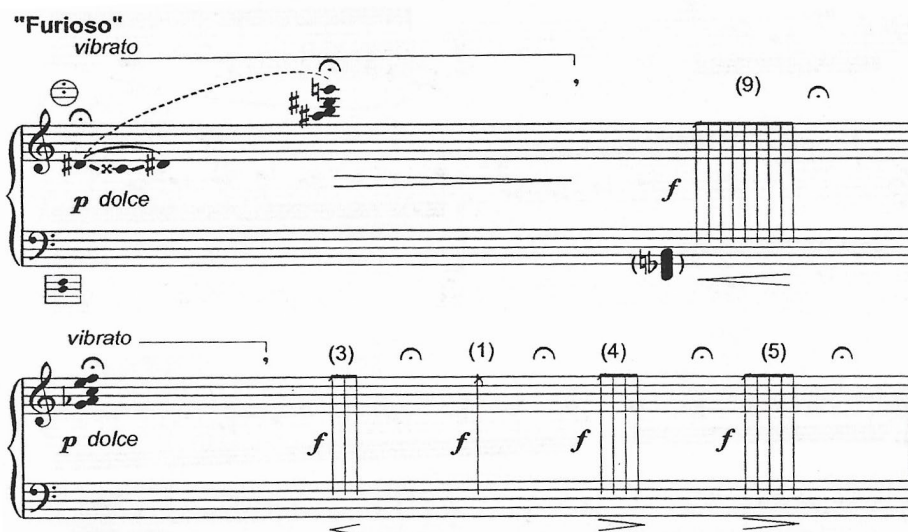


Fig. 12. Essay XVIII - beginning of section *Furioso*

In this second Furioso section, the proportions of the bellow shake movements will be different (9, 3, 1, 4, 5). However, they have the same contour as the first Furioso, although with retrogradation and decrease. That is, with the sequence 1, 4, 5, 9, 14, 23 (whose previous value would be 3, i.e. 4-1): the first Furioso chorus presented the bellow-shake in the order: 14, 9, 5, 4, 23; the second Furioso presents the order: 9, 3, 1, 4, 5. The retrogradation of this order would be 5, 4, 1, 3, 9; Presented like this, it can be seen that the contour is the same, but reduced by two values in the sequence.

The construction in opposite movement in relation to events reveals the composer's ability to seek balance and the intention of architectural writing in his work. The very construction of the vertical structures that surround this introductory moment in each episode reveals balance.

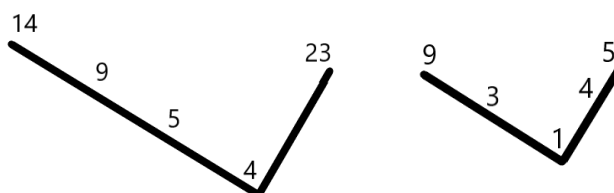


Fig. 13. *Essay XVIII - numerical relationship between the two introductions (bellow shake)*

For example, in fig. 14, the vertical structure (G, Lab, C, E, F) consisting of minor seconds at the extremes and major thirds – that is, the same as the block in fig. 5, although transposed (18 half steps down) - in the centre they reveal a balanced and stable sound. As a characteristic of the accordion keyboard is that it is organized by a succession of halftones and not by the tonal scale as is the case with the piano and other keyboard instruments, the use of the same blocks or designs in transpositions represents great ease in terms of fingering.



Fig. 14. *Essay XVIII - vertical block in vibrato*

After the vertical vibrato structure (fig. 17), the bellow shake movements conclude the sequence 3, 1, 4 and 5 (fig. 15).

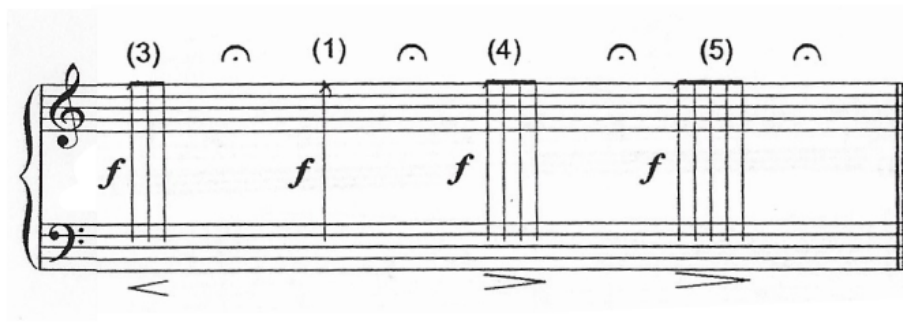


Fig. 15. *Essay XVIII - numerical relationship in bellow shake*

The *piú mosso* section (fig. 16) is preceded by an instant of silence (suspension) and begins with the same melodic and rhythmic motif as the *meno mosso: moderato* section on p. 2. However, this 14-note impulse is reinforced simultaneously and in similar parallel movement by a motif that occurs in a lower major 2nd interval.



Fig. 16. *Essay XVIII - initial motif in section Piú mosso*

The parallelism between the two keyboards moves at a vertical distance of 11th. In the *piú mosso* section, the motifs are interspersed by vertical blocks that occur suddenly and contrasting with the speed of the speech. The musical text appears in the form of small clouds (groups) that are interrupted by clusters of 9 notes (fig. 17), all with the same intervallic structure, which facilitates fingering, including transposition on the button keyboard.



Fig. 17. *Essay XVIII* - musical speech in the section *piú mosso*

The dynamic *f* that begins the *piú mosso* section will be reinforced by sudden *p* movements with crescendo that accompany the clusters in the vertical position. In turn, legato articulation also provides fluid speech that allows the perception of the two voices in juxtaposition. Until the third vertical block (second system on page 6), the direction of the speech is upwards with progressions of the interval structure.



Fig. 18. *Essay XVIII* - expansion of vertical blocks in the section *piú mosso*

In the last 3 lines on page. 6, the speech accelerates and the confrontation/dialogue between the voices becomes increasingly intense.





Fig. 19. *Essay XVIII - dialogue between the voices in the section piú mosso*

At the beginning of the page 7, the vertical construction takes on greater proportions both in terms of rhythmic duration and in terms of the broadening of the sound spectrum (fig. 24). The *mp* / *f* dynamics created in crescendo through the pressure on the bellows make this moment of the work imposing due to its block execution, we would even say with an orchestral thought in terms of construction.

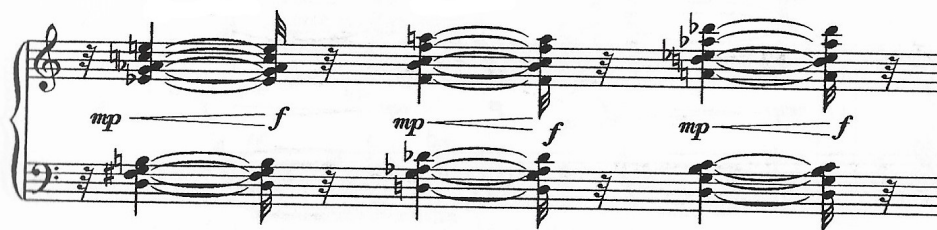


Fig. 20. *Essay XVIII - progression of vertical blocks in the section piú mosso*

The maximum range is created by the following interval order (dim 5th, major 3rd, perfect 4th, perfect 4th, major 3rd, perfect 4th, perfect 4th, perfect 4th) in a range greater than 3 octaves only possible in the chromatic button accordion (fig. 21).



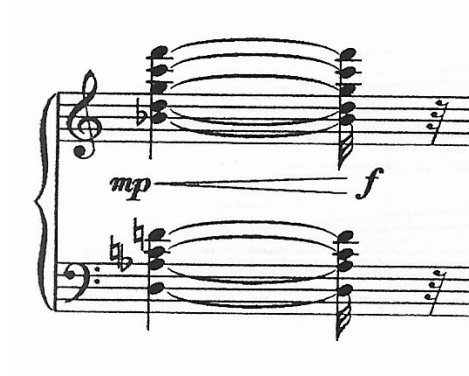


Fig. 21. *Essay XVIII - vertical structure extension*

From the end of the second stave (page 7), the entry of voices ceases to exist simultaneously and switches to a canonical model at the distance of one fusa (rhythm with thirty-two note) and at the distance of a major sixth, or int. 9 (vertical plane).



Fig. 22. *Essay XVIII - canonical entries*

In turn, the triplet vertical blocks start to occur in a bellows shake (fig. 23) and occur in an upward direction. The interval relationship of each block, in the vertical plane, has the following constitution: minor 2nd, major 3rd, major 3rd, minor 2nd, minor 6th, minor 2nd - Int. 1, 4, 4, 1, 8, 1.

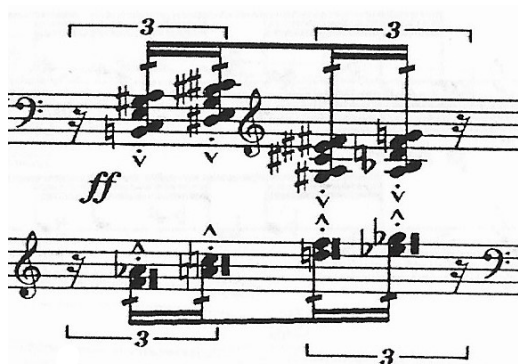


Fig. 23. *Essay XVIII - progression of vertical blocks in bellow shake*

The canon entries (fig. 24), rhythmically homogeneous to the previous speech, now go through a process of augmentation in relation to the entry distance of the voices.



Fig. 24. *Essay XVIII - canonical entries*

The canonical speech assumes a dialogue between the voices at a distance of 9<sup>a</sup>M (int. 14), also increasing the sound spectrum. It should be noted that the musical discourse follows a contrary movement in terms of counterpoint of the voices, always in a legato and dynamic articulation *f*.

The expansion movement of vertical blocks will end (second system on page 9) with a group of 9 blocks, establishing the reference point with the previously presented numerical relationship 4, 5, 9 (Fibonacci series).

The end of the first system on page 9 reveals a progression of vertical blocks with idiomatic writing for the accordion keyboard (fig. 25) as it always allows the same position regarding fingering, as has been mentioned several times.



Fig. 25. Essay XVIII - progression of vertical structures

The progression of vertical structures (fig. 25) is accompanied by clusters on the left-hand keyboard in an ascending direction. The blocks are constituted, in the vertical plane, by an interval relationship of minor second on the extreme axes and major third on the internal axes, that is: minor 2nd, major 3rd, major 3rd, minor 2nd. As in fig. 5, in isobematic language we can observe: intervals 1, 4, 4, 1.

From the end of the second system (page 9), the musical discourse is marked by moments of rest (long-lasting vertical structures) and action (short-lasting staccato vertical structures). This section also comprises an opening register and tessitura starting from the last system on page 9. The vertical structure that defines the end of the section is made up of (D, G, Ab, Db, F, B, C, E, A) performed in an arpeggiated manner (fig. 26) with an irregular order regarding the entry of the voices.

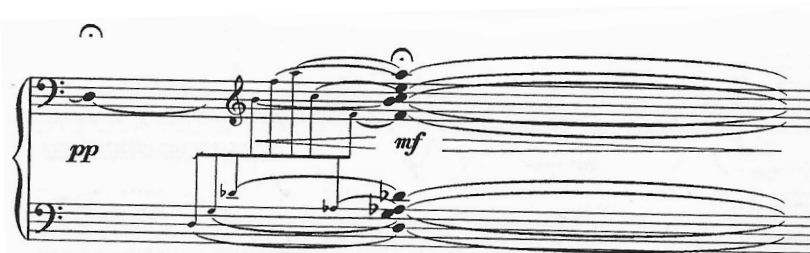


Fig. 26. *Essay XVIII - arpeggiated vertical structure - end of section*

The last three systems on p. 10 mark a moment of contrapuntal writing (fig. 27). At this moment, although written for two distinct lines, the successive entries of the voices give the listener the sensation of a small imitation (canonical speech).

This musical score snippet shows a piano (p) section with a legato marking. It features two distinct voices (treble and bass staves) with successive entries of the same melodic line, creating a small imitation. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Fig. 27. *Essay XVIII - canonical writing*

The Furioso movement (fig. 28), that is, the return of the chorus, appears with a cluster in the low range (5 movements) in dynamics *f*, followed by a movement of 9 fuses starting on the note C#. Like the initial entry movement, this movement will also rest on a vertical block – again, the same as in fig. 5 (1, 4, 4,1), but in another transposition - in vibrato (E, F, A, C#, D) in *p* dynamics and dolce execution. The Furioso move ends with performing the cluster (similar to the initial one) in 4 movements.

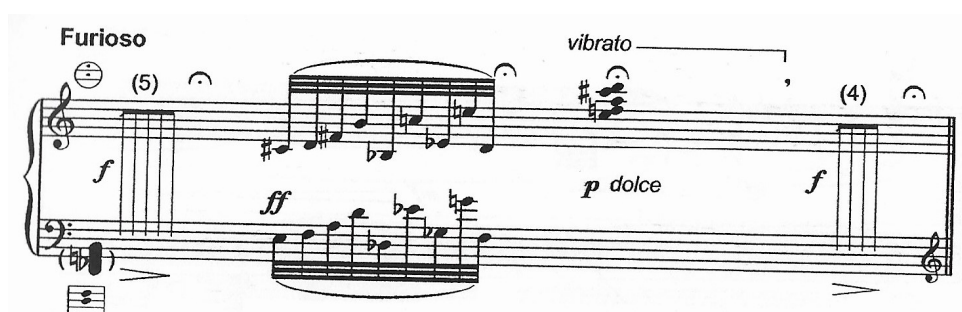


Fig. 28. Essay XVIII - Furioso section

The meno mosso: moderato section goes from the second system on page 11 until the last system on page 14 and contrasts with the previous sections (fig. 29). The beginning involves a vertical block (right-hand keyboard) consisting of intervals 1 and 5 (B, C, F), a block that will appear on the left-hand keyboard at the distance of an eighth note, and an interval 10, on the notes (C#, D, G).



Fig. 29. Essay XVIII - beginning of section meno mosso: moderato

The beginning of the page 12 highlights the motif (C, A, E, Dflat, F) on the left-hand keyboard that has been used throughout this section and that from this

moment on appears in canonical entries, serving as an expansion of the phrasing and texture (fig. 30).



Fig. 30. *Essay XVIII - canonical motif*

From the second system on page 12, a new motive takes place (C#, D, F#, B, G, E, C, A, A) which will always appear in ascending form, and which will be the motto to reach the climax of the section at the end of the second system on page 14 in *fff* dynamics.

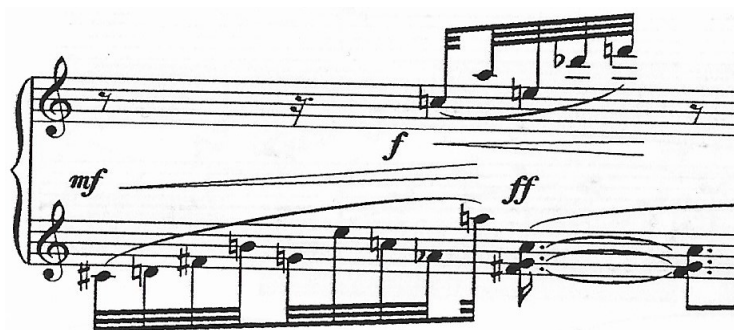


Fig. 31. *Essay XVIII - extended canonical motif*

At the climax of this section, two vertical structures can be seen (fig. 32). The relationship between the two structures, although performed on different keyboards, is complementary. Overall, you get the feeling that it is a vertical structure made up of only 9 notes. In a serious sound spectrum in *fff* dynamics, starting from the point of view that we can juxtapose the mentioned structures, the construction is as follows: (major 3rd, perfect 4th, minor 2nd, major 3rd, minor 3rd, minor 2nd, minor 2nd, perfect 4th). In other words, translating into isobematic language: intervals 4, 5, 1, 4, 3, 1, 1, 5.





Fig. 32. *Essay XVIII - vertical structure in the low tessitura*

The vertical structure gradually dismembers until it rests on the note C which will, in an attacca movement, begin the *molto vivo* movement.

It should be noted that the *meno mosso: moderato* section creates a kind of branching of the materials used and uses the two keyboards of the accordion as if one were an extension of the other in a relationship of complementarity, independence and innovation in musical writing.



Fig. 33. *Essay XVIII - end of the section meno mosso: moderato*

The *molto vivo* section (fig. 34) reveals virtuosity and puts the two keyboards in direct confrontation, through opposite movement. The right-hand keyboard starts the section on the note C while the left-hand keyboard starts on the note G (perfect 4th below), in a canonical speech at the distance of one fusa.



Fig. 34. *Essay XVIII - beginning of the section molto vivo*

The speech seems to move towards the high pitch (fig. 35), the movements that characterize this section are undulatory and the musical text is never repeated.

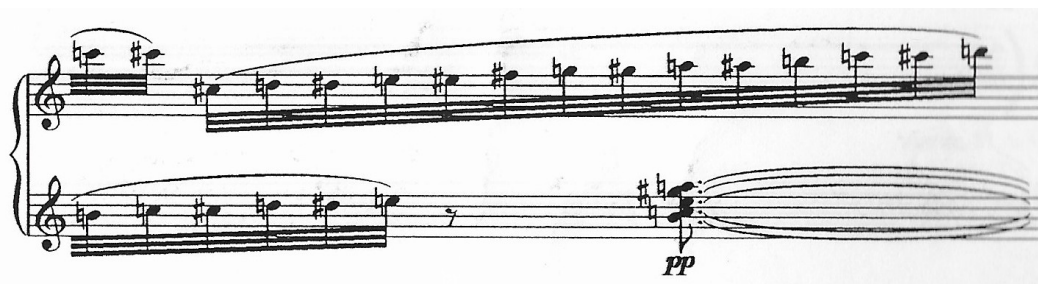


Fig. 35. *Essay XVIII - upward movement by half-tones in the section molto vivo*

The end of the *molto vivo* section ends at the end of the second system on page 17, with a vertical block on the left-hand keyboard (B, C, E, G#, A) while the right-hand keyboard performs small half-tone movements ascending towards the note D 5 (fig. 36).





The Lento tranquillo section (end of page 17) begins on the note D, creating a melodic speech (long notes) and simultaneously polyphonic, especially from the second system on page 18 with the entry of F# and, later Bb, on the keyboard of the left hand as if it were a wind instrument. It should be noted that the central staff more clearly highlights the harmonic structure, as it does not include the rhythmic complexity of the upper staff (fig. 38).

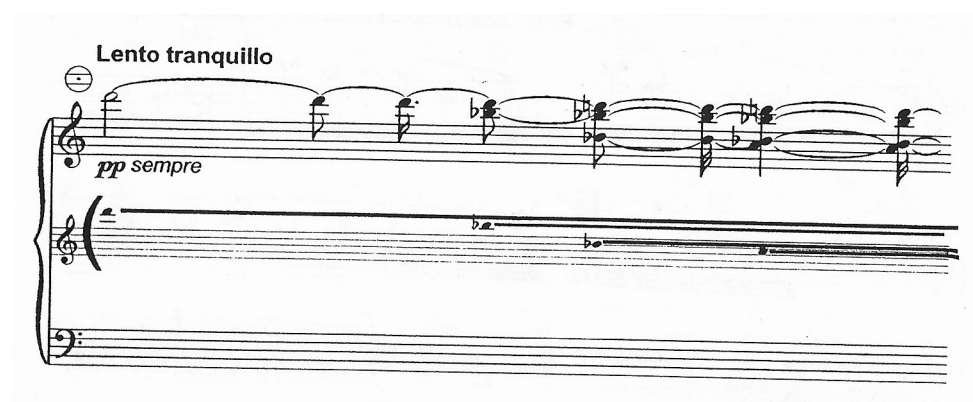


Fig. 38. Essay XVIII - beginning of the section *lento tranquillo*

The penultimate section, which begins at the end of the second system on page 19, supports its base on a vertical block consisting of Bb, B, Eb, added to the diminished octave (G b, G) making space for the note F that will be repeated and ornamented in the upper voice.

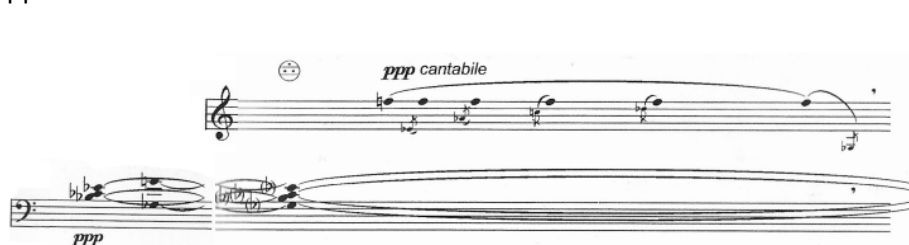


Fig. 39. Essay XVIII - moment of transition in the section *lento tranquillo*

From this moment on, wanderings emerge, both ascending and descending, based on material previously presented in a kind of monologue (with one voice).

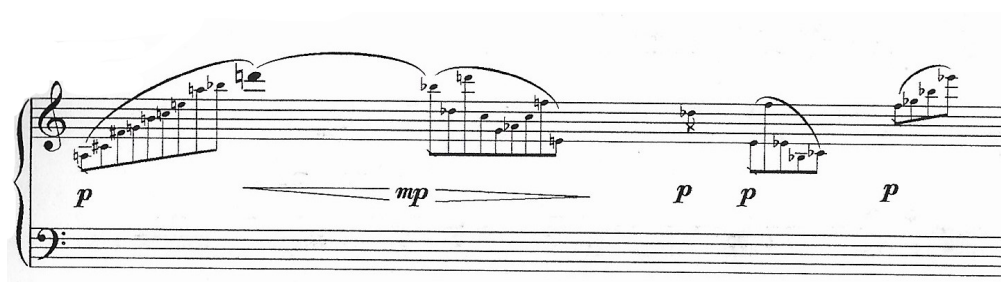


Fig. 40. Essay XVIII - wanderings in the section *lento tranquillo*

The work Essay XVIII ends in a high tessitura with the suspended notes (D, Eb, E, F, F#) in vibrato at a slow and sweet tempo, in a dynamic that gradually decreases. The fact that it is a cluster eliminates any intervallic characteristics from the sound, thus ending up with a neutral and colourless sound.

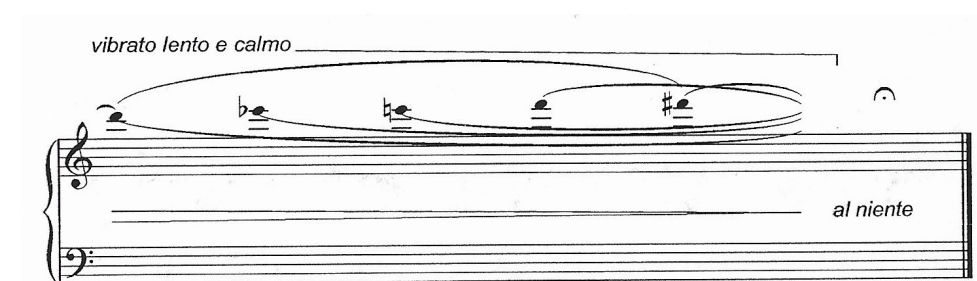


Fig. 41. Essay XVIII - end of the work - ascending chromatic motif

### 3. Conclusion

The writing for accordion in Christopher Bochmann's Essay XVIII meets the technical and sound possibilities of the accordion. It is presented in an accessible way that highlights the performer's mastery. On the other hand, the work prepares the listener for moments that are not visible at the outset but that gradually emerge.

In this context, we can observe the speech and the composition techniques used: chord rotations, fugata entries, canons, use of numerical proportions, use of all the chromatic scale with moments of agitation, *molto vivo* and moments of tranquility, with legato articulation in a sound spectrum that extends, in terms of dynamics, from *pp* to *fff*.

In a language of equal steps in which all relations between sounds are equal, the discourse becomes singular in the search for the new, for creativity, for good taste in musical aesthetics, to the detriment of routine standards in which, from the outset, nothing is added again.

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