

# GRAFISK NOTATION I NY DANSK MUSIK

## GRAPHIC NOTATION IN NEW DANISH MUSIC

Produceret af Dansk Komponistforening v. Carl Bergstrøm-Nielsen i 1992  
til Composers' Biennale, i samarbejde med Dansk Musik Informations  
Center.

Produced by Danish Composers Society /Carl Bergstrøm-Nielsen 1992  
for Composers' Biennale, in collaboration with Danish Music Information  
Center.

Denne dokumentation viser ikke hvordan layout på plancherne tager sig ud.

This documentation does not indicate the layout of the sheets.

6 plancher i højformat 84 x 60 cm.  
En supplerende 13 minutters video (computerfil, DVD eller VHS) findes.  
Materialerne ligger i en flightcase.

6 plates 84 x 60 cm  
Supplementary 13 minutes video (computerfile, DVD or VHS)  
Materials come in a flightcase.

Udstillingen har været vist ved festivaler, musikkonservatorier, i biblioteker, på Louisiana  
museet og andre institutioner i Danmark 1992-96.

The exhibition has been shown at Festivals, music conservatories, libraries, at Louisiana  
Museum of Modern Art and other institutions in Denmark 1992 through 1996.

Yderligere oplysninger / More information from  
Carl Bergstrøm-Nielsen: [www.intuitivemusic.dk/intuitive/imail.htm](http://www.intuitivemusic.dk/intuitive/imail.htm)  
mobile phone 2820 5688.

Plancherne Grafisk Notation 1-8 er produceret af  
Dansk Komponistforening og udstillet første gang ved  
Composers' Biennale 1992.

Redaktion: Carl Bergstrøm-Nielsen.

Tilrettelægning: Carl Bergstrøm-Nielsen i samarbejde med  
MIC (Dansk Musik Informations Center).

Edition Wilhelm Hansen takkes for tilladelse til at gengive  
uddrag fra værker af Bent Lorentzen, Per Nørgård, Niels  
Viggo Bentzon samt Helena Borum m.fl.

Samfundet til Udgivelse af Dansk Musik takkes for  
tilladelse til at gengive værker af Jan Maegaard, Erik  
Jørgensen, Pelle Gudmundsen-Holmgreen, Gunner Møller  
Pedersen, Henrik Colding-Jørgensen og Axel Borup-  
Jørgensen.

Folkeskolens Musiklærerforening takkes for tilladelse til at  
gengive værker af Ivar Frounberg og John Frandsen.  
Ligeledes tak til Grete Aagaard Andersen og Heje Hansen.

En tak for hjælp til komponisterne - og til Gyldendal,  
Lydarkivet på Statens Museum for Kunst v. William Louis  
Sørensen samt Jens Rossel.

The plates Graphic notation 1-8 have been produced by Danish Composer's  
Society and were first exhibited at Composer's Biennale 92.

Editor: Carl Bergstrøm-Nielsen.

Preparation: Carl Bergstrøm-Nielsen in cooperation with Danish Music  
Information Center (MIC).

We thank Edition Wilhelm Hansen for permission to reproduce excerpts of  
works by Bent Lorentzen, Per Nørgård, Niels Viggo Bentzon and Helena Borum  
et al.

We thank The Society for Publishing Danish Music for permission to  
reproduce works by Jan Maegaard, Erik Jørgensen, Pelle Gudmundsen-  
Holmgreen, Gunner Møller Pedersen, Henrik Colding-Jørgensen and Axel  
Borup-Jørgensen.

We thank Folkeskolens Musiklærerforening for permission to reproduce works  
by Ivar Frounberg and John Frandsen.

Likewise, we thank Grete Aagaard Andersen and Heje Hansen.

We thank the composers for their assistance - and the publisher Gyldendal,  
William Louis Sørensen at The Sound Archive at the State Gallery of Art  
and Jens Rossel.

### WHAT IS GRAPHIC NOTATION?

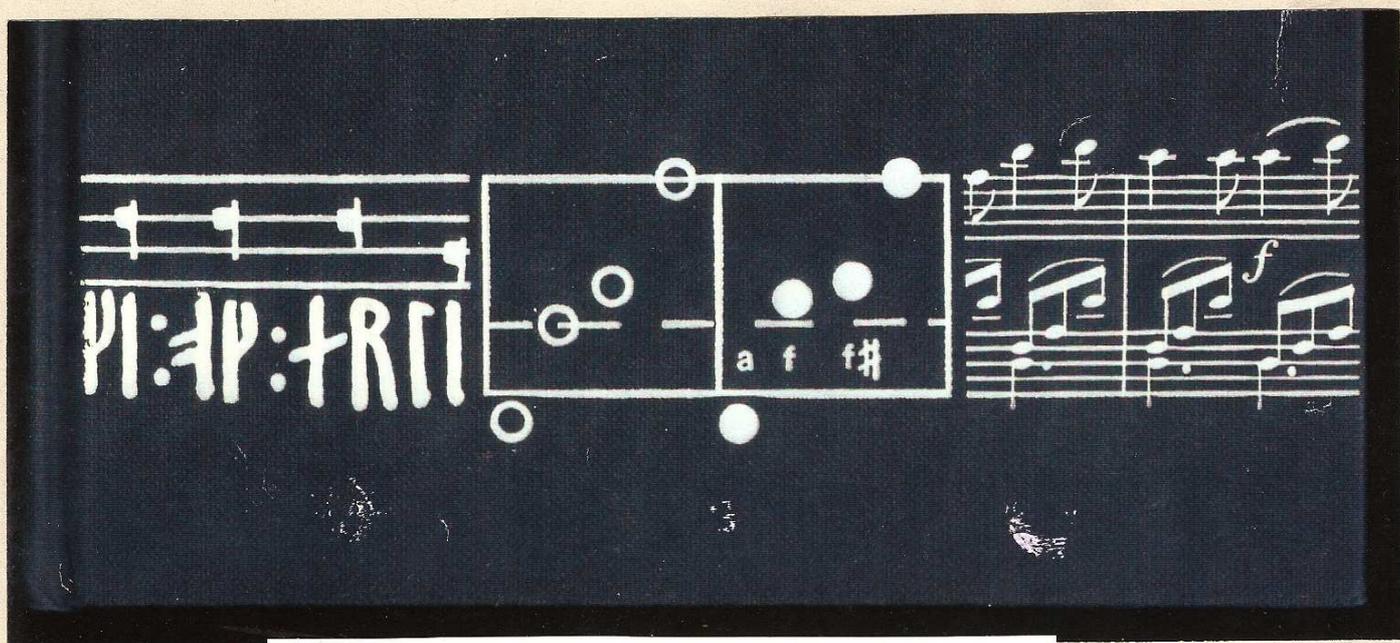
GRAPHIC NOTATION MEANS MUSIC WRITTEN DOWN WITH OTHER SIGNS THAN NOTES. FROM THE ANCIENT GREEKS, "GRAPHIC" MEANS "CONCERNING THE ART OF DRAWING OR WRITING". BUT THE CONCEPT OF GRAPHIC NOTATION EMERGED DURING THE SIXTIES AND BEGAN TO SIGNIFY A MULTITUDE OF ADDITIONS TO THE WELL-KNOWN WAY OF WRITING MUSIC AS WELL AS NEW SIGN SYSTEMS - NOW AND THEN SIMPLY "TO PLAY FROM A PICTURE".

NOTATION FORMS ONLY A PART OF ALL THE VISUAL ITEMS THAT CAN SURROUND THE MUSIC. BUT FOR THE COMPOSER IT CAN BE A VITAL PART. AND SINCE LONG, NOTES HAVE HAD A FASCINATING EFFECT TO ALL KINDS OF PEOPLE LOOKING AT THEM. AS FORMS - AS SYMBOLS THAT CAN MAKE AN IDEA OF THE MUSIC DESPITE ITS PASSING NATURE.

# Hvad er grafisk notation?

Grafisk notation er nedskrivning af musik med andre tegn end noder. Fra de gamle grækere betyder "grafisk" noget, der vedrører tegne- eller skrivekunst. Men begrebet "grafisk notation" dukkede op i 60-erne og kom til at betyde en mangfoldighed af både tilføjelser til det kendte nodebillede, nye tegnsystemer og undertiden slet og ret at "spille efter et billede".

Notation er kun en del af alt det visuelle, der kan omgive musikken. Men for komponisten kan det være en vital del. Og noder har længe fascineret udadtil. Som former - som symboler, der kan bringe den ellers flygtige musik på begreb.



Gyldendals Musikhistorie fra 1984 viser bl.a. et glimt fra Bent Lorentzens *Puncti* for orgel fra 1973 uden på bindet.

The Gyldendal Music History from 1984 displays among other notations a glimpse from Bent Lorentzen: *Puncti* for organ from 1973 on its cover.

# "Passageværk", optisk notation, clusters m.m.

Klassisk musik kender til fænomener, som falder uden for de enkle og eksakte metriske rytmer, som noderne ellers bygger på. Triller og forslag, som udføres hurtigt og "pr. fornemmelse". I solokoncerter kan kadencer kan forslagene svulme op til "passageværk" af større omfang. I ny musik kan sådanne mere irrationelle fænomener i forhold til afgrænsede temaer og motiver få en fremtrædende plads, og det kan give sig udslag i udvidelser af allerede kendte fænomener i notationen. Her kan detaljeringen af enkelte toner forsvinde til fordel for en aftegning af bevægelsesformen.

Tendensen i ny musik til at erstatte enkle "dadum"-rytmer med mere komplekse, uregelmæssige fænomener førte til optisk notation, hvor man afskaffede metrum og taktstreger. Musikeren skal så udføre nodeprikkerne og linjerne ud fra sit visuelle indtryk af afstanden mellem dem, ikke ved at tælle. På samme måde kan det forekomme, at de fem nodelinjer udelades og blot bevægelsesmønstret vises.

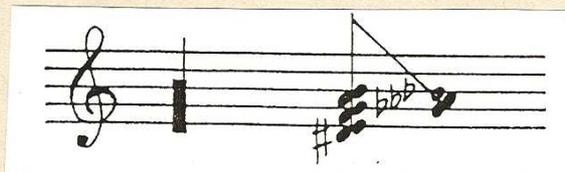
Clusteret, som er en tæt klynge eller håndfuld af toner, har det klassiske nodesystem ikke forudset. Det skrives ofte som en "klods" i rektangelform, som der kan være mange varianter af.

## "PASSING FIGURES", OPTICAL NOTATION, CLUSTERS AND MORE...

CLASSICAL MUSIC KNOWS OF PHENOMENA BELONGING OUTSIDE THOSE SIMPLE AND EXACT METRICAL RHYTHMS ON WHICH THE NOTES HAVE OTHERWISE BEEN BUILT. TRILLS AND GRACE NOTES WHICH ARE PERFORMED FAST AND BY INTUITION. IN NEW MUSIC, SUCH TO A HIGHER DEGREE IRRATIONAL PHENOMENA MAY TAKE A MORE PROMINENT PART, AND THAT CAN LEAD TO EXPANSIONS OF KNOWN PHENOMENA IN THE NOTATION. THE GOING INTO DETAILS OF SINGLE NOTES MAY DISAPPEAR AND A DEPICTION OF THE MOVEMENT'S OUTLINE MAY APPEAR INSTEAD.

THE TENDENCY IN NEW MUSIC TO REPLACE SIMPLE "HUMPTY-DUMPTY" RHYTHMS BY MORE COMPLEX, IRREGULAR PHENOMENA LEAD TO OPTIC NOTATION WHERE METRE AND BARLINE WERE ABOLISHED. THE MUSICIAN THEN PERFORMS THE NOTE-DOTS AND LINES USING HIS OR HER VISUAL IMPRESSION OF THE DISTANCE BETWEEN THEM, NOT BY COUNTING. LIKewise, IT MAY HAPPEN THAT THE FIVE STAFF LINES ARE ABOLISHED AND JUST THE PATTERN OF MOVEMENT IS SHOWN.

THE CLUSTER WHICH IS A HANDFUL OF NOTES WAS NOT FORESEEN BY THE CLASSIC NOTE SYSTEM. OFTEN IT IS WRITTEN AS A BLOCK IN A RECTANGULAR FORM. MANY VARIANTS OF THIS EXISTS.



Her ses et enkelt tegn for et kromatisk cluster og dets "oversættelse" ved Bent Lorentzen.

This is a simple sign for a chromatic cluster and its "translation". By Bent Lorentzen.

Her ses en passage med hurtige løb. Nodehalse ses, men skal næppe tælles og fungerer snarere som visuel antydning af en mængdes størrelse. Bevægelsens kontur fremhæves.

Fra Jan Maegaard: *Musica Riservata II* for blæserkvartet; 1976.

Here is a passage with fast figures. Tails on the notes are drawn but should probably not be counted. They function rather as a suggestion on the size of the amount of notes. The outline of the movement is accentuated.

From Jan Maegaard: *Musica Riservata II* for reed quartet; 1976.

Mulighederne i forslags-agtige figurer og hjælpelinjer kan her siges at blive strakt til det yderste. Cirklen er en drejeskive, der kan stilles på.

Fra Jørgen Plaetner: *Relativités II og III* for ensemble; 1960-62.

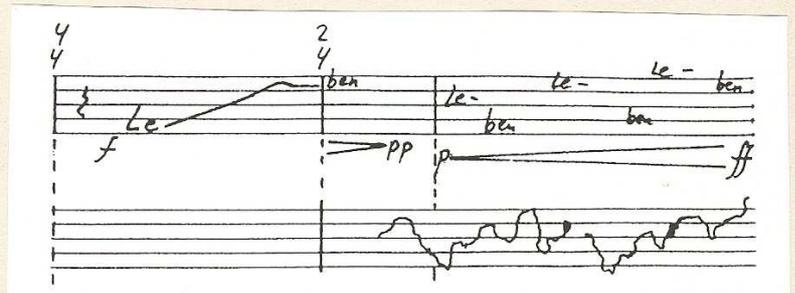
The possibilities of grace notes and auxiliary lines seem to have been taken to their utmost extremes here. The circle can be turned.

From Jørgen Plaetner: *Relativités II and III* for ensemble; 1960-62.



Forskellige udgaver af optisk notation.  
 Fra Pelle Gudmundsen-Holmgreen: *Chronos* for orkester; 1962,  
 Per Nørgård: *Canon* for orgel; 1971.

various types of optic notation.  
 From Pelle Gudmundsen-Holmgreen: *Chronos* for orchestra; 1962 and Per Nørgård: *Canon* for  
 organ; 1971.



Den glidende melodiske bevægelse, glissando, går på tværs af den konventionelle opdeling af tonerummet i oktaver med hver 12 toner.  
 Her ses 2 samtidige, forskellige udgaver fra Jørgen Lekfeldt: *Leben und Nebel*; 1984.

Sliding melodic movement, glissando, goes across the conventional dividing of the tone space into octaves, each with 12 tones.  
 Here are 2 simultaneous, different versions from Jørgen Lekfeldt: *Leben und Nebel*; 1984.

Et aleatorisk forløb er i store træk styret, men detaljer er overladt til tilfældet. Man lader et endeligt antal muligheder veksle i en uforudseelig følge, ligesom når man kaster med en terning (alea på latin = terning). Det kan ske ved at musikerne selv vælger, hvordan de skifter mellem elementerne.

Oftes ses den vifteformede signatur der optræder hos Gunner Møller Pedersen (fra *Music for a Brass Band*; 1968).

En anden udformning ses hos Henrik Colding-Jørgensen (fra *4 japanske tegninger* for instrumentalensemble; 1982).

An aleatoric sequence is controlled in its outline while details are left to chance. A finite number of possibilities alternate, forming an unforeseeable sequence - like throwing a dice. It may be accomplished by letting the musicians choose when to alternate between elements.

Often, a fan-shaped signature is seen like in Gunner Møller Pedersen: *Music for a brass band*; 1968.

Another version is shown in the excerpt from Henrik Colding-Jørgensen: *4 japanske tegninger* <Four Japanese Drawings> for instrumental ensemble; 1982.

The image shows a handwritten musical score for an aleatoric sequence. At the top, a series of hand-drawn symbols are arranged in a fan shape: a crown, a circle with '3"', a circle with '1', a circle with '2"', a circle with '2', a circle with '4"', a circle with '3', a circle with '5"', and a circle with '4'. Below these symbols are five staves of music. The top staff is labeled 'E<sub>b</sub>cornet' and contains a wavy line with 'tr.' markings. The middle three staves are labeled 'Solo B<sub>b</sub>' and contain rhythmic patterns with 'ff on mouthpiece' markings. The bottom two staves are labeled 'B<sub>b</sub>cr. II' and also contain rhythmic patterns with 'ff on mouthpiece' markings. A vertical dashed line is drawn on the right side of the score.

97

98

99

100

101

102

1 *p* *mp* *mp* *mf* *pp* *mp* *p* *mp*  
 2 *mp* *pp* *pp* *pp* *pp* *p* *mp*  
 3 *pp* *mp* *pp* *pp* *pp* *p*  
 4 *pp* *mp* *pp* *pp* *pp* *p*  
 VI. *arco* *pp* *mf* *pp* *pizz* *p*  
 5 *f* *pp* *mf* *pp* *pizz* *p*  
 6 *f* *pp* *mf* *pp* *pizz* *p*  
 7 *f* *pp* *mf* *pp* *pizz* *f*  
 1 *senza sord.* *arco* *pp* *mf* *pp* *pizz* *p*  
 2 *senza sord.* *arco (scacc.)* *pp* *mf* *pp* *pizz* *p*  
 1 *senza sord. (Pizz)* *mf* *p*  
 2 *senza sord. (Pizz)* *mf* *p*  
 1 *mf* *p*  
 1 *mp* *p*  
 2 *mf* *p*

$\text{♩} = \text{♩}$

Xylorimba

Percussion

1) See note above.  
2) Improvise a melodically sharp-toothed progress (within a dodecaphonic atmosphere) in fast  $\text{♩}$ -beats at the same rate as the preceding percussion, ending in a deep note together with a beat on an instrument of percussion.

(modello ritmico  $\text{♩} = 48$ )

Piano I - II

Contre C

Double bass

Temple blocks

Piatto

Gong

1) Clusters with both hands (black and white keys).  
2) Col legno battuto on different high notes.

Hos Erik Jørgensen og hos Birgitte Alsted findes "passageværket" også. Det kan være meget andet end enkle skalabevægelser!  
Fra Erik Jørgensen: *Quintet*; 1962, og Birgitte Alsted: *Stykke 2 for kammerensemble*; 1973.

In these scores by Erik Jørgensen and Birgitte Alsted "passing figures" are seen. It can be many other things than going up and down simple scales!

From Erik Jørgensen: *Quintet*; 1962 and Birgitte Alsted: *Stykke 2* <Piece No.2> for chamber ensemble; 1973.

24

Handwritten musical score for piano, consisting of four staves (a, b, c, d). The score includes various dynamic markings such as *pp*, *p*, *mf*, and *f*. It features performance instructions like "gva" and "bva" with arrows indicating articulation. Staves b and c contain specific performance directions: "P ELLER P" and "KUN PP". A legend on the right side of the score lists: "STEMMER NÆR OG FJERN", "VANDFALD OG LØV", and "FALDENDE". Below the legend, it is noted: "hai-ku gendigtet af Hans-Jørgen Nielsen ©".

\*) DER SPILLES SMA LEGATO-MOTIVER PÅ 1, 2, 3 ELLER 4 TØNER, MED PAUSER MELLEM MOTIVERNE. TØNERNE TIL HVERT ENKELT MOTIV VÆLGES FRA EN AF DE ANGIVNE 4-TØNEGRUPPER.

COPYRIGHT © 1982 H. COLDING-JØRGENSEN

Handwritten musical notation and a box notation diagram. The notation includes "allegro string.", "stacc.", "mf", and "p". The box notation is a square with a horizontal line, containing a box with "ba" and a dynamic range from "P" to "f". The text "andante acc. 12" (5)" is written above the box. Below the box, the word "Stacc." is written.

Toner til aleatorisk brug og "kasse-notation" fra Carl Bergstrøm-Nielsen: *Quadrivium* for klaver; 1972.

Notes for aleatoric use and "box-notation" from Carl Bergstrøm-Nielsen: *Quadrivium* for piano; 1972.

# Nye tegn og tegnsystemer

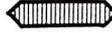
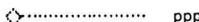
I klassisk musik holdt melodi, harmoni og rytme sig inden for forudsigelige rammer. I ny musik er det ikke sådan, og i de enkelte værker kan helt forskellige sider af lydmaterialiet sættes i fokus. Hertil kan svare nyopfundne tegn og tegnsystemer. Ganske vist kendte man også før til at opfinde signaturer fx. for forskellige instrumenter og til at lave diagrammer for opstilling m.v. Men her breder opfindsomheden sig ind i selve anvisningerne for, hvilke lyde der skal frembringes og hvordan.

Ofte forekommende lyde i en given komposition, lydforandringer, spillemåder, i detaljer, i omrids - alt kan der laves tegn for, ganske ifølge det, den musikalske idé kræver.

## NEW SIGNS AND SETS OF SYMBOLS

IN CLASSICAL MUSIC, MELODY, HARMONY AND RHYTHM EXISTED WITHIN FORESEEABLE FRAMEWORKS. IN NEW MUSIC THIS IS NOT SO, AND IN INDIVIDUAL WORKS QUITE DIFFERENT ASPECTS OF THE SOUND MATERIAL CAN BE FOCUSED UPON. NEWLY INVENTED SIGNS AND SETS OF SYMBOLS MAY BE RELATED TO THIS. TRUE ENOUGH, THE INVENTING OF SIGNATURES FOR VARIOUS INSTRUMENTS, OF DIAGRAMS FOR SETTING UP ETC. WERE KNOWN BEFORE. BUT HERE, THE INVENTIVENESS EXTENDS ITS DOMAIN INTO THOSE VERY SIGNS TELLING WHICH SOUNDS ARE TO BE PRODUCED AND HOW.

SOUNDS WHICH OCCUR OFTEN IN A GIVEN COMPOSITION, CHANGES OF THE SOUND, WAYS TO PLAY, IN DETAILS, IN OUTLINE - SIGNS CAN BE MADE FOR ANYTHING, FOLLOWING ENTIRELY THE DEMANDS SET BY THE MUSICAL IDEA.

	Functional Concrete Sounds, mezzoforte	Abrupt, short, forte	Ethereal, long, piano
CI	<p><b>blow</b></p>  <p>Blow down the instruments without sounding tones</p>	<p><b>screach</b></p>  <p>Play with the mouth-piece only, thereby making a screaching sound</p>	<p> normal tone</p> <p> harmonic</p>
	<p><b>special</b></p>  <p>Tone-making with a special fingering. The sound must not be too powerful and should have as little tonal character as possible.</p>	<p> Short accent, ff</p>	<p> p</p>
	<p><b>rattle</b></p>  <p>Rattle-effect with the keys</p>	<p><b>flutter</b></p>  Fluttertonguing	<p> ppp</p>

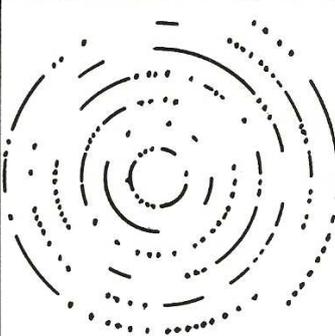
Uddrag af tegnforklaring som viser de tegn, klarinetstemmen bruger i Bent Lorentzen: *Syncretism* for ensemble; 1970.

Excerpt from an explanation of signs showing those used in the clarinet part of Bent Lorentzen: *Syncretism* for ensemble; 1970.

Each musician uses here only one note (sometimes changing its octave) during the whole piece; then the staff becomes superfluous. In return, a changing aleatoric distribution of durations play an important part. Changes in this distribution are indicated by proportional figures with a colon between them, and they are made plain by the circular diagrams.

From Erik Jørgensen: *Notturmo* for orchestra; 1973.

7



*p*  
 $1 : 2 : 1$   
*trm*, *<f>*, *gliss.*

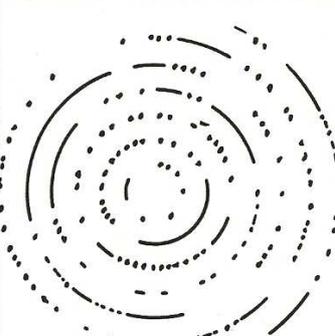
*dim.*  
*e*  
*rit.*

Cl. b. Re  
 Fg. I. Sol $\flat$   
 Fg. II. Re $\flat$   
 Cor. I. Fa  
 Cor. II. La  
 Trb. La $\flat$

19"

16"

9



*p*  
 $1 : 3 : 1/2$   
*trm*, *<f>*, *gliss.*  $\frac{1}{4}$

*dim.*  
*e*  
*rit.*

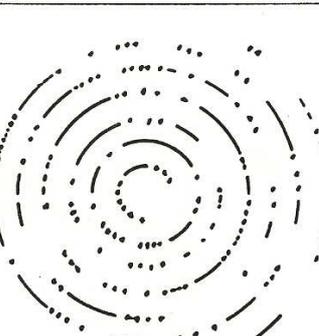
*pizz.*, *c.l.*, *batt.*

Cl. b. Re  
 Cor. I. Fa  
 Vla. II. Re $\flat$   
 Vlc. I. La  
 Cb. II. La $\flat$

15"

Fl. alt. Sol  
 Cor. ing. Mi  
 Tr. Si $\flat$   
 Fg. II. Re $\flat$   
 Vl. II. Mi $\flat$   
 Vl. III. Do  
 Vl. IV. Si  
 Vla. I. Sol $\flat$

8

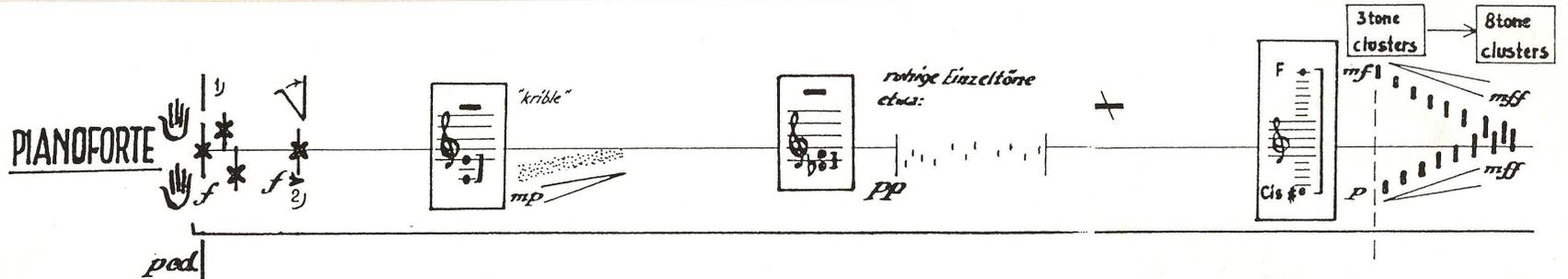


*mf*  
 $1 : 3 : 1/2$   
*trm*, *<f>*, *gliss.*  $\frac{1}{4}$   
*pizz.*, *c.l.*, *batt.*

*dim.*  
*e*  
*rit.*

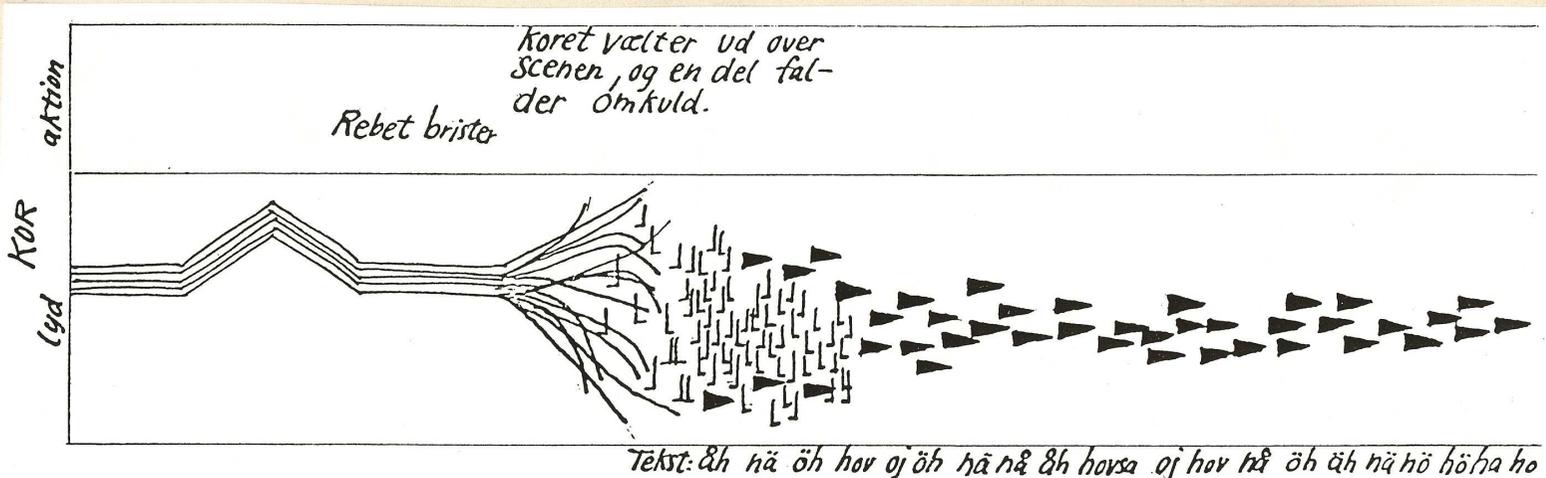
Hver musiker nøjes her med at bruge én tone (undertiden oktavforlagt) hele stykket igennem, og så bliver de fem nodelinjer overflødige. Til gengæld spiller en skiftende aleatorisk fordeling af varigheder en stor rolle. Forskellene i denne fordeling angives med forholdstal med kolon imellem, og de bliver tydeliggjort ved cirkeldiagrammerne.

Fra Erik Jørgensen: *Notturmo* for orkester; 1973.



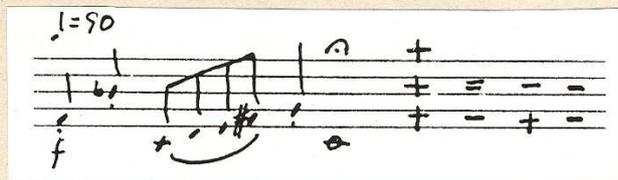
Fra klaverstemmen i Axel Borup-Jørgensen: *Prisma Parafrese* for ensemble; 1965.

From the piano part of Axel Borup-Jørgensen: *Prisma Parafrese* for ensemble; 1965.



Korlyden starter med et cluster som efterfølges af tramp og korte akcentuerede toner. Disse har hver deres særlige tegn.  
 Fra Bent Lorentzen: *Revolution* for kor; 1969.

The choir sound starts with a cluster followed by stamping and short, accentuated tones. These all have their individual sign.  
 From Bent Lorentzen: *Revolution* for choir; 1969.



"Plus-minus"-notationen stammer fra Stockhausen. Musikeren skal gentage figuren og første gang have øget aktivitet i 3 selvvalgte parametre. Fx. kraftigere, hurtigere, højere register. Næste gentagelse skal have uændret niveau i et af parametrene, mindre aktivitet i et andet. Osv.  
 Fra Jørgen Lekfeldt: *Forår*; 1977.

The "plus-minus"-notation originates from Stockhausen: The musician is to repeat the figure and the first time have increased activity in three self-chosen parameters. For instance, louder, faster, higher register. The next repetition must have unchanged level in one of the parameters, less activity in another. Etc.  
 From Jørgen Lekfeldt: *Forår* <Springtime>; 1977.



Den champignon-agtige figur står for en bevægelse med hånden fra hvide til sorte tangenter og tilbage.  
 Fra Niels Viggo Bentzon: *Mycelie. Mykologisk suite for orgel*, 1. sats "Champignon"; 1965.

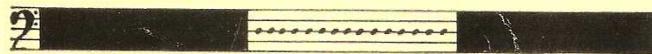
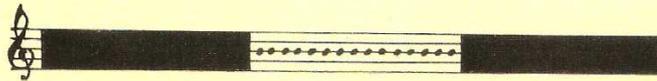
The sign resembling a champignon stands for a movement with the hand from white to black keys and back.  
 From Niels Viggo Bentzon: *Mycelie. Mykologisk suite for orgel*, 1. movement, "Champignon".

## POINT, LINE AND THE SURFACE

MUSIC AND VISUAL ART HAVE POINT, LINE AND THE SURFACE IN COMMON, THE COMPOSER PETER HOCH HAS REMARKED, SYNAESTHETIC ASSOCIATIONS - ASSOCIATIONS GOING FROM ONE SENSE TO ANOTHER THAT WILL GENERALLY BE UNDERSTOOD: LEFT-RIGHT AS DEPICTING TIME, UP-DOWN AS DEPICTING PITCHES, A SURFACE MAY BE TRANSLATED INTO A CHORD, A CLUSTER, A BAND OF FREQUENCIES (FOR INSTANCE, A NOISE) OR A "TIMBRAL SURFACE".

# Punkt, linje, flade

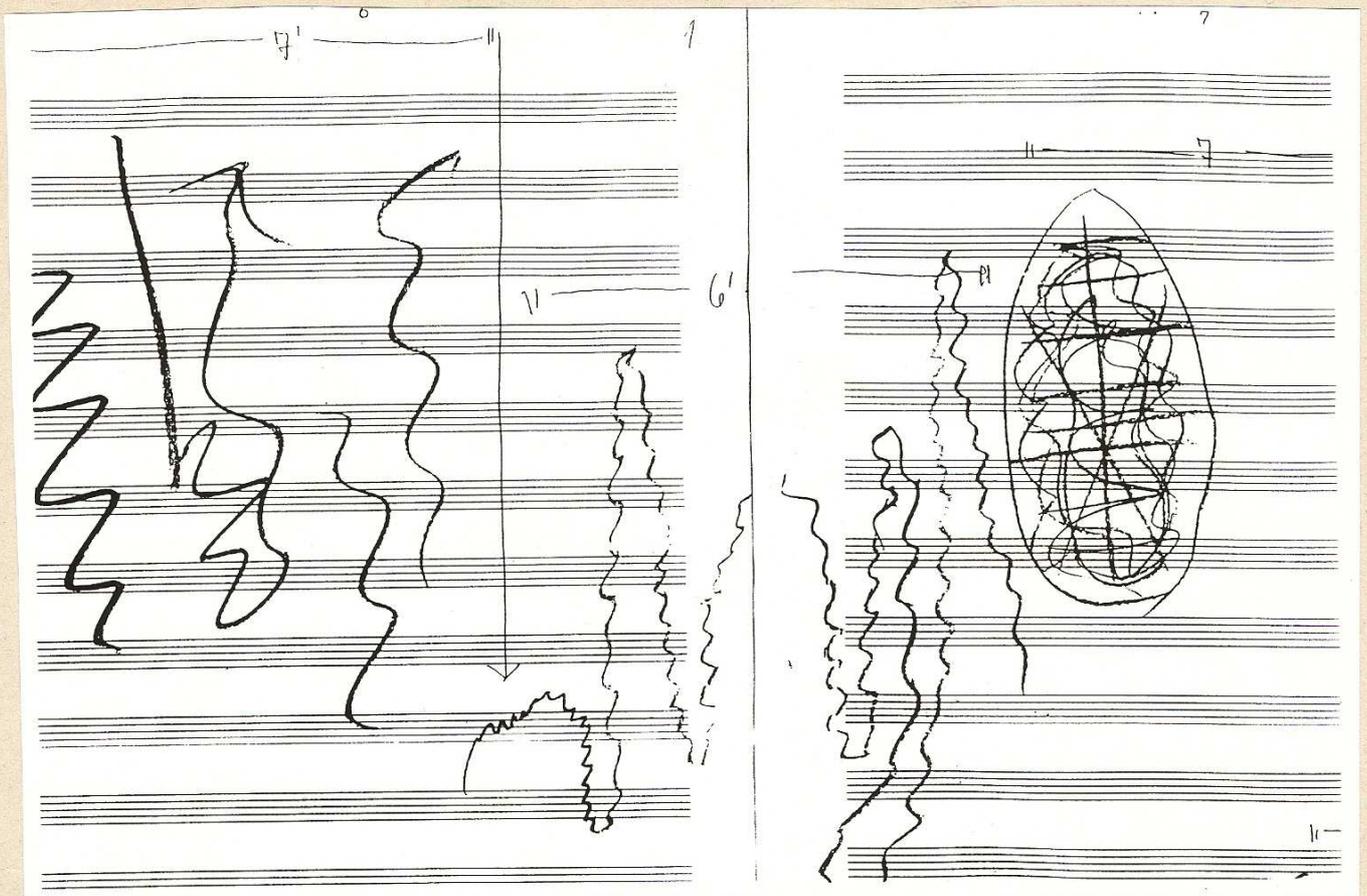
Musik og billede har punkt, linje og flade tilfælles, har komponisten Peter Hoch bemærket. Alment forståelige synæstetiske, dvs. tvær-sanselige associationer: venstre-højre som en tidslinje og op/ned til tonernes højder. Flade kan oversættes til en akkord, et cluster, et frekvensbånd (fx. en støjlyd) eller en klangflade.



black and white - white and black

Henning Christiansen: "Black and white - white and black" fra *Modeller*, 1964-67. Stykket kan fungere som læsemusik, men det kan også spilles.

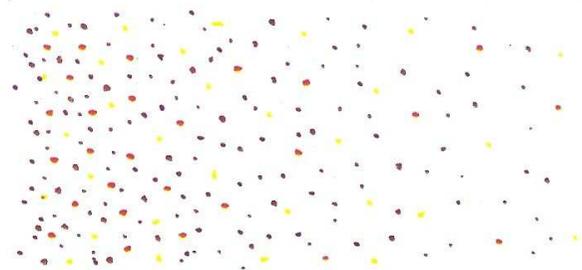
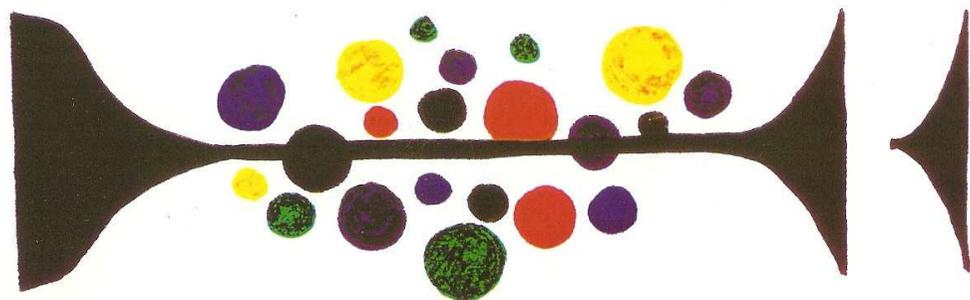
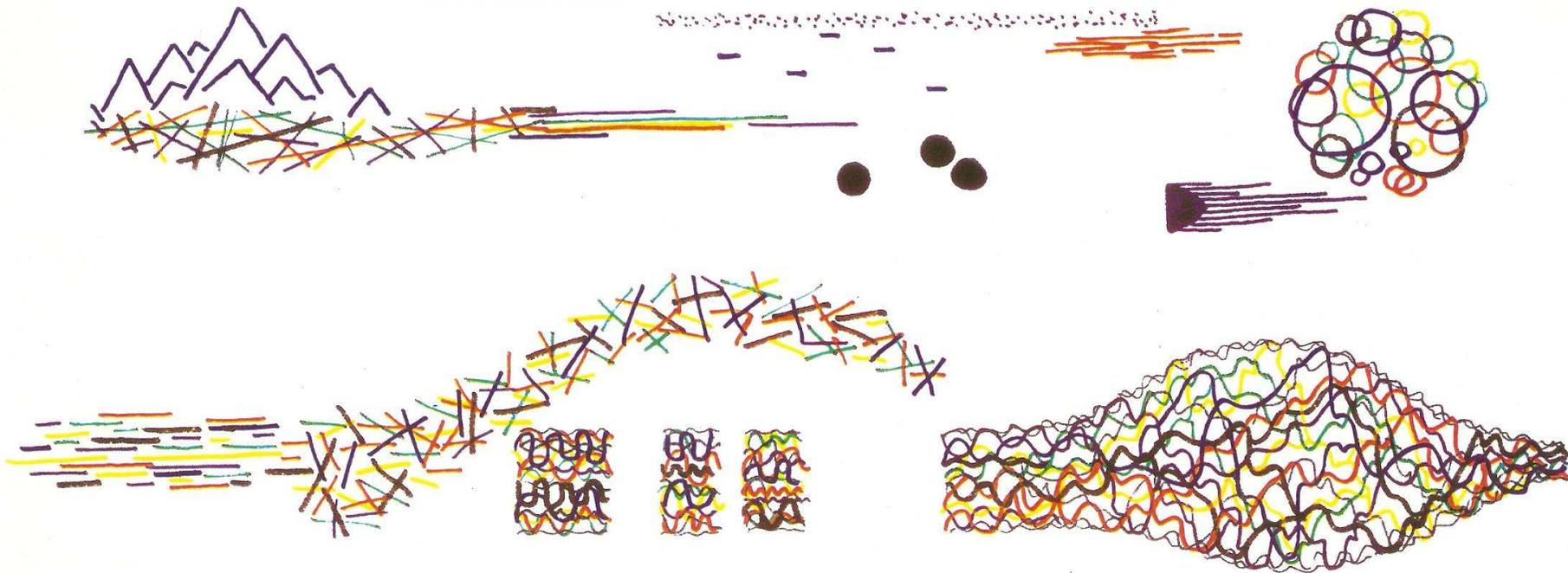
Henning Christiansen: "Black and white - white and black" from *Modeller* <Models>; 1964-67. The piece may function as "music to be read", but it can also be played.



Minutangivelseerne viser, at tegningen gengiver musikkens omrids.  
Fra Niels Viggo Bentzon: *Montmartrekonzert*, 1. sats "Razzia";  
1965.

The indications of minutes show that the drawing gives an outline of the music.  
From Niels Viggo Bentzon: *Montmartrekonzert*, 1. movement "Razzia"; 1965.

From Henrik Colding-Jørgensen: *MUSEIK* for variable ensemble; 1979. Written to the Children's Music Week arranged by DUT (Danish ISCM-Section).

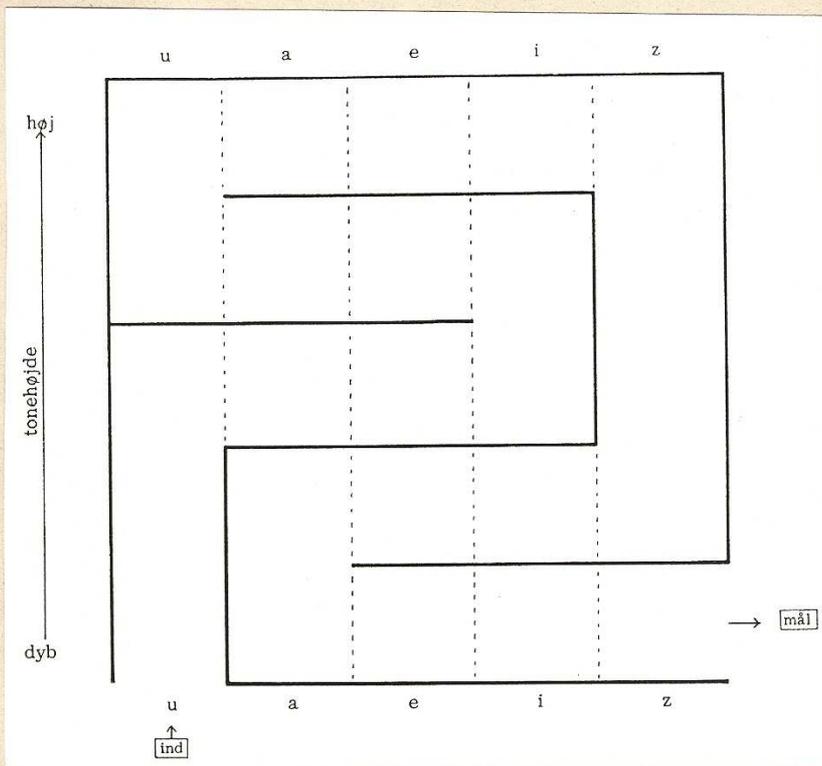


Fra Henrik Colding-Jørgensen: *MUSEIK* for variabelt ensemble;  
1979. Skrevet til DUTs børnemusikuge.

*MUSEIK* (10)  
© 1979 H. Colding-Jørgensen

# Labyrinten og den lige linje

Nogle kompositioner lader ikke stemmerne følge en lige og entydig vej men er snarere en labyrint. Det kan gælde både for stemmernes forløb og for hvordan de mødes og skilles.



Bent Lorentzen: "Labyrintsats" (for kor) fra *Lydformning. Kordramatik*; 1968.

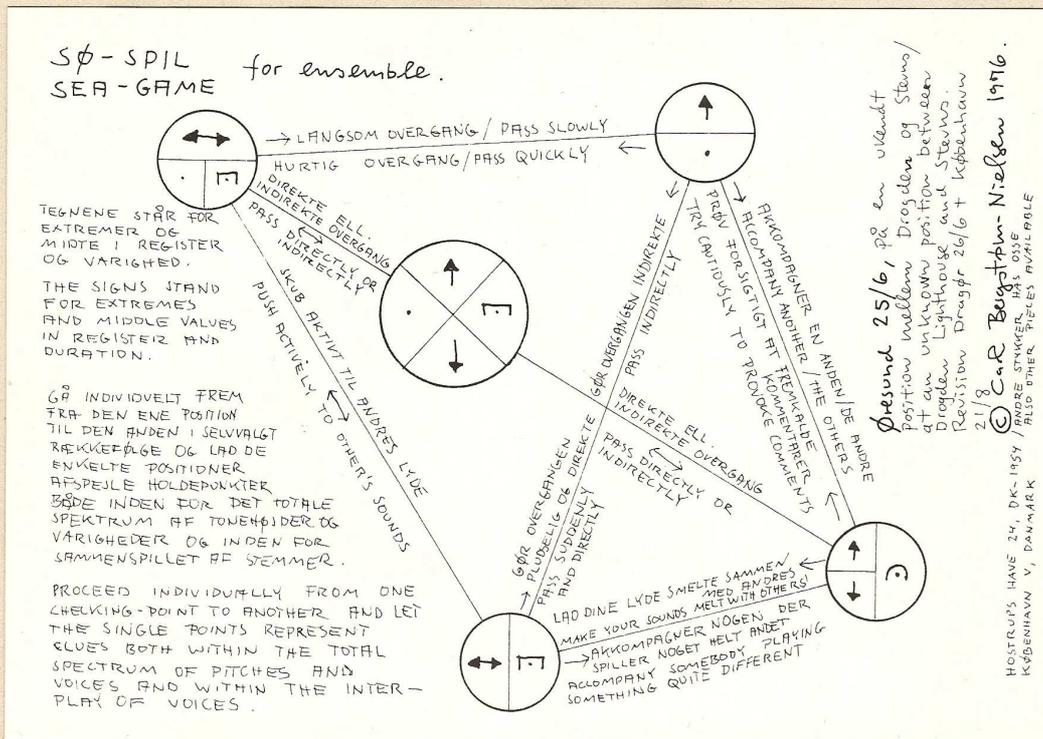
Den enkelte stemme følger en fastlagt vej gennem labyrinten (som har bestemt det snørklede forhold mellem tonehøjder og klangfarver). Koordinationen mellem stemmer kan ske efter "skovtursprincippet". Dvs. at man starter og slutter de samme steder, men gruppen kan sprede sig frit under turen.

Bent Lorentzen: "Labyrintsats" <Labyrinth Movement> (for choir) from *Lydformning. Kordramatik*; 1968.

The individual part follows a fixed route through the labyrinth. The labyrinth governs the complex relation between pitches and timbres. The coordination between voices may take place according to the "picnic principle": the group starts and concludes at the same places, but it may wander freely during the journey.

THE LABYRINTH AND THE STRAIGHT LINE

SOME COMPOSITIONS DO NOT LET PARTS FOLLOW A STRAIGHT AND UNAMBIGUOUS ROUTE BUT IS TO A HIGHER DEGREE A LABYRINTH, THIS MAY BE THE CASE BOTH FOR THE WAY THE PARTS PROCEED AND FOR THE WAY IN WHICH THEY MEET TOGETHER AND DEPART.



Her ses en spille-plan, hvor deltagerne bevæger sig frit rundt uden fast koordination.  
Carl Bergstrøm-Nielsen: Sø-Spil for variabelt ensemble; 1976.

Here is a game field in which participants move around without any fixed coordination.  
Carl Bergstrøm-Nielsen: Sø-Spil <Sea-Game> for variable ensemble; 1976.



I hvert element kan musikeren vælge mellem 3 varianter, og deraf afhænger hvilket element der skal blive det næste, idet der herefter igen er 3 elementer at vælge imellem, osv.  
 Fra Gunnar Berg: *Random* for cello og slagtøj; 1968.

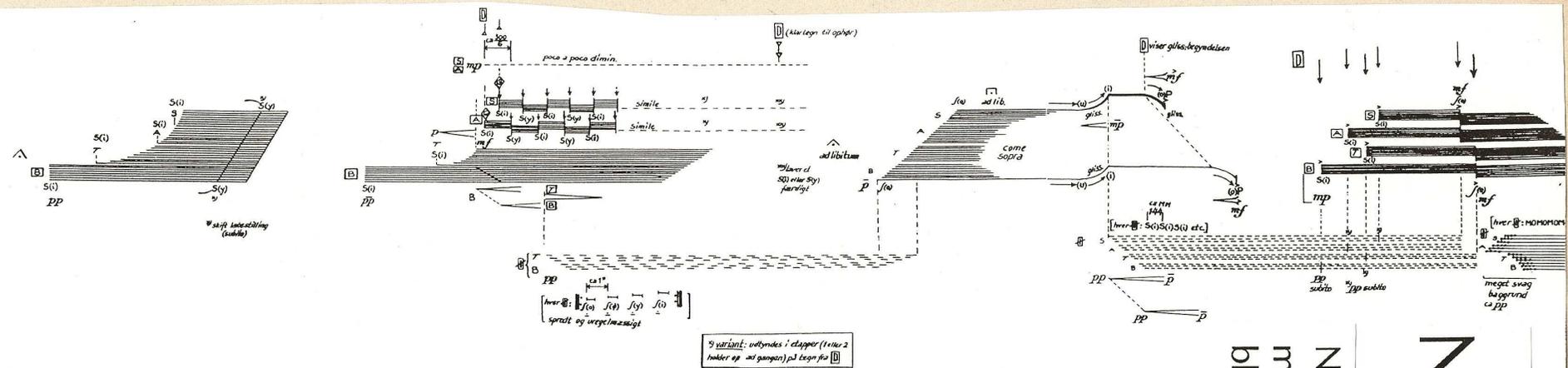
Gunnar Berg  
**RANDOM**  
 [percussion]  
 (1968)

The score is a complex network of musical paths for percussion instruments. It starts with three main branches labeled I, II, and III. Each branch contains musical notation for different instruments: I includes xylophone (xyl), II includes xylophone (xyl) and glockenspiel (gls), and III includes xylophone (xyl) and glockenspiel (gls). The paths are interconnected with various choice points, indicated by circled numbers (1, 2, 3, 4) and boxed numbers (1, 2, 3, 4). These choice points allow the musician to select between different variants of an element, which then leads to the next element in the sequence. The score is annotated with dynamic markings like *pp* and *f*, and includes performance instructions such as *glsp.* and *xyl.*. The overall structure is a branching tree that allows for a wide range of possible musical outcomes.

all rights reserved G.B.

© by SAMFUNDET TIL UDGIVELSE AF DANSK MUSIK

In each element the musician chooses between 3 variants. On this choice depends which element is going to be the next one. After this, there will be 3 elements to choose between again, etc.  
 From Gunnar Berg: *Random* for cello and percussion; 1968.



© axel borup-jørgensen: LYDMØNSTRE II op 62 (1971)

Fra Axel Borup-Jørgensen: *Lydmønstre II op. 62* for talekor; 1971. Borup-Jørgensen "inddamper" nodebilledet.

From Axel Borup-Jørgensen: *Lydmønstre <Sound Patterns> II op. 62* for a choir of speakers; 1971. Borup-Jørgensen evaporates the notation into a condensed version.

## NOTATION AS VISUAL ART

SOME NOTATIONS APPEAR VERY MUCH AS VISUAL ART, BUT THEY MAY NEVERTHELESS DEMAND OR SUGGEST THAT THEY BE INTERPRETED AS A DEFINED JOB.

Nogle notationer kan se meget billedlige ud, men kan alligevel kræve eller lægge op til at blive aflæst på en bunden måde.

# Notation som billedkunst

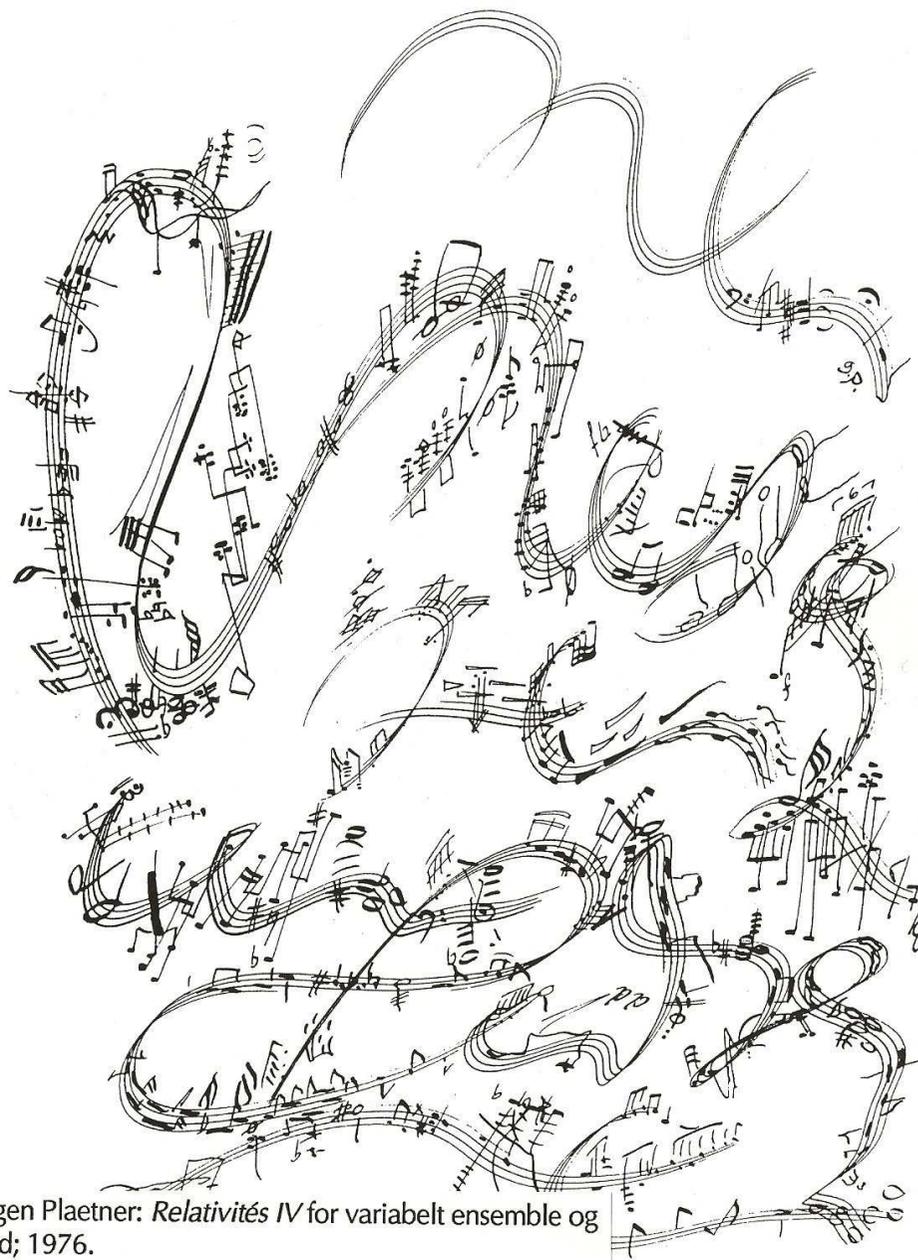
Bent Lorentzen: "Macabre" fra *WINDS* for blæsere; 1988.

Bent Lorentzen: "Macabre" from *WINDS* for reeds; 1988.

# Macabre

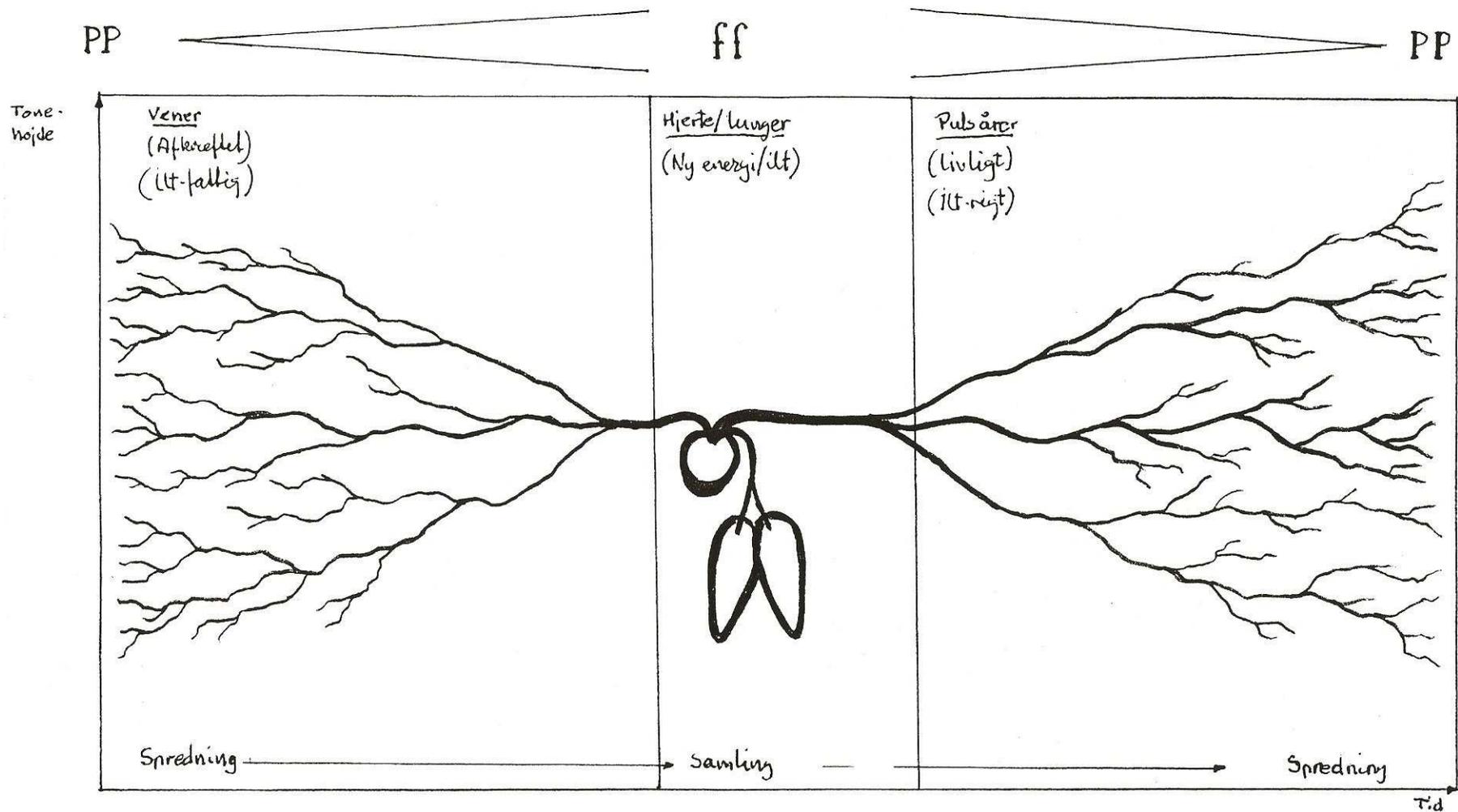


(text flip-over): macabre



Fra Jørgen Plætnær: *Relativités IV* for variabelt ensemble og lydbånd; 1976.

From Jørgen Plætnær: *Relativités IV* for variable ensemble and tape; 1976.

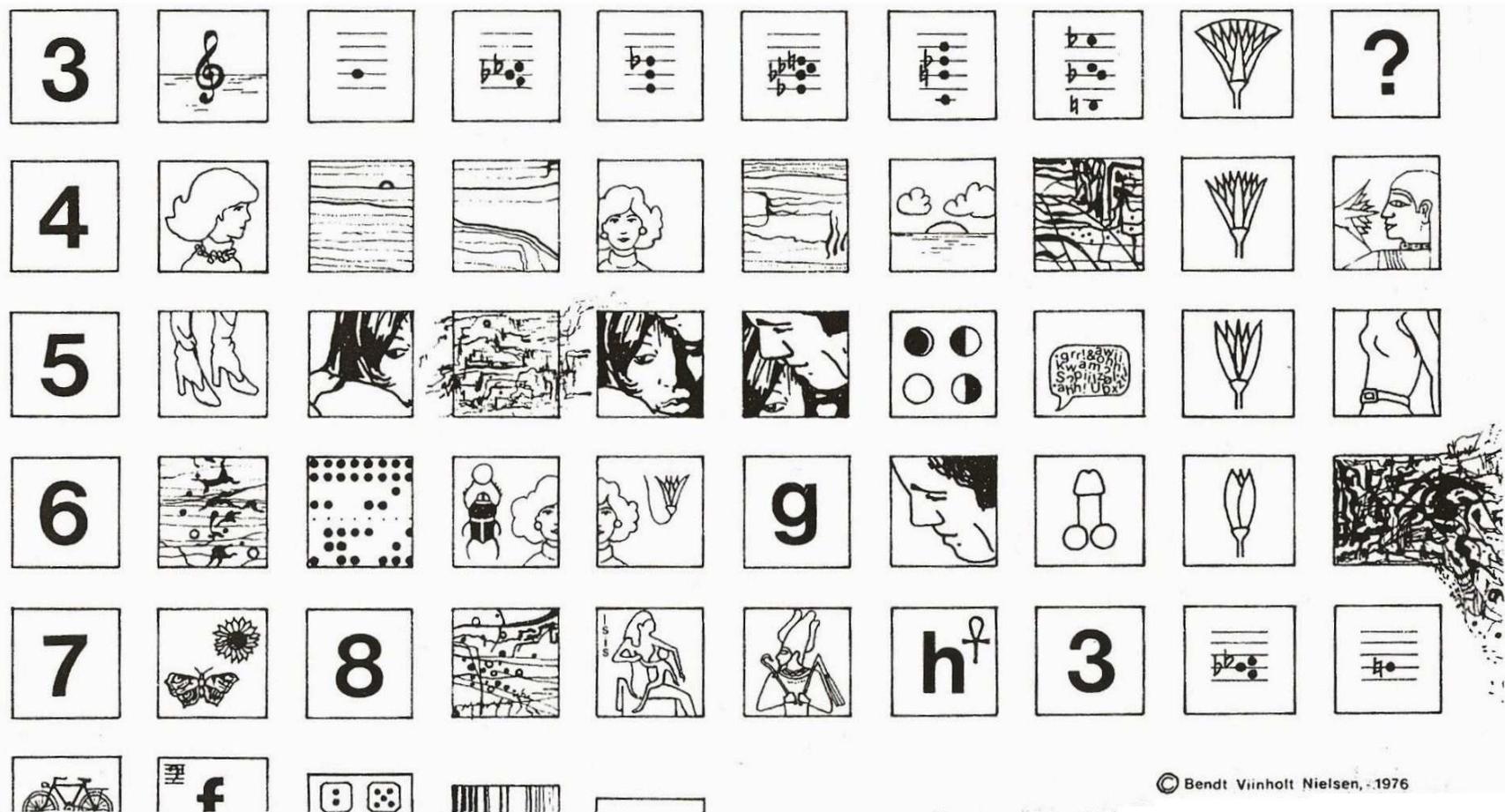


Følg en vene til hjertet/lungerne.

Følg en pulsåre.

Arne Kokborg: *Blodets kredsløb* for variabelt ensemble; 1992.  
Lavet som eksamensopgave i improvisationsoplæg ved  
Musikterapeutuddannelsen, Aalborg Universitetscenter.

Arne Kokborg: *Blodets Kredsløb* <Cycle of the Blood> for variable ensemble; 1992. Made for  
the examination in improvisation recipes at the Music Therapy Education, Aalborg  
University.



© Bendt Viinholt Nielsen, -1976

Udsnit af et ark med rendyrkede "kasser", hvis indhold kan genfindes i et sammenhængende, større billede. Oplægget kan opfordre til at kasserne bruges til "træning" før det mere frie billede spilles - eller til at de sættes i kontrast til resten.

Fra Bendt Viinholt Nielsen: *When the sun leans towards a maid to caress her* for variabelt ensemble; 1976.

Excerpt from a sheet with boxes containing material in states of pure cultivation. The material is used in a coherent picture. This work can be said to suggest that the boxes be used for training before free playing from the picture - or they be played and given a contrasting role to the rest.

From Bendt Viinholt Nielsen: *When the Sun leans towards a maid to caress her* for variable ensemble; 1976.

# Billedkunst som notation

Her findes billeder beregnet til at blive omsat til musik og billeder som oprindeligt ikke var beregnet til det men som er blevet brugt til det alligevel.

I nogle tilfælde aftaler musikerne hvordan billedet skal fortolkes - hvilket materiale, hvilken form for rækkefølge. I nogle tilfælde udveksler musikerne blot opfattelser efter at have spillet og påvirker derved hinanden. I nogle tilfælde vil musikerne se på billedet ofte under spillet. Og i nogle tilfælde vil musikeren tage billedet som udgangspunkt og ellers gøre hvad han/hun har lyst til, altså bruge det som springbræt for en improvisation. Meget kan afhænge af de verbale anvisninger komponisten giver eller ikke giver.

## *VISUAL ART AS NOTATION*

*HERE ONE MAY FIND PICTURES MEANT TO BE TRANSFORMED INTO MUSIC AND PICTURES ORIGINALLY NOT MEANT TO BE SO WHICH NEVERTHELESS HAVE BEEN EMPLOYED FOR THAT PURPOSE.*

*IN SOME CASES, MUSICIANS AGREE ON HOW TO INTERPRET - WHICH MATERIAL, WHICH SORT OF SEQUENCE. IN SOME CASES, MUSICIANS JUST EXCHANGE THEIR VIEWS AFTER HAVING PLAYED AND INFLUENCE EACH OTHER BY THIS. IN SOME CASES, MUSICIANS OFTEN LOOK AT THE PICTURE DURING PLAYING, AND IN STILL OTHER CASES, THE MUSICIAN WILL TAKE THE PICTURE AS A JUMPING-OFF GROUND FOR IMPROVISATION. MUCH CAN DEPEND ON THE VERBAL INSTRUCTIONS GIVEN OR NOT GIVEN BY THE COMPOSER.*

Et billede har en elementært suggestiv virkning på betragteren. Kontrastrige eller statiske billeder omsættes fx. til kontrastrig eller statisk musik.

Øjet vandrer på kryds og tværs i billedfladen, når det betragter et billede. Denne vandring påvirkes af billedets komposition. Et billede har måske elementerne grupperet tæt omkring et centrum, hvad der giver en regelmæssig "rondoform" i øjets registrerende aktivitet - abacadac... osv. (A).

Hvor et andet måske falder i adskilte flader og fører øjet på en tur, der er påvirket heraf, som fx. abcb defdfefd... osv. (B).

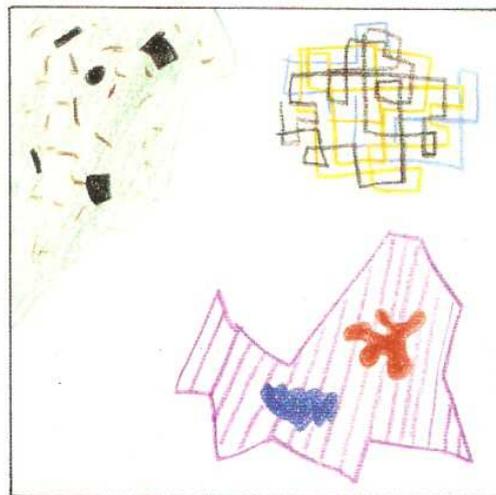
Man kan således betragte billedet som en formel for hvordan elementer skal kombineres.

A PICTURE WILL HAVE AN ELEMENTARY, SUGGESTING EFFECT ON THE OBSERVER, PICTURES WITH GREAT CONTRASTS AND STATIC PICTURES WILL FOR INSTANCE BE TURNED INTO CONTRASTING OR STATIC MUSIC.

THE EYE WANDERS IN ALL DIRECTIONS WHEN LOOKING AT A PICTURE, THE WANDERING IS INFLUENCED BY THE COMPOSITION, ONE PICTURE MAY HAVE ITS ELEMENTS CLOSELY GROUPED AROUND A CENTER, THIS GIVING A REGULAR "RONDO FORM" IN THE REGISTRATING ACTIVITY OF THE EYE - ABACADAC... ETC. (A), WHILE ANOTHER ONE COULD FALL INTO SEPARATE SURFACES AND LEAD THE EYE ON A TRIP INFLUENCED BY THAT, LIKE ABCB DEFDFEFD ... ETC. (B), THUS, A PICTURE MAY BE REGARDED AS A FORMULA TELLING HOW TO COMBINE ELEMENTS.



A



B

Tegninger af Gunner Møller Pedersen til illustration af satser i den elektroniske komposition *Et Lydår*, 1983. De blev oprindeligt lavet efter kompositionens færdiggørelse - som illustrationer til de digte, hver sats er bygget over. Måske er de dog påvirket af, at Møller-Pedersen som en del andre komponister bruger grafisk notation i planlægning og skitsering af sine kompositioner. Senere er der blevet spillet efter dem.

NOVEMBER  
Mørket vinder atter  
men varer ikke evigt her  
og uden mørket kunne vi ikke  
opfatte lyset  
som lys

*November*  
*Darkness prevails again  
but not forever  
and without darkness we could not  
perceive the light  
as light*

OKTOBER  
Også mennesket har et pulsslag  
som jorden har det  
som alting i universet  
fra det mindste  
til det største

*October*  
*Even man has a beating pulse  
like the earth itself  
like all in the universe  
from the tiniest  
to the greatest*

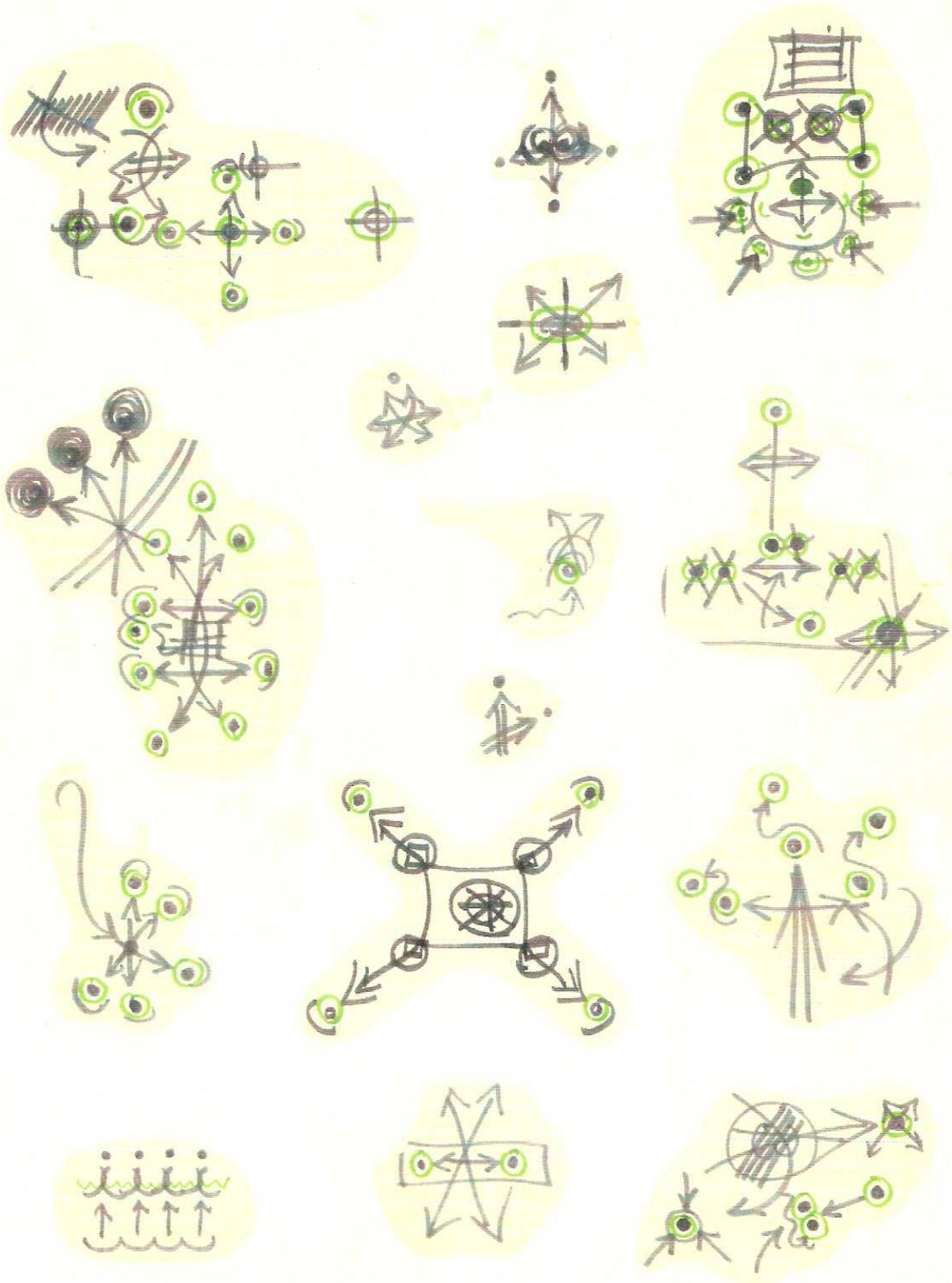
DECEMBER  
Selvom jordens åndedræt er tungt  
dør den ikke  
jorden samler kræfter  
til en ny omgang

*December*  
*Though the earth breathes heavily  
it is not dying  
the earth is gathering strength  
for another round*

Gunner Møller Pedersen:  
ET LYDÅR a sound year SUITE 1983

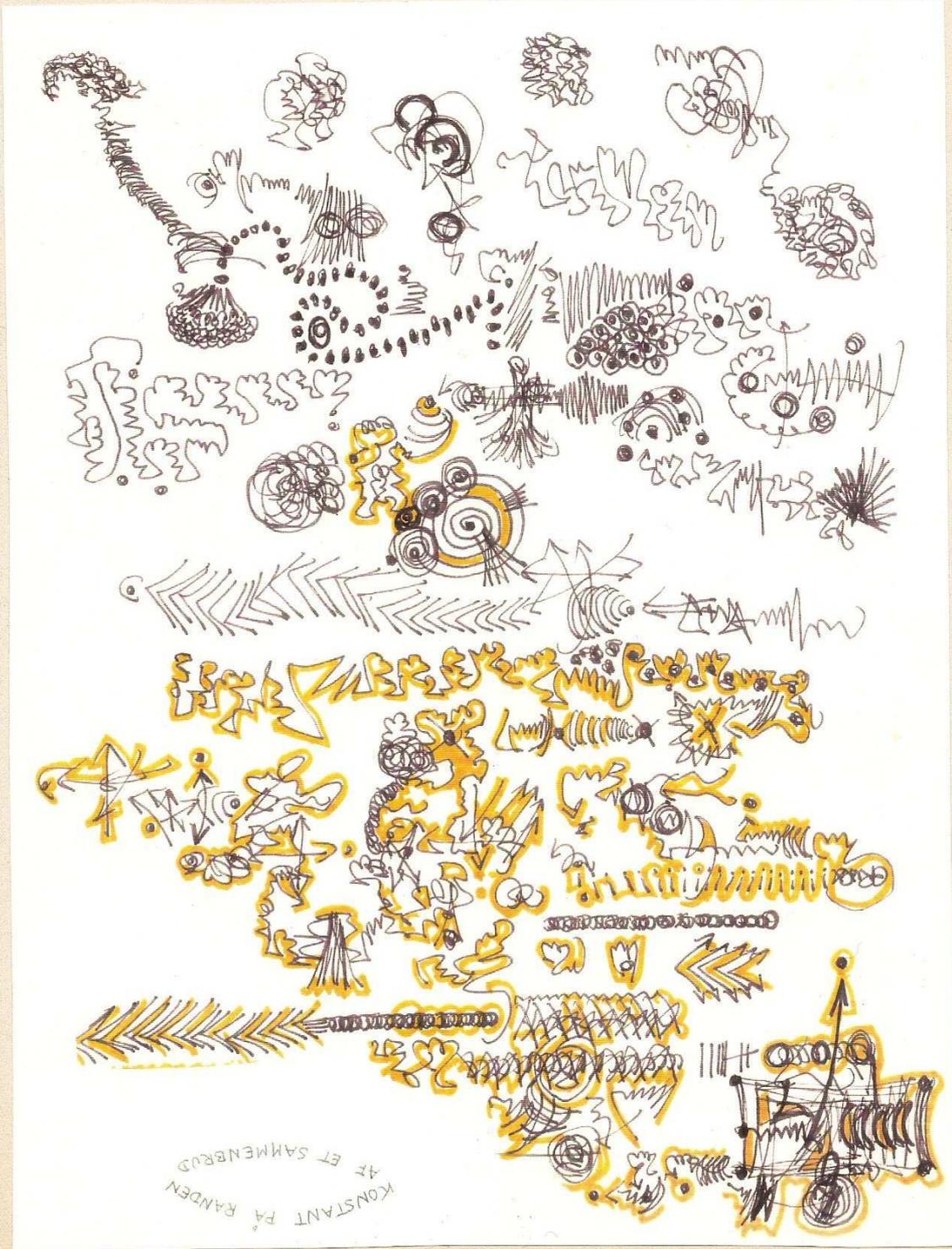
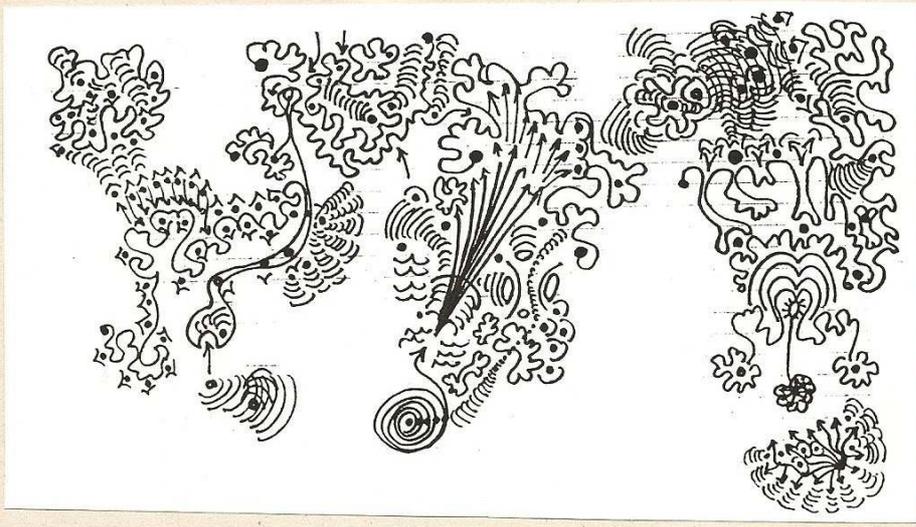
Drawings by Gunner Møller Pedersen illustrating movements in the electronic composition *A Sound Year*; 1983. They were originally made after completing the composition - as illustrations to the poems which each movement is built on. However, they are perhaps influenced by the fact that Møller Pedersen, like some other composers, employs graphic notation in planning and sketching compositions. Later, playing after the drawing has taken place.

TELEFONSAMTALE  
FOR TO ELLER  
FLERE MUSIKERE



Fra Erik Christensen: *Telefonsamtale for to eller flere musikere/*  
*Konstant på randen af et sammenbrud/Nødvendige konsekvenser*  
*af uforudsete strukturændringer*; 1976 og 77.

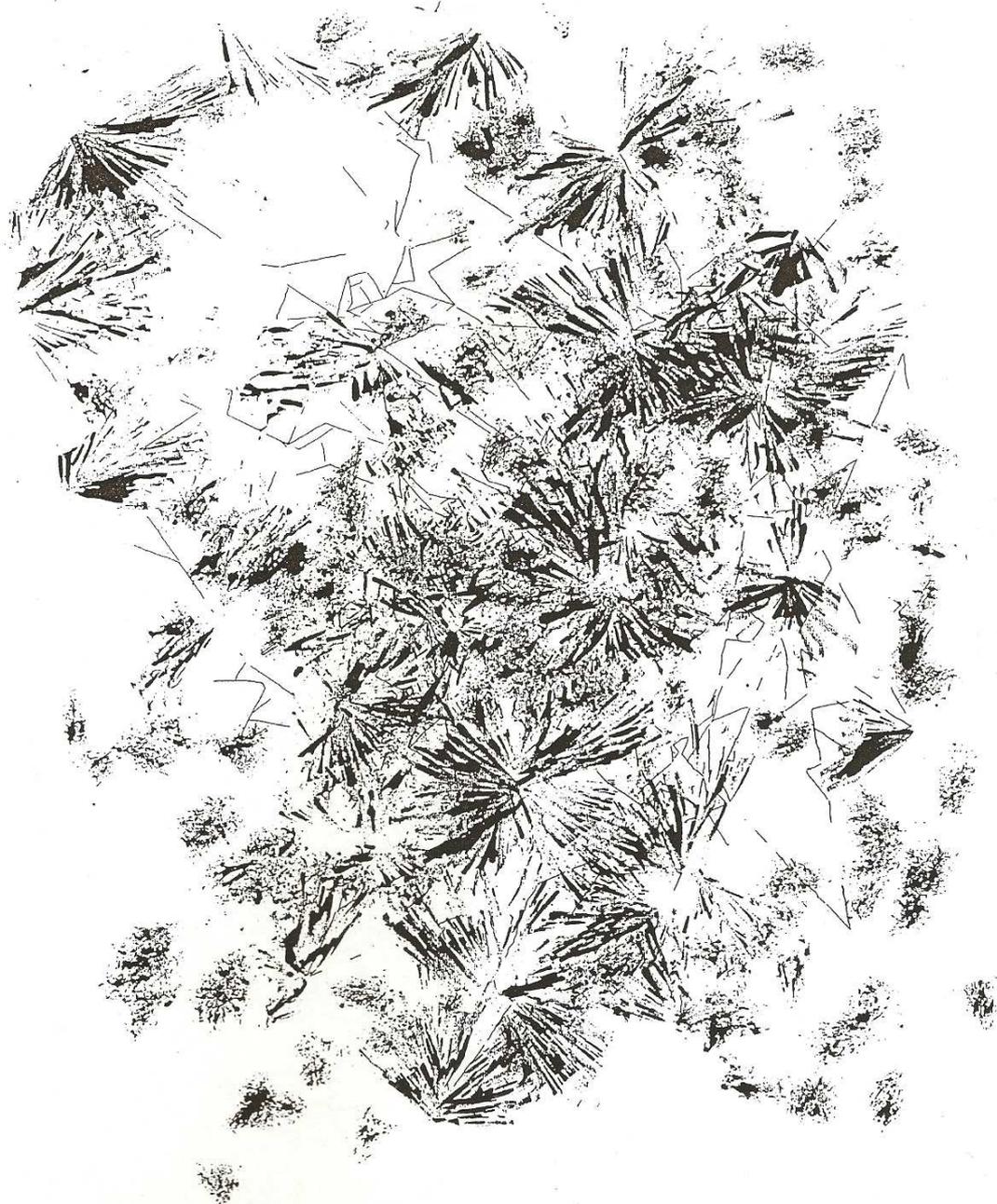
Erik Christensen har systematisk dyrket en form for automatskrift,  
"doodling", under telefonsamtaler. Den første af de tre er et sam-  
menklippet udvalg.



From Erik Christensen: Telefonsamtale for to eller flere musikere/Konstant på randen af et sammenbrud/Nødvendige konsekvenser af uforudsete strukturændringer <Telephone Conversation for Two or More Musicians/Constantly on the the Verge of A Nervous Breakdown/Necessary Consequences of Unforeseen Structural Changes>; 1976 and 77. Erik Christensen has systematically cultivated a kind of automatic writing, "doodling", during telephone calls. The first of these three is a selection having been put together.

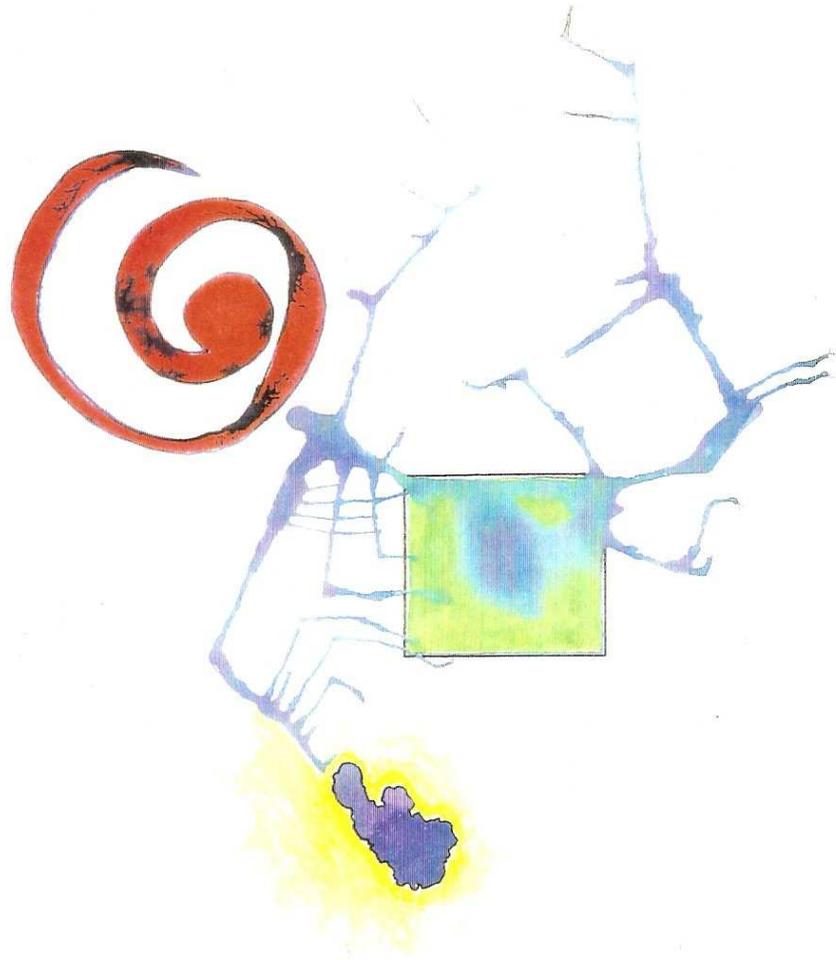


Billeder af Gunnar Berg som cellisten Jørgen Friisholm har brugt til musikforlæg i begyndelsen af halvfjerdserne. Berg tegnede sådanne billeder i pauser i kompositionsarbejdet; deres første oprindelse lå i den tilfældige aftørring af pennen.



Pictures by Gunnar Berg used by the cellist Jørgen Friisholm in the beginning of the seventies. Berg drew this kind of pictures during pauses in the compositional work; their first origin were in the random wiping off the pen.

Bendt Viinholt Nielsen: *Vegetationer* (4 lyriske situationsbilleder for ensemble ad lib.), 3. sats; 1972-73.



Bendt Viinholt Nielsen: *Vegetationer* (4 lyriske situationsbilleder) <*Vegetations* (Four Lyric Situation Pictures) for ensemble ad lib., 3. movement; 1972-73.



2B



NW

Forklaring til hvordan farverne skal omsættes til musik udleveres et kvarter før opførelsen.  
Fra Niels Winther: *Ingen numre tilladt*; 1990.

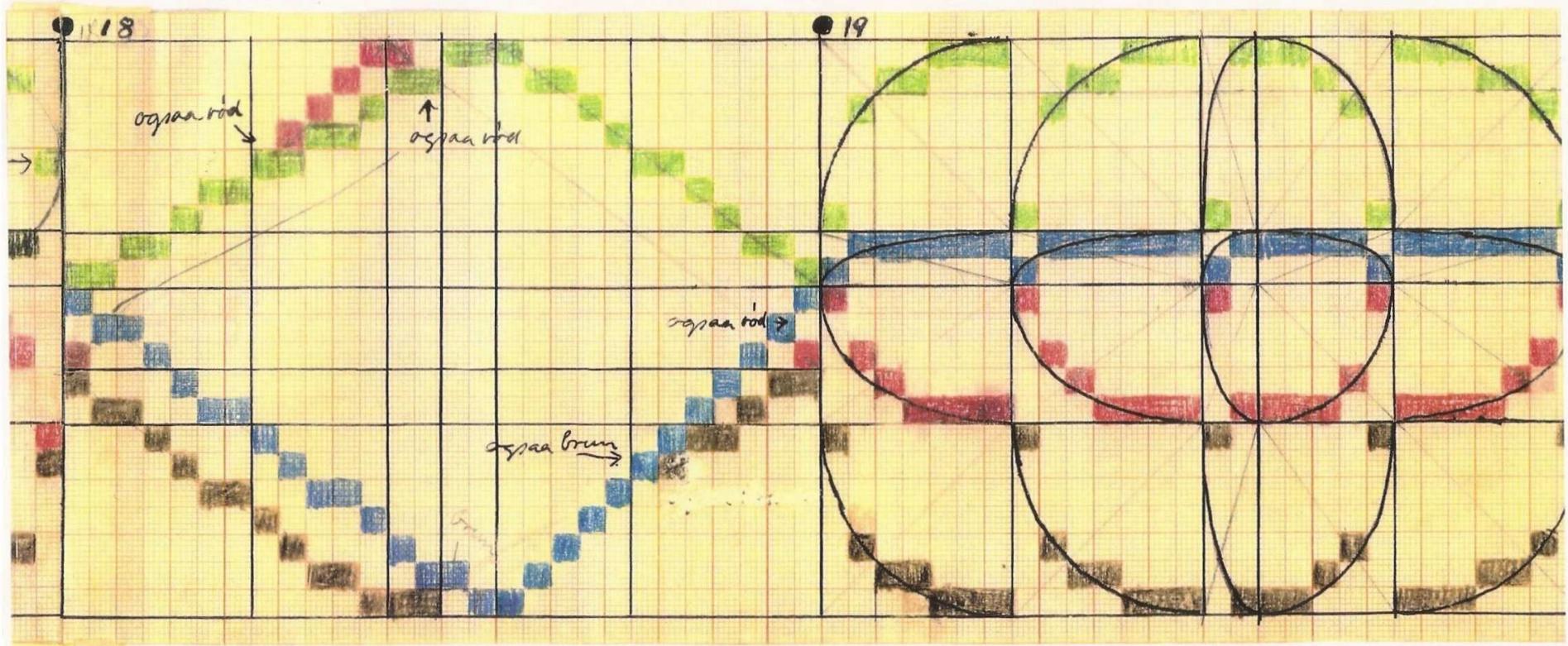
An explanation telling how to transform the colors into music is provided a quarter of an hour before the performance.  
From Niels Winther: *Ingen numre tilladt* <No fooling allowed>; 1990.

Fra Gunnar Aagaard Andersen: *Koncert for 5 violiner og et lysbilledapparat*; 1947.

Aagaard Andersen var billedkunstner og lod en dertil skabt billedfrise transskribere til noter og opføre - på et tidspunkt hvor den slags ideer næppe var almindeligt udbredt. Den synaestetiske vision bagved beskrev han som det at 'få en linje til at stå i rummet ved hjælp af musik'.

From Gunnar Aagaard Andersen: *Koncert for 5 violiner og et lysbilledapparat* <Concert for Four Violins and a Slide Projector>; 1947.

Aagaard Andersen was a visual artist who let a sequence of pictures which were created for that purpose transcribe into notes and be performed - at a time in which that kind of ideas were not widespread. The synaesthetic vision behind he described as "having a line to stand in space by way of music".



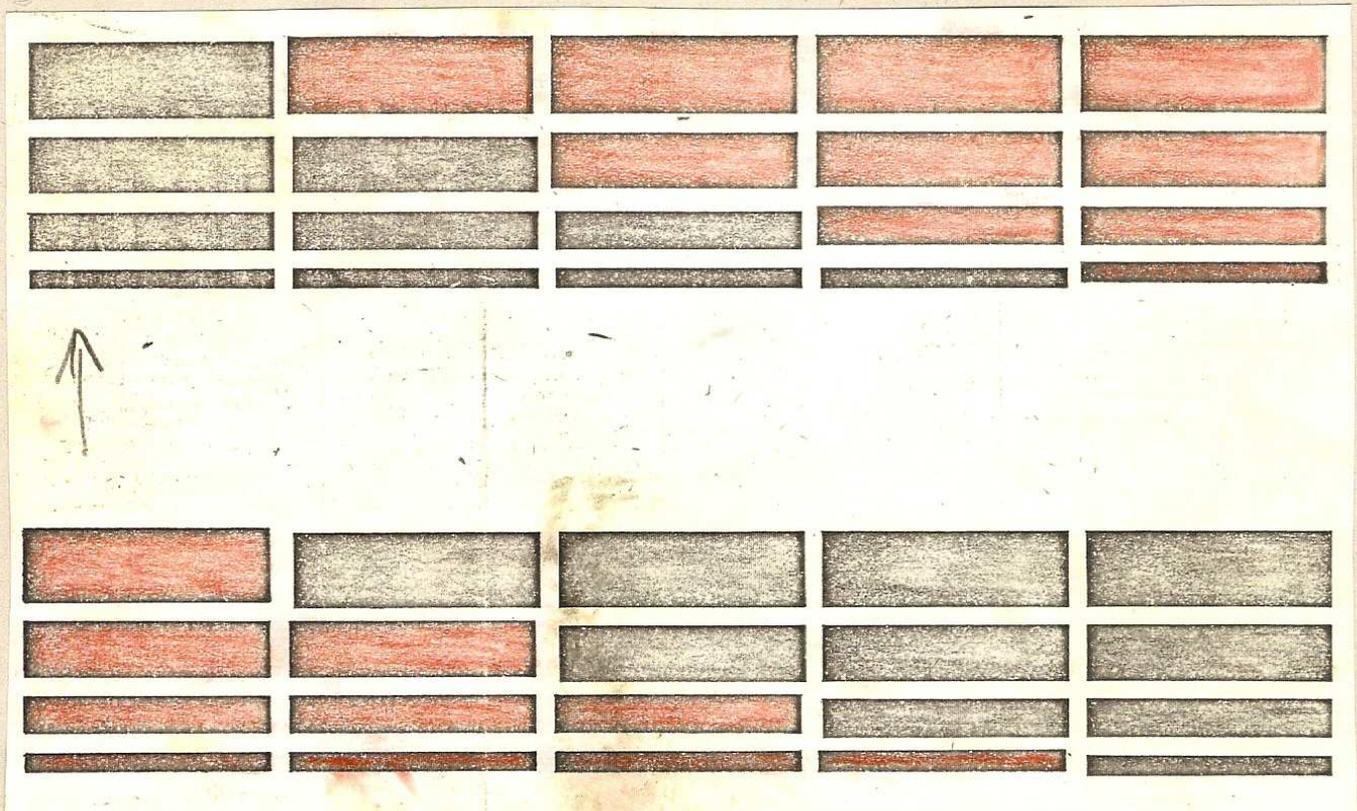
18 13. X | Violin

19 X

Grafik af billedkunstneren Erik Liljenberg som indgår i Ole Buck:  
*IN*; 1968.

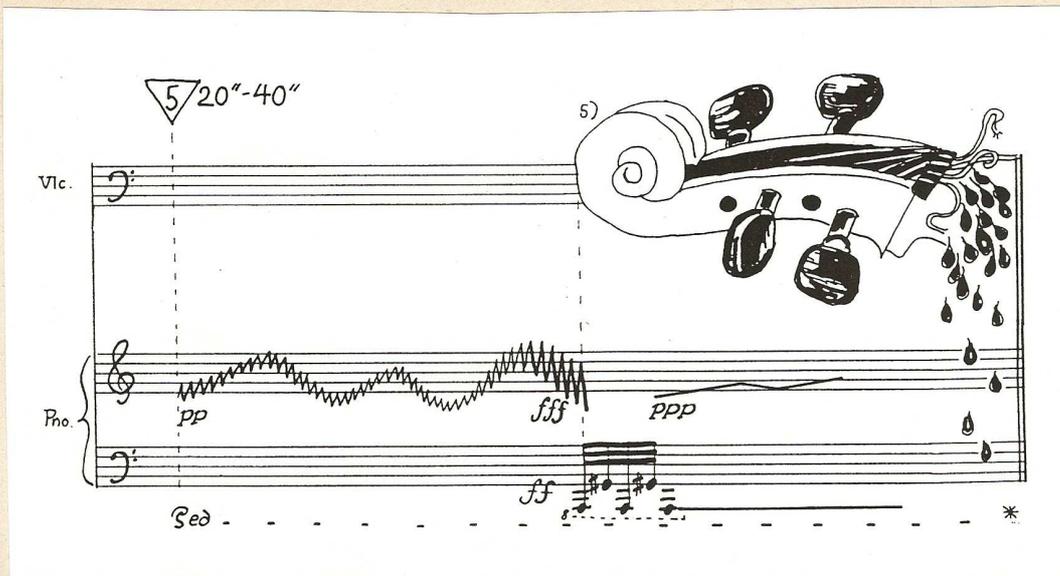
Ud fra grafikken og en verbal anvisning skal en version udarbejdes  
- uddrag fra et eksempel herpå vises også.

Graphic work by the visual artist Erik Liljenberg being a part of Ole Buck: *IN*; 1968.  
From the graphic picture and a verbal instruction, a version is to be made - an excerpt  
from one version by Buck is also shown here.



Handwritten musical notation on a yellow background, consisting of ten staves. The notation includes wavy lines and vertical bar lines. Above the first staff, there are handwritten numbers:  $\frac{32}{4}$  A,  $\frac{2}{4}$ ,  $\frac{24}{4}$ ,  $\frac{2}{4}$ ,  $\frac{16}{4}$ ,  $\frac{2}{4}$ ,  $\frac{8}{4}$ , and  $\frac{2}{4}$ . The word "GP" is written below the first bar line of each staff. The word "B" is written in red above the second staff. The notation is divided into sections by a vertical line on the left and bar lines on the right. Each staff has double bar lines at the beginning and end.

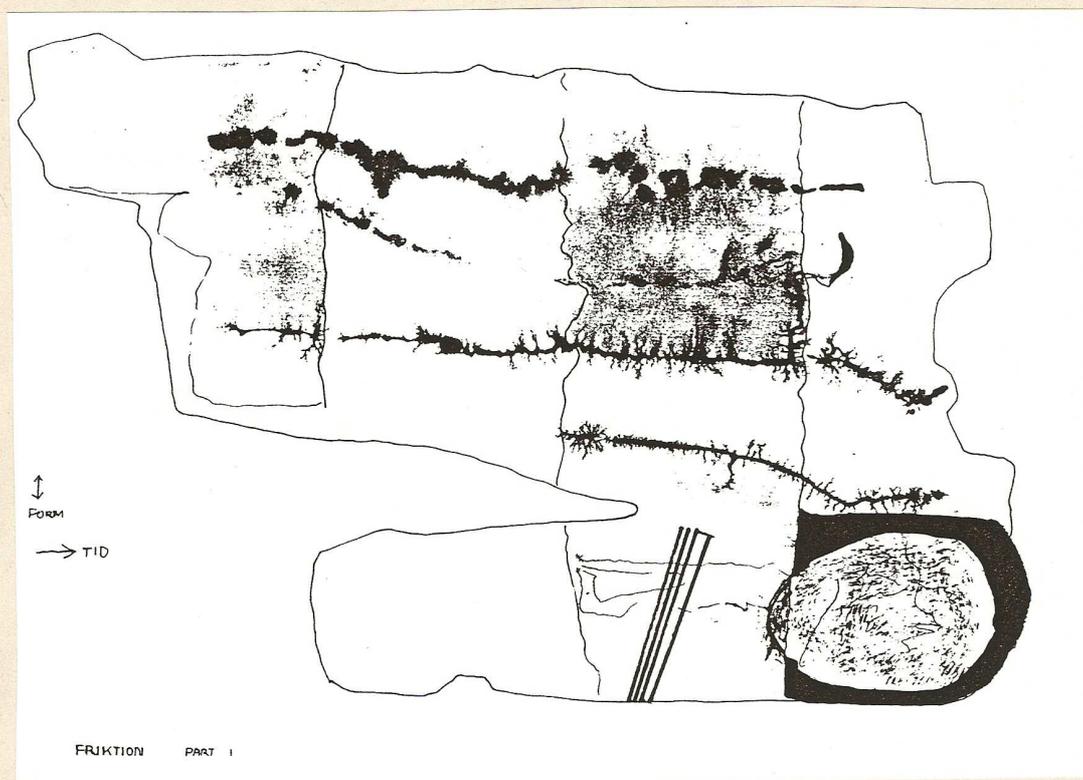
(Buck - see previous page)



Billedet fungerer sammen med en verbal kommentar såvel som suggestion til det lydige som regianvisning.  
 Fra Bent Lorentzen: *Studies for Two* for cello og slagtøj; 1967.

From Bent Lorentzen: *Studies for Two* for cello and percussion; 1967.

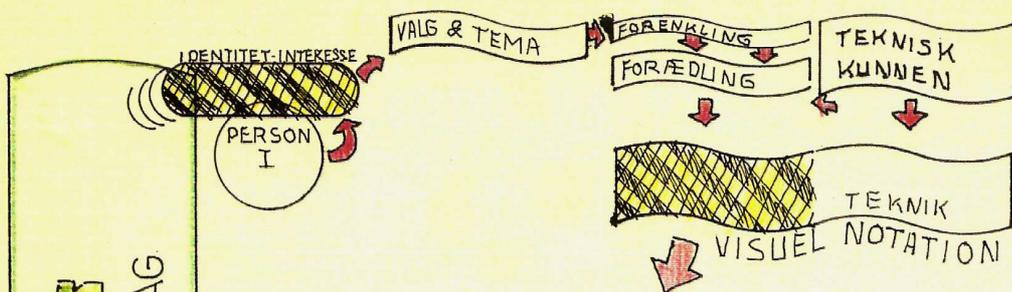
The picture with a verbal commentary serves as a suggestion of sound as well as of action.



Fra Steen Chr. Espersen: *Friktion*, 1. sats; ca. 1973.  
 Espersen er billedkunstner og var tilknyttet Gruppen for Alternativ Musik.

From Steen Chr. Espersen: *Friktion* <Friction>, 1. movement; ca. 1973.  
 Espersen is a visual artist who was connected with the Group for Alternative Music.

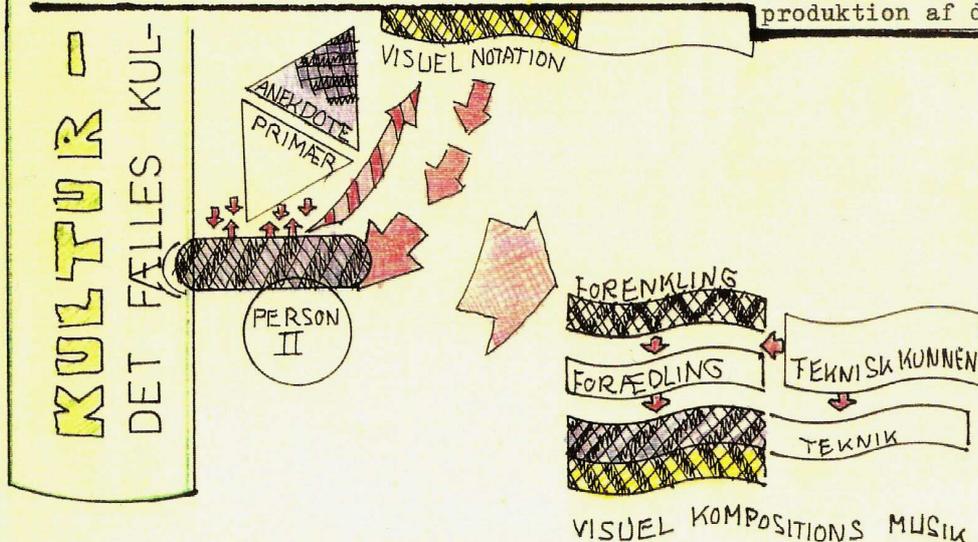
PRODUKTIONSFASEN frembringelse af grafisk notation:



EN person med en identitet og interessesfære, mærket:  baseret på en given kulturkreds, vælger et tema og beslægtede eller brugbare referencer fra og i kraft af sin identitet & interessesfære. UDSÆTTER disse for en ~~forenkling~~ forenkling (frasortering af det uvæsentlige i forhold til et bestemt eller anslået mål) DETTE forenklede materiale er på et ikke angivet tidspunkt omsat til primær klangbestemt materiale som indgår med den tekniske kunnen til det færdige grafiske notationsoplæg.

NOTATIONEN videregives til

REPRODUKTIONSFASEN fortolkning af grafisk notation (skematisk) & produktion af det færdige musik.



EN anden person med en identitet og interessesfære, mærket:  baseret på samme kulturkreds, får påtvunget et tema (visual notationen) og udsætter dette for en primær grafisk fortolkning (bekæmper en evt anekdotisk/litterær) ved hjælp af de givne kulturelle referencer. DETTE forenkles til en sfære der er identisk med det visuelle produkts karakteristik, og forbindes med den tekniske kunnen til et musik produkt der da vil være summen af de implicerede <sup>SKARENDE</sup> personers identitet. 

S U P L E M E N T: OM primær - og anekdotisk fortolkning.

DA en notation ikke skal bruges til romanforlæg ell.lign. må man i 1. produktionsfase notere sine intentioner som klangbestemt materiale; således at det kan fortolkes (i 2. produktionsfase) uden omveje ad intilektets anekdotiske eller litterære associationer ( landskaber, huse, mennesker og genstande) MEN gøre brug af vore kulturbestemte perception, ALTSÅ vor primære iagttagelser af omgivelser (rum, tid, form, struktur og bevægelse )

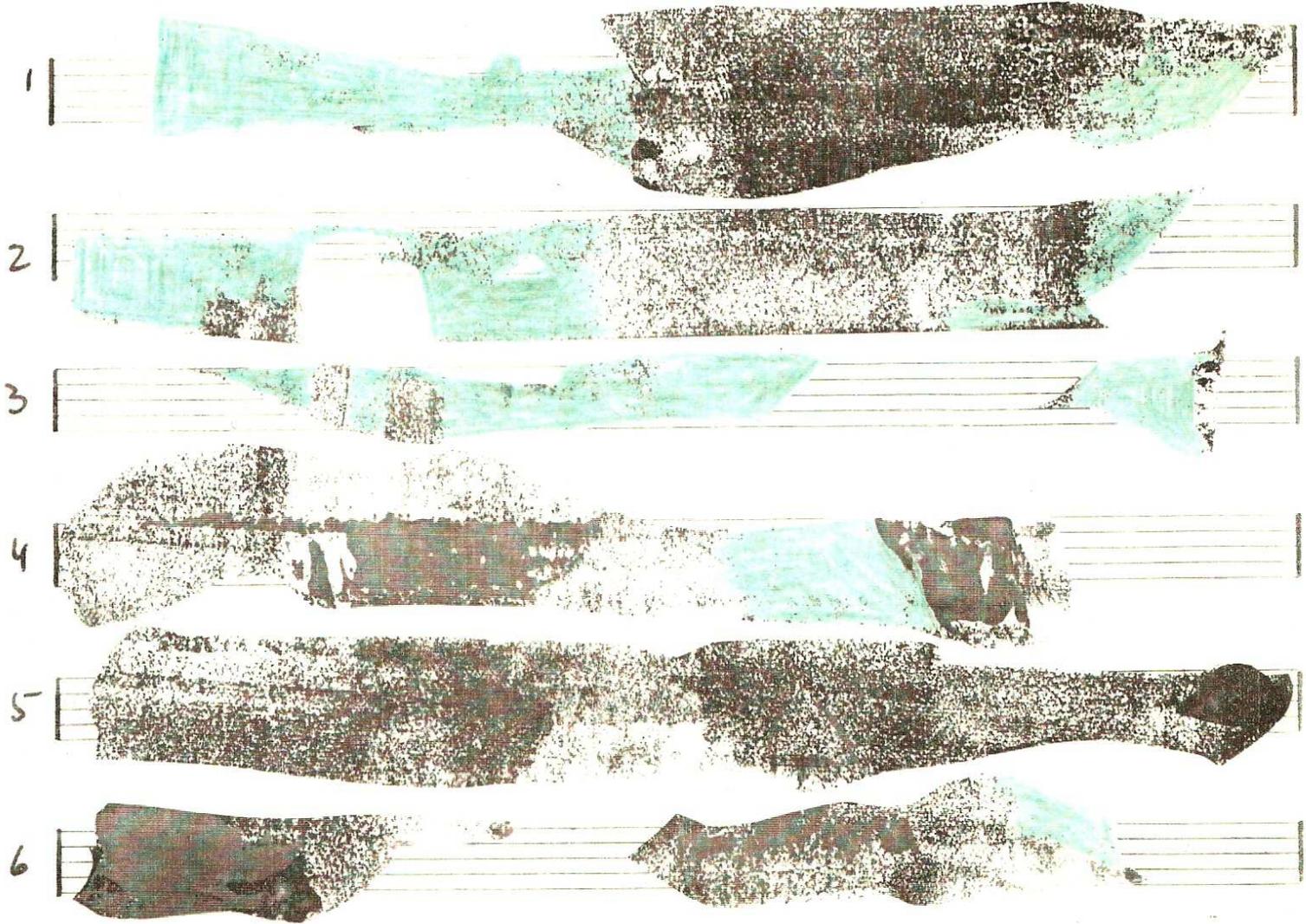
Et notat af Steen Espersen om grafisk notation.

A note by Steen Espersen on graphic notation.

Instrument B.

Trio I

Johs. Hansen.



Fra Johannes Hansen: *Trio I* for 3 instrumenter (ca. 1977).

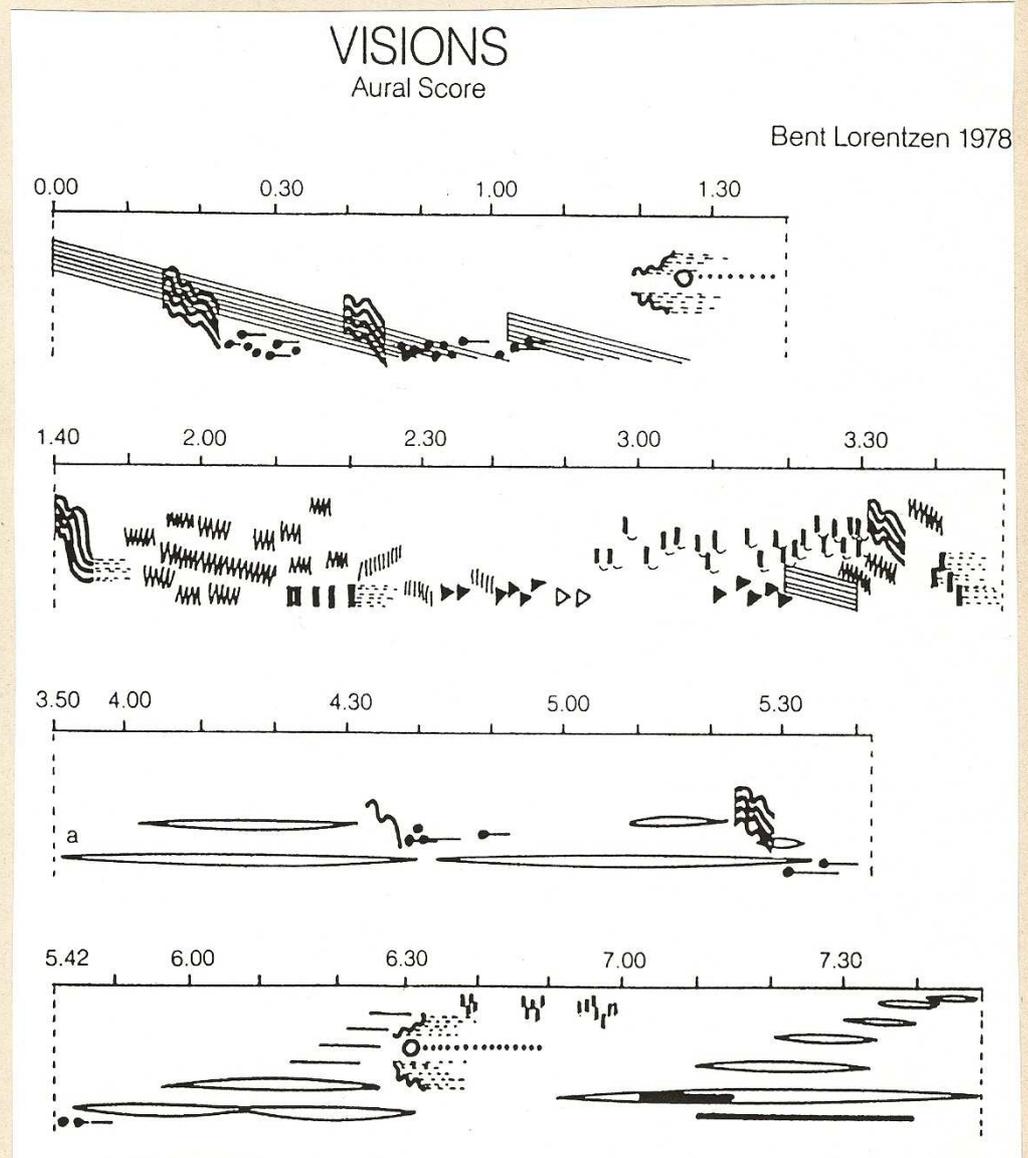
From Johannes Hansen: *Trio I* for 3 instruments (about 1977).

# Lyttepartiturer

Grafisk notation er særlig velegnet til at overskue musik med og følge med i. Den kan fx. udnyttes til at beskrive elektronmusik med, som indgår i en komposition sammen med levende musikere, som skal følge båndet. Eller i omtale og analyse af musik, hvor den i udarbejdet form kan give læseren et indtryk af musikken selv uden at den høres. I pædagogisk sammenhæng kan den bruges også af folk, der ikke har lært noder.

## AURAL SCORES

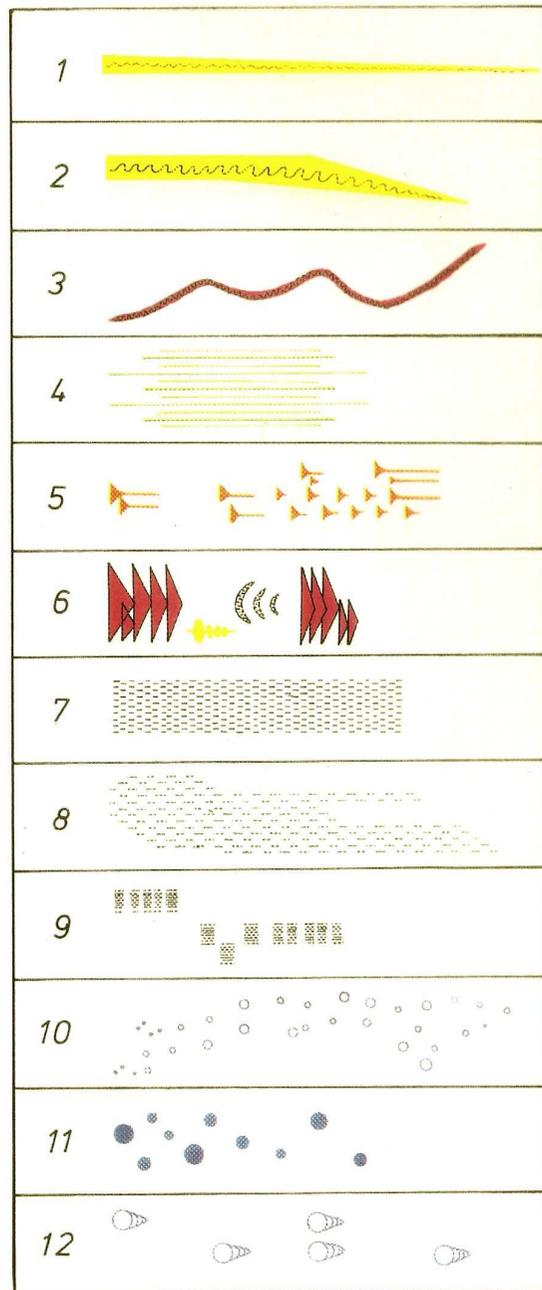
GRAPHIC NOTATION IS ESPECIALLY WELL SUITED TO PURPOSES OF SURVEY AND LEADING THE READER ALONG THROUGH THE NOTATION, FOR INSTANCE, IT MAY BE USED TO DESCRIBE ELECTRONIC MUSIC BEING PART OF A COMPOSITION TO BE PERFORMED WITH LIVE MUSICIANS WHO ARE TO FOLLOW THE TAPE, OR WHEN COMMENTING AND ANALYZING MUSIC WHERE AN ELABORATE GRAPHIC NOTATION MAY GIVE AN IMPRESSION OF THE MUSIC EVEN WITHOUT IT BEING HEARD, IN THE PEDAGOGIC FIELD IT MAY BE USED ALSO BY PEOPLE WHO HAVE NOT BEEN TAUGHT THE NOTES.



Bent Lorentzens lyttepartitur til elektronmusikkompositionen *Visions*.

På omslag til plade: Electronic Music PLP 5072; 1987.

Aural score by Bent Lorentzen for his own electronic music composition *Visions*.  
On the cover of the record: Electronic Music PLP 5072; 1987.



1 TONE WITH VIBRATO

2 TONE WITH VIBRATO AND GLISSANDO

3 SIREN

4 TONGEMISCH

5 SMALL BELLS

6 COMPLEX SOUNDS

7 WHITE NOISE

8 FILTERED NOISE

9 NOISE STUTTER

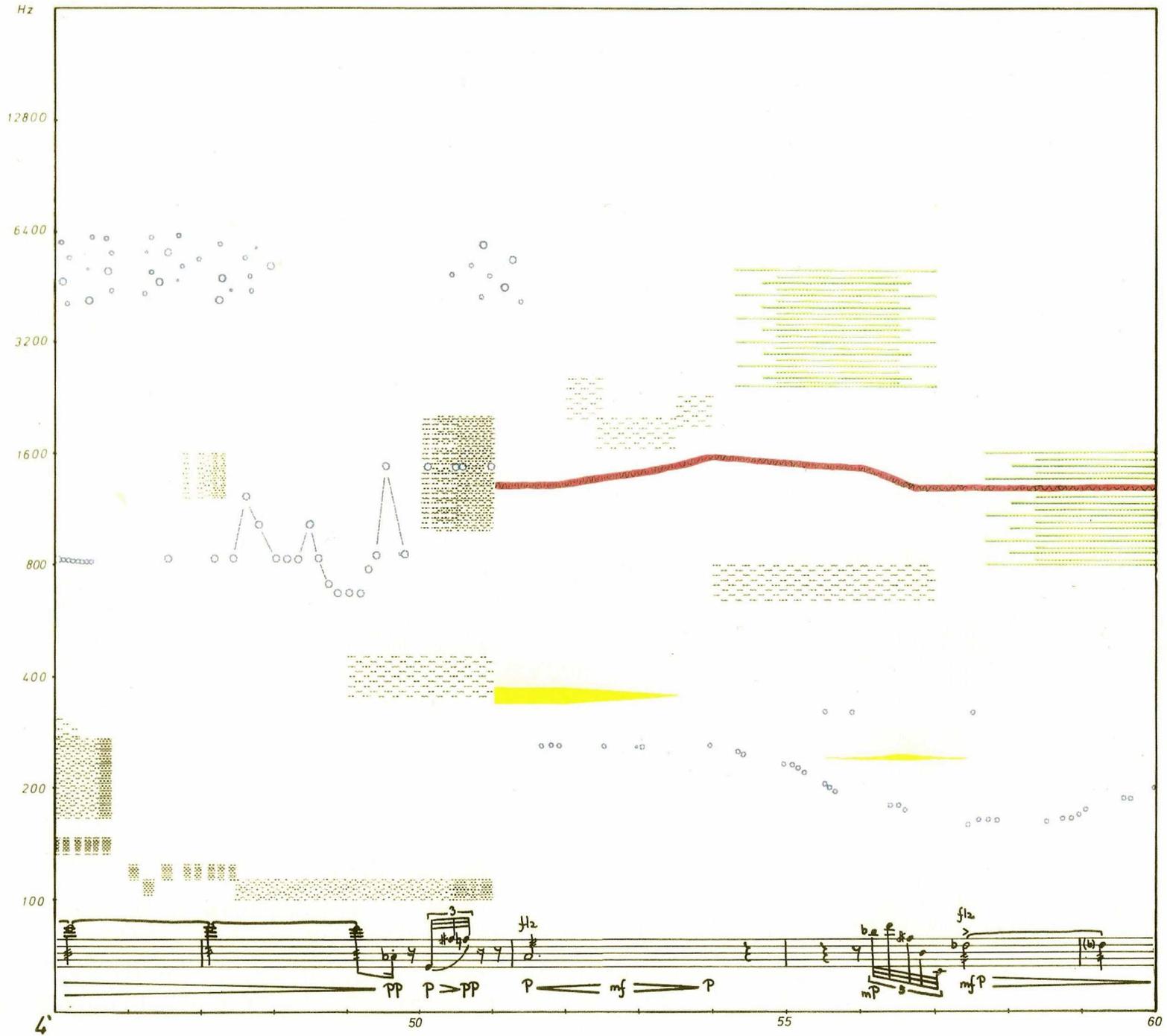
10 REVERBERATED PULSES

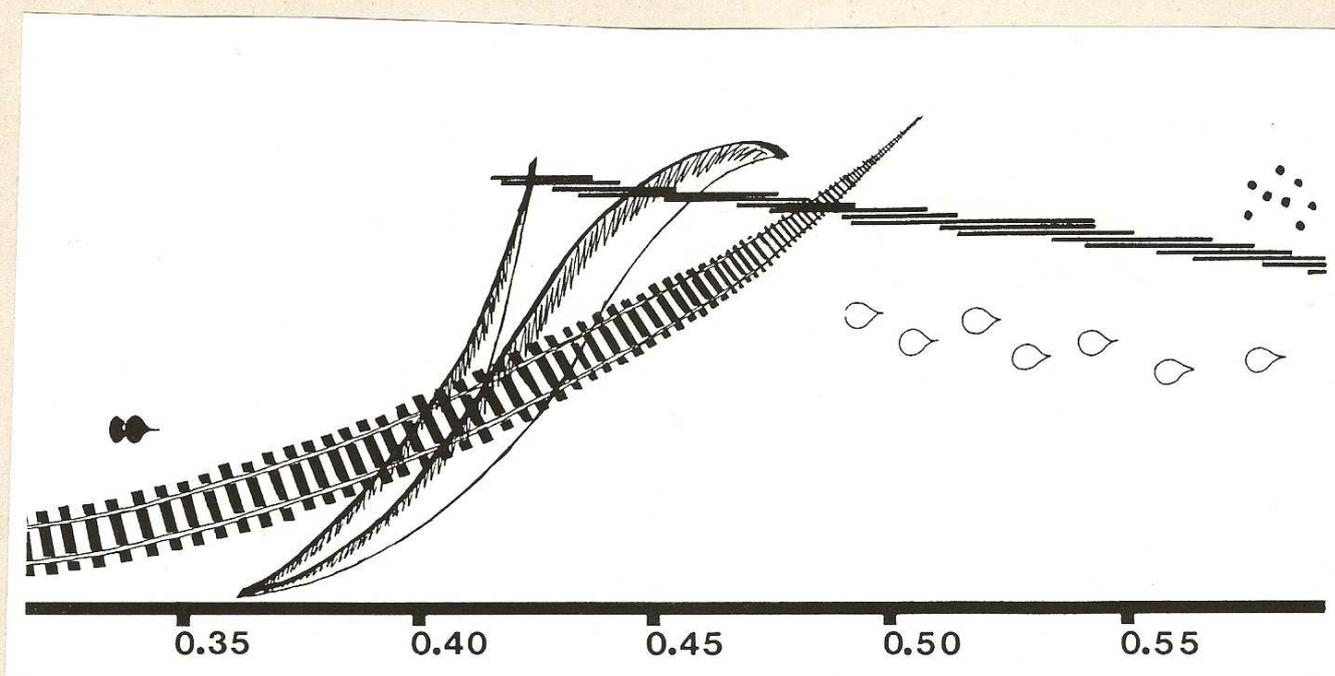
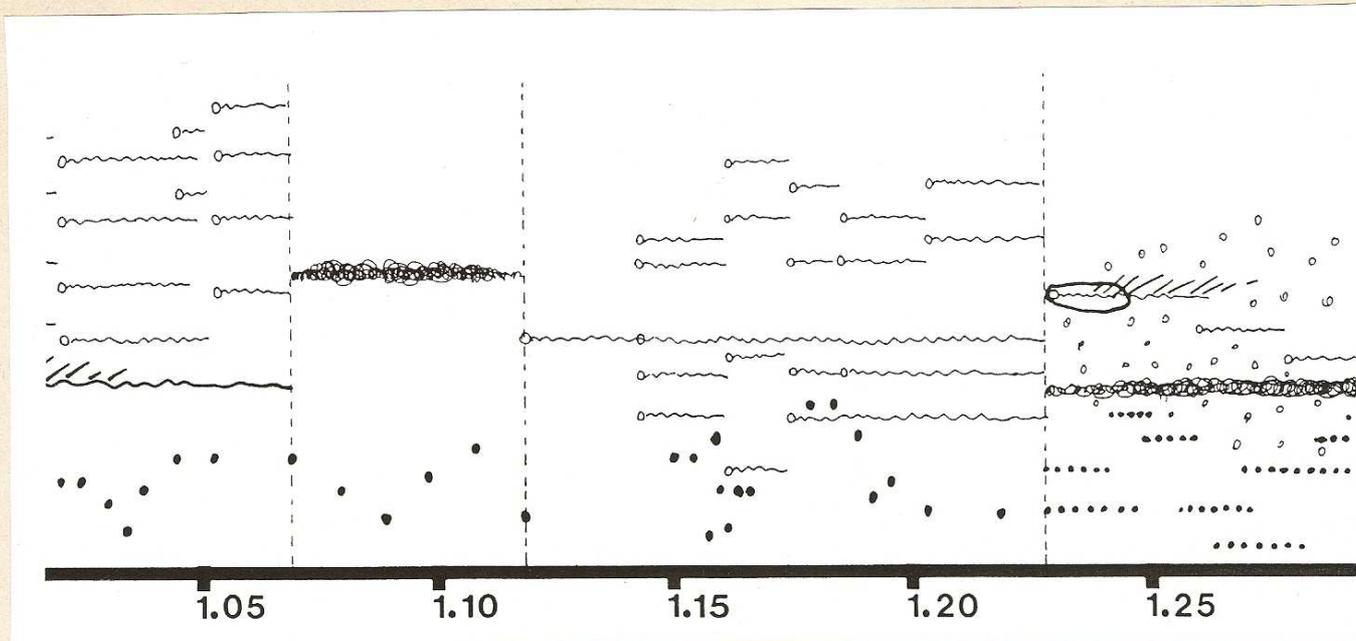
11 DRY PULSES

12 FORMANT AND ECHO PULSES

Fra lyttepartitur udgivet af Helena Borum m.fl.: *Jørgen Plaetner: Nocturne for Flute and Tape. Aural Score*; 1975.

From an aural score edited by Helena Borum et al.: *Jørgen Plaetner: Nocturne for Flute and Tape. Aural Score*; 1975.





Uddrag af lyttepartiturer til båndmusik beregnet på brug i folkeskolen. Klassen skal selv tilføje instrumentalstemmer.  
 Ivar Frounberg: *Sten-alder* og John Frandsen: *Interrail*; 1988.  
 Fra Finn Egeland Hansen: *Båndtropering*. Folkeskolens Musiklærerforening; 1988.

Excerpts from aural scores of electronic compositions to be used in primary school. The class is to provide the instrumental parts.

Ivar Frounberg: *Sten-alder* <Stone Age> and John Frandsen: *Interrail*; 1988.

From Finn Egeland Hansen: *Båndtropering* <Making Tape Tropes>. Folkeskolens Musiklærerforening; 1988.

Aural score by Jane Pedersen for a three minutes excerpt from a music therapy improvisation; 1988.  
 Made for the examination in graphic notation at the Music Therapy Education, Aalborg University.

Jane Pedersen

# STYRKE

ET LA'-MIG-VÆRE-RUM  
 MED LYD KAN JEG HOLDE  
 DIG "UDE"!

- - HARMONIKA
- - KLAVER

## STOLTLED

- - HARMONIKA
- - klaver

## VEMODIG SØGEN

- KLAVER
- KIAVES
- klokkeskål
- klokke/lyd

Ca. 60 sek.

ca. 45 sek.

ca. 60 sek.

A "let-me-alone-space - with sound I can keep you "out" !"

Pride

Nostalgic searching

Lyttepartitur til et 3 minutters udsnit fra en musikterapi-improvisation af Jane Pedersen; 1988.  
 Lavet som eksamensopgave i faget grafisk notation ved musikterapiuddannelsen, Aalborg Universitetscenter.

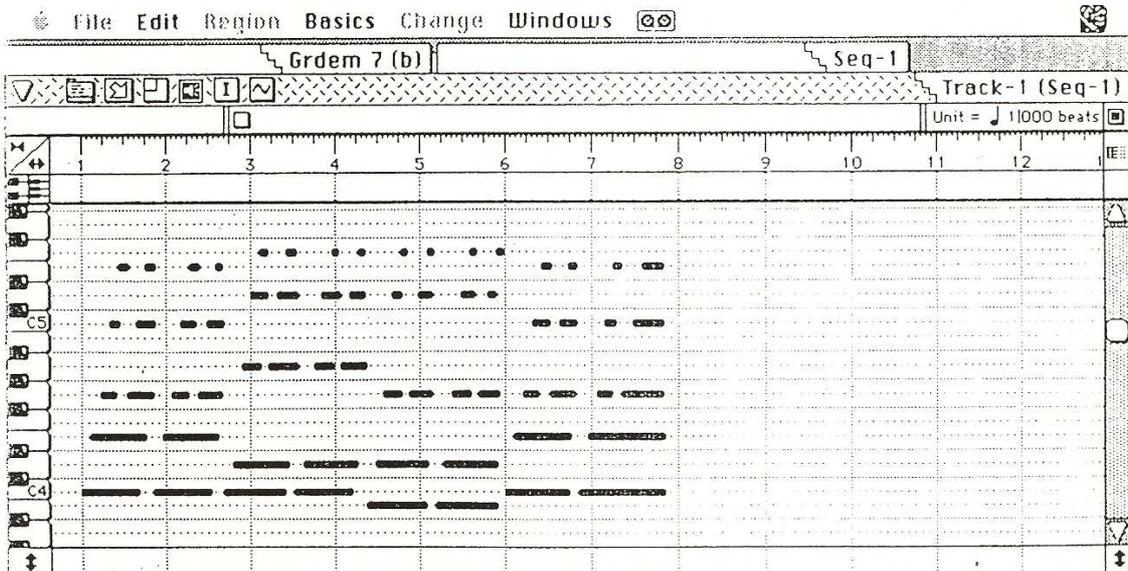
TIP

# Computeren

Elektroniske musikinstrumenter, fx. synthesizere, kan idag styres med computere. Med almindeligt tilgængelige kommercielle programmer kan man ikke blot optage, redigere, skrive ud i noder - men også få vist musikken i grafisk notation. Den grafiske notation viser tonehøjder lodret og tid vandret. Det kan vise nye strukturer i det kendte - og et frit opbygget billede vil øjeblikkeligt kunne omsættes til musik.

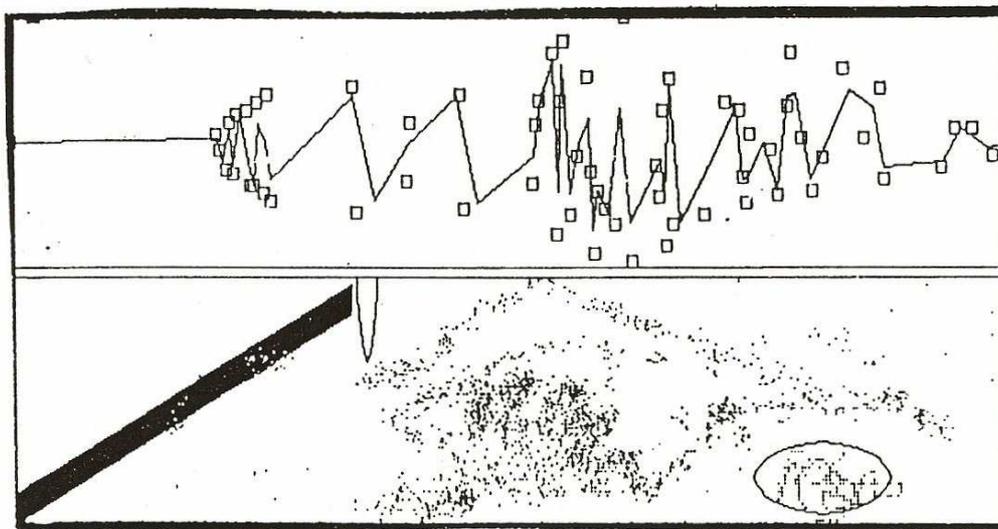
Beginning of *Prelude in C Major* by Bach - with notes and with graphic notation by the sequencer program Macintosh Performer.

Begyndelsen af Bachs C-dur-præludium - som det ser ud med noder og som det ser ud i grafisk notation med sequencerprogrammet Macintosh Performer.



## THE COMPUTER

TODAY, IT IS POSSIBLE TO LET COMPUTERS CONTROL ELECTRONIC MUSIC INSTRUMENTS, FOR INSTANCE SYNTHESIZERS. WITH COMMERCIALY ACCESSIBLE PROGRAMS ONE CAN NOT ONLY RECORD, EDIT, WRITE OUT IN NOTES - BUT ALSO HAVE THE MUSIC SHOWN IN A GRAPHIC NOTATION. THE GRAPHIC NOTATION SHOWS PITCHES VERTICALLY AND TIME HORIZONTALLY. IT CAN SHOW NEW STRUCTURES WITHIN THAT WHICH SEEMS WELL-KNOWN, AND A FREELY CONSTRUCTED PICTURE CAN INSTANTANEOUSLY BE TRANSFORMED INTO MUSIC.



Computerudskrevet grafisk notation af Fuzzys elektronmusikkomposition *Stenspil*; 1992.

Øverste halvdel viser toner, dels ved linjen der bevæger sig op og ned, dels ved de små firkanter, som viser clusters. Nederste halvdel viser velocities, dvs. anslagsstyrker. Shareware-programmet "Kandinsky" er brugt.

Fuzzy: graphic notation written out by computer of the electronic work *Stenspil* <Stone-Play>; 1992. The upper half shows tones, by the line moving up and down and by the small squares showing clusters. The lower half shows velocities, that is, strength of attack.

# Notation til debat

Den grafiske notations fortrin og ulemper blev diskuteret i forskellige artikler, da Bent Lorentzen i 1986 påbegyndte en revision af en række værker, hvor grafiske notationer i en del tilfælde blev erstattet af traditionelle noder. Vi citerer fra debatten...

*“Noderne har en uhyggelig evne til at bestemme over musikken, hvor det i virkeligheden burde være omvendt. (...)*

*Grunden til, at så mange komponister i 60'erne og 70'erne eksperimenterede med notationen, er uden tvivl et ønske om at finde en notation, der ligner den oprindelige idé mere end det er muligt med traditionelle noder. Når musikken indeholder blokke, linjer og prikker samt stærke klangfarver, så er det også nærliggende og fristende at tegne blokke, linjer og prikker i stedet for et hav af krydser, b'er, opløsningstegn, bjælker, nodehalse, nøgler, pausetegn, finger- og fodsætning, bindebuer, forte'r, piano'er, taktsignaturer, taktstreger o.s.v., o.s.v. (...)*

*Umiddelbart kunne man tro, at musikerne følte sig frastødt af de ofte helt urimeligt pedantiske noder. Men meget tyder på, at musikerne i hvert fald ikke oplever det grafiske partitur som en befrielse fra nodeslaveriets jernkæder, men derimod som noget irriterende og besværligt komponistkrukkeri. (...)*

*Fordelen ved det gamle nodesystem er først og fremmest, at vi allesammen kender det til bevidstløshed, og derfor orienterer os selv i meget komplicerede ting, med rasende hast. Det skyldes ikke, at nodesystemet er ideelt, men kun at det er en indarbejdet standard. Og så er det jo ovenikøbet også internationalt. Da indstuderingen tit skal gå hurtigt, det vil sige, at der mere eller mindre spilles fra bladet, så er det vigtigt, at nodebilledet direkte giver de rigtige fingerreflekser. En dygtig musiker sammenfatter selv alle informationerne til en overordnet idé, der måske minder om den grafiske fremstilling. (...)*

*Konklusionen er, at den grafiske notation, hvor god den end måtte være, ofte skaber flere problemer end den løser (...) ... de mange eksperimenter med ren grafisk notation har givet det resultat, at nogle af idéerne stadig kan anvendes, men at man, hvor det er muligt, skal foretrække den traditionelle notation.”*

Bent Lorentzen

*“Storheden, der altså ifølge mit subjektive skøn, er nedlagt i musikken i disse værker skyldes, at det er lykkedes for komponisten, i kraft af brugen af grafisk notation og dermed i kraft af denne notationsforms anti-autoritære og emanciperende væsen, at skabe et overordentlig frit formidlet, næsten dramaturgisk og i hvert fald meget dramatisk udtryk i en usvigelig sikker formal disponering; en anden side af den grafiske notations væsen, og det må til enhver tid påpeges som modstilling til det anti-autoritære og emanciperende, er jo netop, at metoden har en uimodståelig formkrævende gestus overfor brugeren, idet den i langt højere grad end traditionel notationsmåde er naturtro. (...)*

*Det må være indlysende, at jeg på denne baggrund ser revisionen som en noget pessimistisk afslutning på et særdeles frodigt projekt. Bent Lorentzen har med revisionen valgt at lukke det åbne, definere det infinite - må jeg bruge allegorien fra før - han har valgt at balsamere et foster.”*

Musikforsker Jens Bruno Hansen

*“...jeg har uropført 3 af de 6 værker...Desuden er Puncta, Triplex og Groppo ... opstået i et meget tæt og frugtbart samarbejde mellem Bent og mig ved Sorø-orglet. Disse mange timer, hvor vi skiftedes til at løbe op og ned ad trappen, vil jeg aldrig glemme. De hører til blandt de bedste i mit liv - med livlige diskussioner, team-work i ordets bedste forstand - og den store glæde når noget væsentligt lykkedes, faldt på plads, blev født. (...)*

*For det første må nodebilledet da virke meget mere uoverskueligt - “vanskeligt” og afskrækkende på en konservatorie-elev, som evt. overvejer at spille det til en diplomeksamen, end det grafiske billede gør med en kyndig lærer ved hånden, for det andet indsnævrer nodebilledet interpretationsmulighederne i en urimelig grad. (...)*

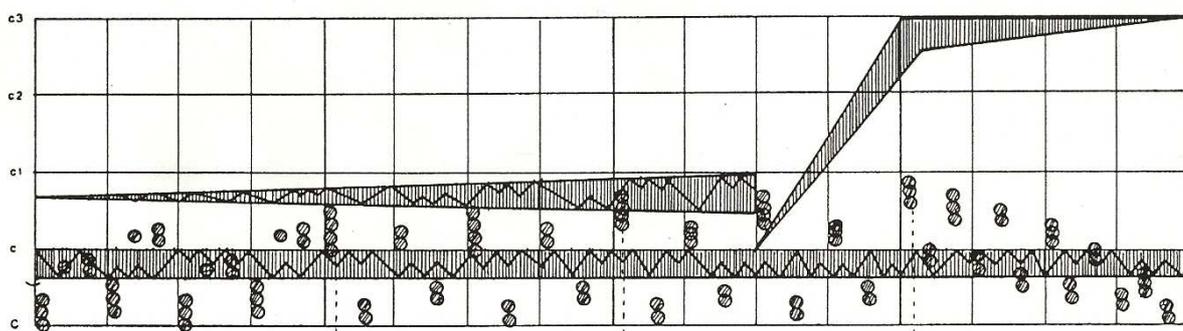
*Sammenligningen til Bruckner, der reviderede mange geniale steder i sine symfonier ihjel, ligger desværre lige for”.*

Organist Knud Vad

"Jeg indrømmer, at den grafiske udgave må være udgangspunktet, og at min nodefortolkning kun skal betragtes som én ud af mange.

(...) ikke alle versioner af mine grafiske partiturer, som jeg har haft lejlighed til at høre, har været lige gode. Nogle har endda, efter min mening, været helt uacceptable. Det skyldtes at organisten ikke havde den nødvendige baggrundsviden eller intuition for, hvorledes stilen i 70'erne var med hensyn til klang, rytme, harmoni, gestik og frasing. Det viser sig nemlig, at man for at kunne spille et grafisk partitur tilfredsstillende må kende tidens stil til bunds, da der naturligvis er mange uskrevne regler. (...) Lad os derfor sammen forsøge at beskrive disse uskrevne noder og spilleregler, inden vi glemmer dem."

Bent Lorentzen



187

gliss.

ff

Fra Bent Lorentzen: *Triplex* for orgel.  
Begyndelsen i grafisk og i node-version; 1974/86.

## A DEBATE ON NOTATION

ADVANTAGES AND DISADVANTAGES OF GRAPHIC NOTATION WERE DISCUSSED IN VARIOUS ARTICLES WHEN BENT LORENTZEN IN 1986 BEGAN A REVISION OF A SERIES OF WORKS, REPLACING GRAPHIC NOTATIONS IN SOME CASES WITH TRADITIONAL NOTES. WE QUOTE FROM THE DEBATE...

"Notes have an alarming capability to control the music although the relationship ought to be the other way round. (...)

The reason why so many composers in the sixties and seventies experimented with notation is no doubt the wish to find a notation which was more similar to the original idea than traditional notes would allow. When the music contains blocks, lines, dots and strong timbres, then it is natural and tempting to draw blocks, lines and dots instead of a myriad of flats, sharps, naturals, balks, tails, clefs, pauses, fingering and footing, ties, signs for forte and piano, metre, bars etc. etc. (...)

At first one might think that the musicians became repelled by the notes which are often unreasonably pedantic. But much points to the conclusion that musicians certainly do not experience the graphic notation as the liberation from the iron chains of note-slavery, but rather as an annoying and awkward form of affectation from the side of the composer. (...)

The main advantage of the old note-system is that we all know it backwards and forwards, and therefore we can orient ourselves in very complicated things in a furious haste. This is not because the note system is ideal, only because it is a well-established standard. And, even more, it is international. Since the rehearsing must often take place fast, that is, musicians play more or less from sight, it is important that the notes directly give the right reflexes in the fingers. A competent musician will her- or himself sum up all the information to an general idea which maybe has similarities with the graphic description. (...)

The conclusion is that the graphic notation, regardless how well it is made, will often produce more problems than it solves-(...)... all the experiments with graphic notation in pure form have had as outcome that some of the ideas can still be employed, but wherever possible, one should prefer the traditional notation."

Bent Lorentzen.

From Bent Lorentzen: *Triplex* for organ.

The beginning, in the graphic version and in the note-version.

"The greatness which according to my subjective judgement is embodied in the music of these works is due to the composer, thanks to the use of graphic notation and consequently, by virtue of the anti-authoritarian and emancipative nature of this form of notation, having succeeded in creating an extraordinarily freely communicated, almost dramaturgic and in any case very dramatic expression in an unerring formal disposition; another side of the nature of graphic notation, and this should always be pointed out as a contrast to the anti-authoritarian and emancipating aspect, is that the method really has an irresistibly form-demanding gesture towards the user, since it is to a far higher degree than traditional ways of notation is life-like. (...)

On this background it must be evident that I see the revision as a somewhat pessimistic conclusion to a highly vigorous project. Bent Lorentzen has with the revision chosen to close what was open, define what was indefinable - let me use the allegory from above - he has chosen to embalm an embryo."

Musicologist Jens Bruno Hansen.

"... I made the first performance of 3 of the 6 works ... In addition, *Puncta*, *Triplex* and *Groppo* ... came into existence in a very tight and fruitful cooperation between Bent and me at the organ in Sorø. These many hours in which we alternately ran up and down the stairs I shall never forget. They belong to the best ones in my life - with animated discussions, team-work in the best sense of the word - and the great joy when something essential succeeded, the pieces of the puzzle fell into place, was born. (...)

First, the notes surely must be much more confusing - "difficult" and deterring to a conservatory student who might consider playing it at his diploma exam than the graphic picture will be with a well-informed teacher at his side, second, the notes narrow down possibilities of interpretation unreasonably. (...)

The comparison to Bruckner who revised many passages of genius in his symphonies to death is unfortunately very much to the point."

Organist Knud Vad

"I admit that the graphic version must be the starting-point and that my note-interpretation only is to be seen as one among many possible. (...) not all versions of my graphic scores that I have had the opportunity to hear have been equally good. Some have even, to my opinion, been quite unacceptable. This is because the organist did not have the necessary background knowledge or intuition for how the style of the seventies was as to timbres, rhythm, harmony, gesture and phrasing. It appears that in order to play a graphic score satisfactorily you must know the style of the period to the bottom, there being many unwritten rules of the game. Let us, therefore, try together to describe these unwritten notes and rules before we forget them."

Bent Lorentzen.