

Cluster Typography

Jean-Michel Hufflen

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What is a *cluster*?

First idea: hands flat on keys of a piano.

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White keys? or black ones? or both?

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Using *micro-intervals*.

What is a *cluster*?

First idea: hands flat on keys of a piano.

White keys? or black ones? or both?

Using *micro-intervals*.

A *cluster* is a chord comprising at least three adjacent notes of a scale.

A cluster may be *tonal*

Example: Henryk Mikołaj Górecki's *3rd Symphony*.

Example: Henryk Mikołaj Górecki's *3rd Symphony*.

The first system of the musical score features five staves. The vocal line (S) begins with a treble clef and a key signature of one sharp (F#). It starts with a half note G4, followed by a half note A4, and then a half note B4, all marked with a piano (*p*) dynamic. The lyrics "Sy - n - ku" are written below the notes. The piano accompaniment consists of four staves: Violin I (vn I), Violin II (vn II), Viola (vl), and Violoncello (vc). The violin parts play a sustained half note G4, while the viola and cello parts play a sustained half note E3. The system concludes with a fermata over the final notes.

Whole-tone cluster

H. M. Górecki's *2nd Symphony*.

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H. M. Górecki's *2nd Symphony*.



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Chromatic cluster

Example: Dmitri Shostakovich's *14th Symphony*.

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Example: Dmitri Shostakovich's *14th Symphony*.

V-ni
(div.
in 10)

The image displays a musical score for Violins (divided in 10) from Dmitri Shostakovich's 14th Symphony. The score is written on ten staves, each representing a violin part. The notation is in treble clef and features a complex chromatic cluster, characterized by rapid, sequential chromatic movements across the staves. The score is divided into three measures, each containing a dense, chromatic cluster of notes. The notation is in black ink on a white background, with a light blue background for the right side of the slide.

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Micro-tonal cluster

Example by Alfred Schnittke: *1st Concerto grosso's* end.

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Micro-tonal cluster

Example by Alfred Schnittke: *1st Concerto grosso's end.*

The image displays a musical score for the end of the 1st Concerto grosso by Alfred Schnittke. The score is written for a string ensemble, with staves numbered 1 through 6, and then 1 through 3 for a second section. The notation includes various micro-tonal clusters, indicated by the 'sul pont.' (sul ponticello) instruction and the 'ppp' (pianissimo) dynamic marking. The clusters are represented by dense, vertical lines of notes, often with a curved line above them, suggesting a sustained or glissando effect. The score is presented in a two-measure format, with the first measure showing the initial cluster and the second measure showing the continuation or resolution of the cluster.

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Quite standardised

Double stem—up and down—for chromatic clusters.

Quite standardised

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Double stem—up and down—for chromatic clusters.

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The image displays a musical score for piano and c. solo. The piano part is written in treble and bass staves, featuring chromatic clusters indicated by double stems (up and down) and dynamic markings like *piano*, *mp*, and *mp*. The c. solo part is written in a single staff, showing a continuous, wavy line representing a solo performance. The score is marked with a 3-measure rest and a 5-measure rest, indicating a specific rhythmic structure.

Using thick horizontal lines. . .

. . . but make precise the notes belonging to the cluster.

Using thick horizontal lines. . .

. . . but make precise the notes belonging to the cluster.

Example 1: H. M. Górecki's *Old Polish Music*.

Using thick horizontal lines...

... but make precise the notes belonging to the cluster.

Example 1: H. M. Górecki's *Old Polish Music*.

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vn I
e
II

1. 2. 3. 4. 5. 6. 7. 8.

vn III

1. 2. 3. 4. 5. 6. 7. 8.

Using thick horizontal lines (con'd)

Example 2: Krzysztof Penderecki's *Threnody*.

Using thick horizontal lines (con'd)

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Example 2: Krzysztof Penderecki's *Threnody*.

ord. 1-12

(A) 1. 2...

(A) 13, M...

rd. 13, M...

1 p. ord.

15

f ppp

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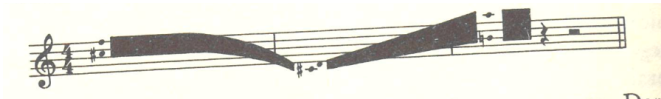
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More expressive power

More changing, more random. . .

More changing, more random...

Special notations



Even more

Sofia Gubaidulina's *De Profundis*, for *bayan* (chromatic accordion).

Even more

Sofia Gubaidulina's *De Profundis*, for bayan (chromatic accordion).

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Other examples extracted from Sofia Gubaidulina's.

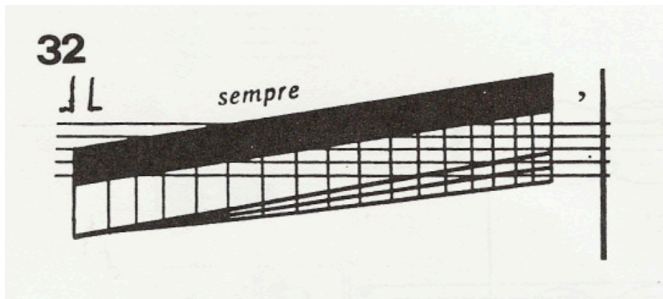
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Deliria (con'd)

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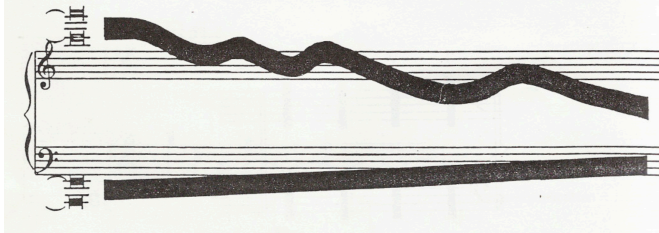
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Tiré de DE PROFONDIS (S. Gubaidulina)

CLUSTER AVEC Mts ASCENDANT ET DESC



Deliria (con'd)

György Ligeti's *Volumina*, for organ.

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György Ligeti's *Volumina*, for organ.

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Right hand

Left hand

Pedal

(sempre cresc.)

R. H. and L. H. on different manuals

cresc. molto

fff

Full organ; all manuals coupled to great

No break in cluster

Continue to sustain cluster on great with one hand

About music software

Software such as Sibelius and Finale \Leftarrow clusters pictured as *vertical bars*.

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New notation for modern (bad?) music?

New notation for modern (bad?) music? But the first clusters were written in 1738 by Jean-Féry Rebel for his ballet *Les Éléments*!

New notation for modern (bad?) music? But the first clusters were written in 1738 by Jean-Féry Rebel for his ballet *Les Éléments*!

Simple concept, difficult to put down.