boucles FOR ever!

Un workshop qui explore une structure informatique
afin d’explorer l’émergence de structures visuelles.

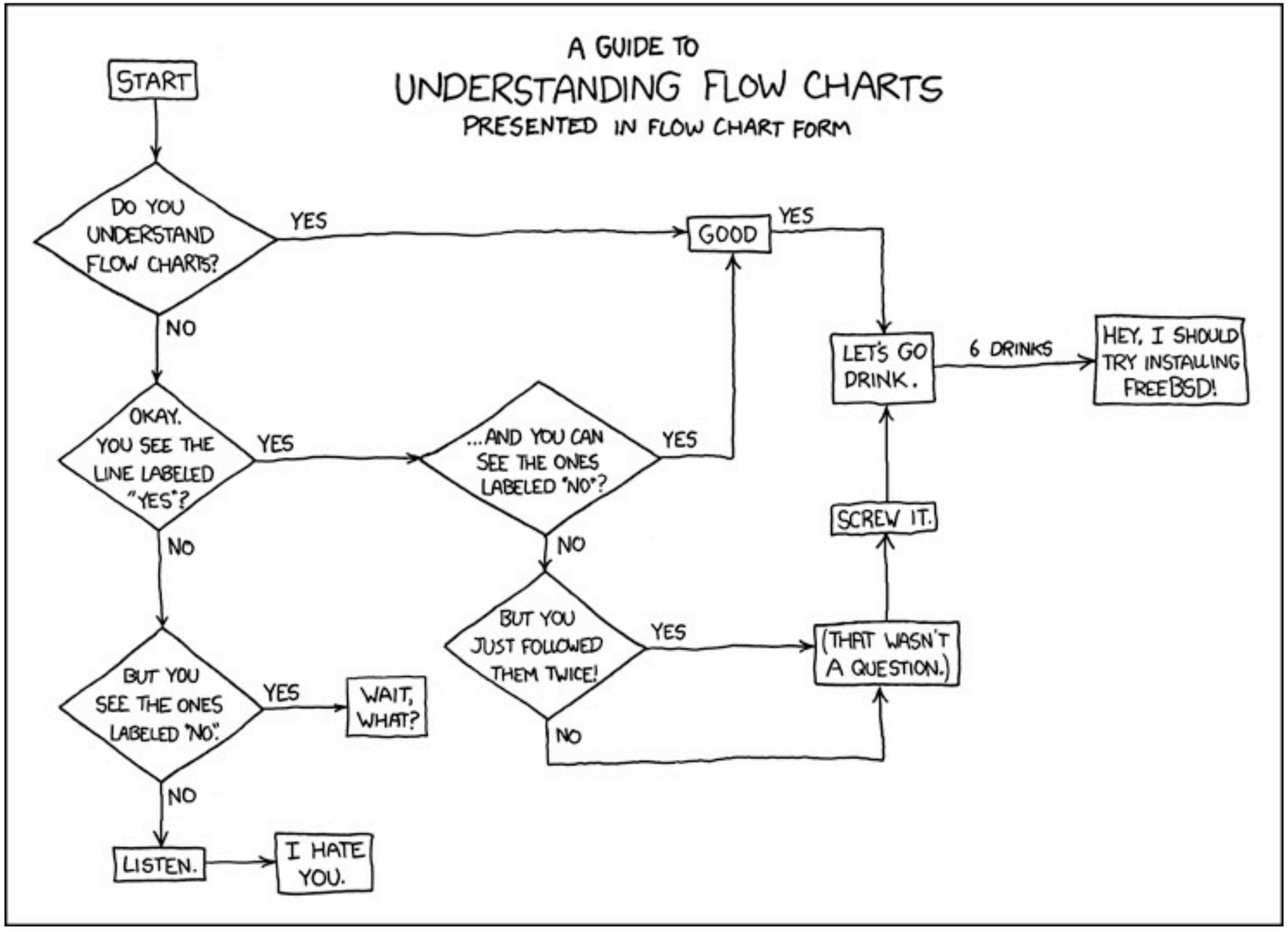
LA BOUCLE FOR / THE FOR LOOP

Une **structure de contrôle** permettant de réaliser la répétition d'une ou plusieurs instructions.

// repeat // something // until i say ... // STOP.

A FOR Loop is a **programming structure** that repeats instruction(s).

UNE STRUCTURE ?



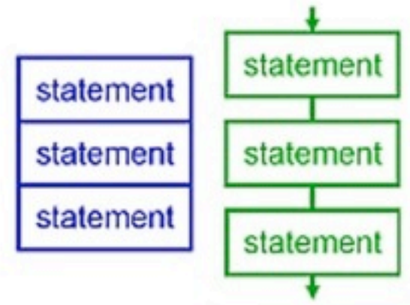
3 STRUCTURES

- Structures linéaires d’opérations.
  SEQUENCE

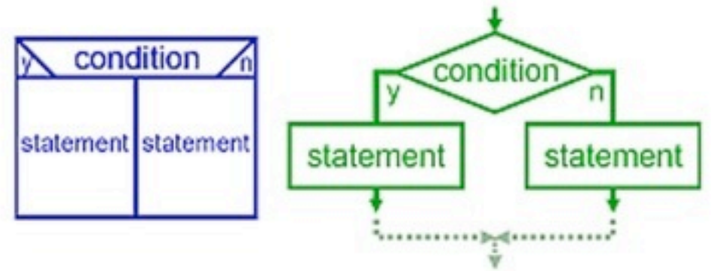
- Structures alternatives ou conditionnelles.
  SELECTION

- Structures itératives / répétitives
  ITERATION

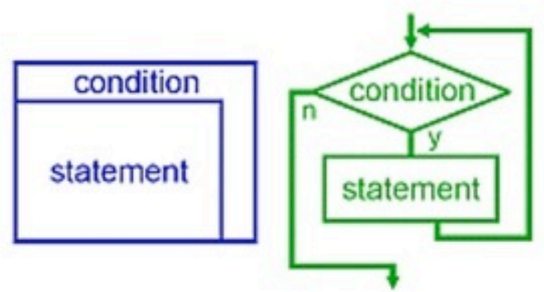
SEQUENCE



SELECTION



ITERATION



MAIS...

... une petite histoire personnelle...

Comment moi, j'ai comrpis les boucles FOR

DESIGN

«Le designer est essentiellement un organisateur des formes avec une sensibilité ésthétique.»

Bruno Munari. Design as Art.


50 GESTES
pour la Terre
HIGH SCHOOL MUSICAL
Clochette
Bella Sara
PRINCESSE Academy
CHRIS RIDDELL
APOLLINE ET LE CHAT MASQUÉ
CHRIS RIDDELL
APOLLINE EN MER
CHRIS RIDDELL
APOLLINE ET LE FANTÔME DE L'ÉCOLE
Clochette
Bella Sara
PRINCESSE Academy
Les boîtes de peinture
Princesse Histamine
Pokémon
Love
Tea Sisters contre Vanilla Girls
Les Pozzis
Tea Sisters
LE ROYAUME DU BONHEUR
Chi
Chi
Chi
Chi
Chi
THE ENCHANTED WOOD
une sacrée mamie
une sacrée mamie
une sacrée mamie
THE FOLK OF THE FARAWAY TREE
THE MAGIC FARAWAY TREE

La grille est un programme par excellence.

The New York Times folder shows the solution of a complex problem; it displays the integration of an idea, a text and typographical presentation through several phases. It would be a further task to integrate this type of folder with other advertising media or printed matter. Today more than ever, firms need not only a folder here, a poster or an advertisement there. Today something else is needed: a physiognomy, a public face.

The examples on these pages show the physiognomy of "Boîte à musique", a record shop in Basel. "Boîte à musique" has a signature and a style of its own – but not in the sense of an unchangeable mark or of a mere aesthetic principle. Rather do the elements, definitely established though adapted in every case to the functions and proportions, constitute the signature and style in one.

Fig. 13 shows the structure. The lettering and frame are fixed elements; so are the connection between them and the principle of variability. Starting from the bottom right corner, the frame can be increased upward or to the left by whole units at a time. There is no case which is pre-eminent for its proportions. There are only variants of equal value; and the variant is pre-eminent when it is best adapted to the particular problem awaiting solution.

Fig. 14 shows the New Year's card with variants embodying different proportions at one and the same time; 15 the note paper, in which the insignia is adapted to the (given) DIN A4 format; 16 and 17 advertisements tailored to fit the advertising space available; 18 a gift voucher.

13

boîte à
musique

64.65

14

boîte à
musique

boîte à
musique

15

boîte à
musique

16

boîte à
musique

17

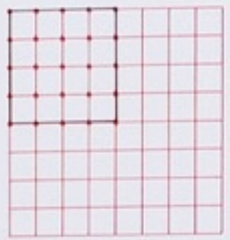
alle platten – derrik olsen
im shopping center drachen basel
23 04 33

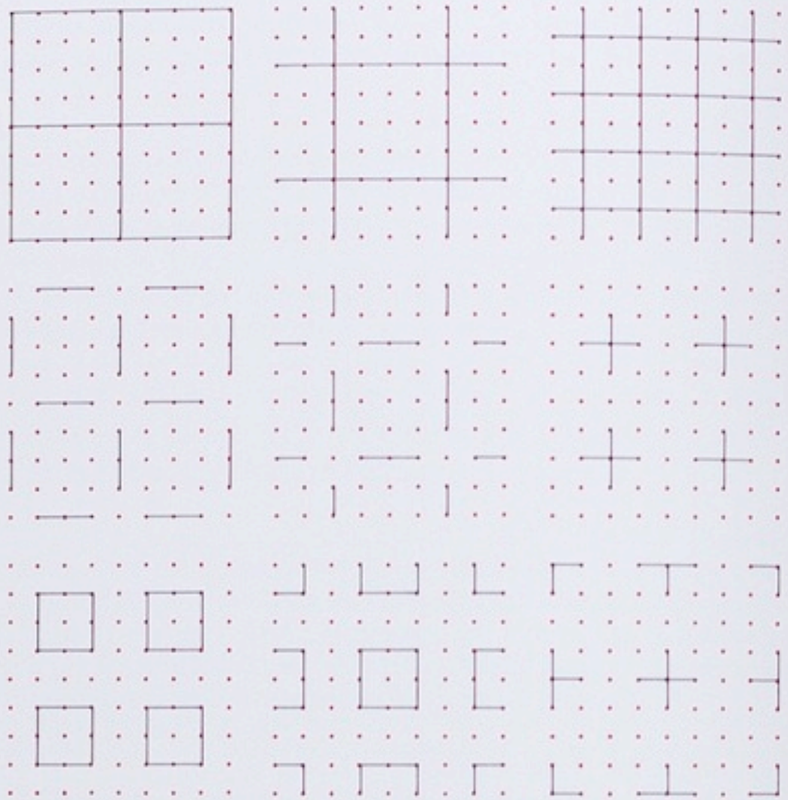
boîte à
musique

18

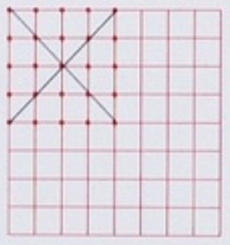
boîte à
musique

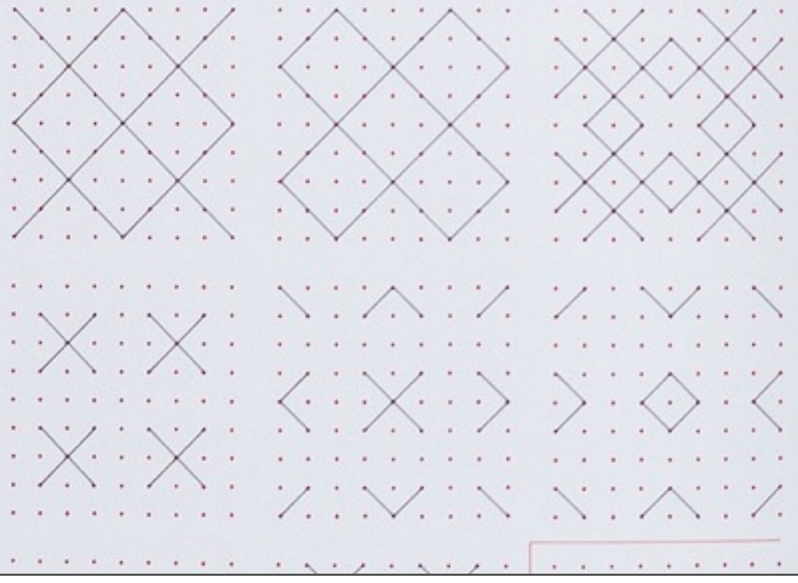
7.1

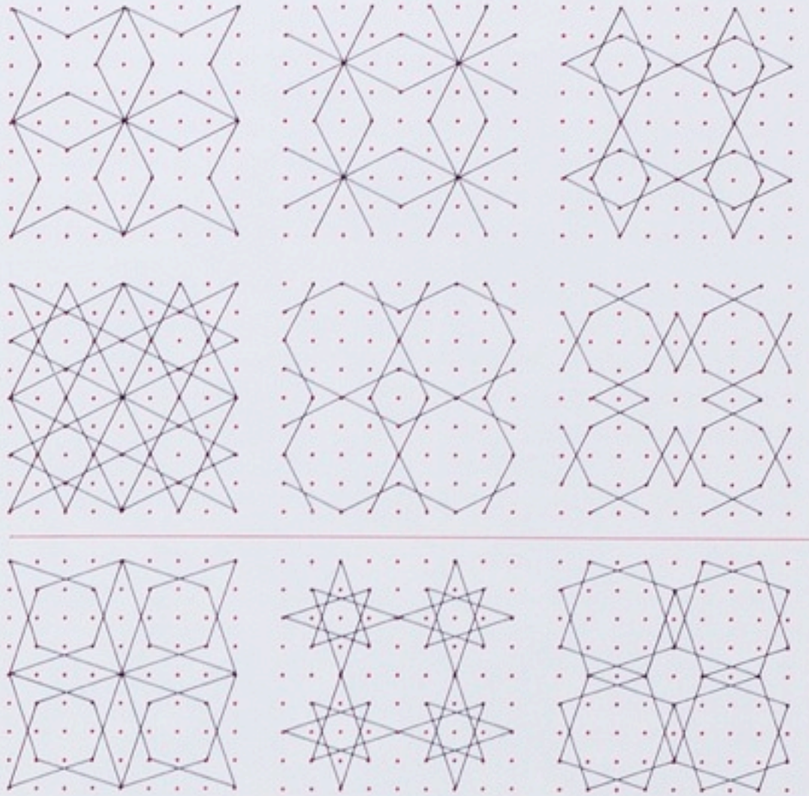


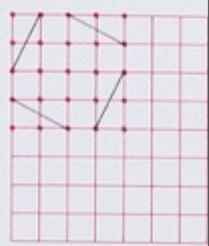


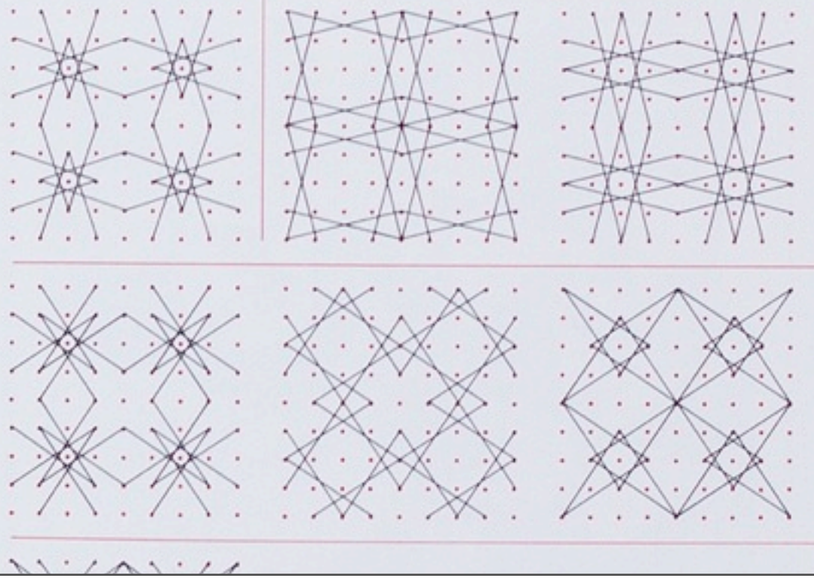
7.2

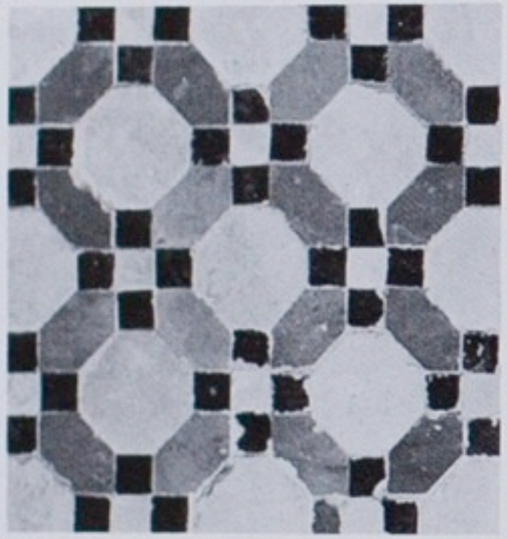




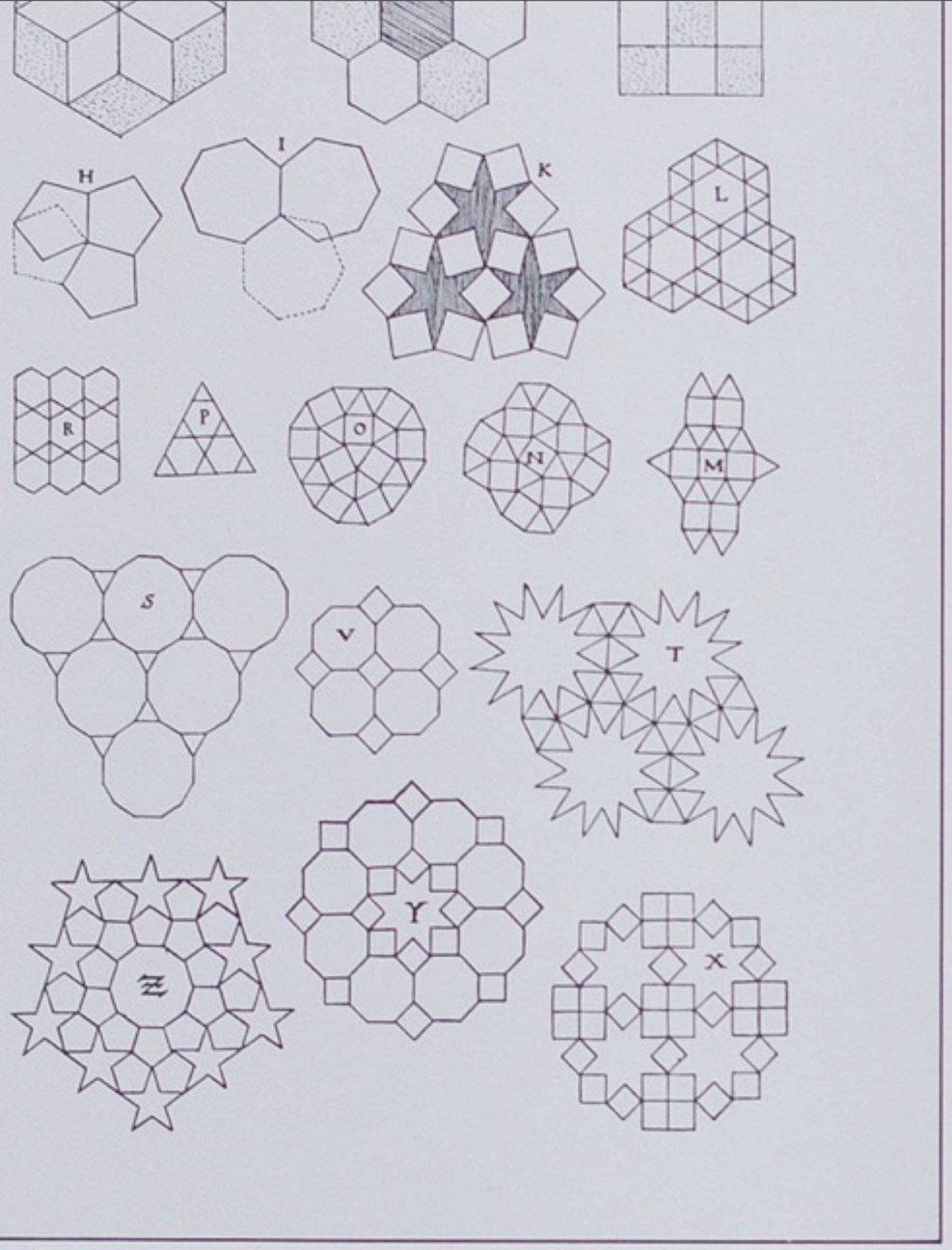








1



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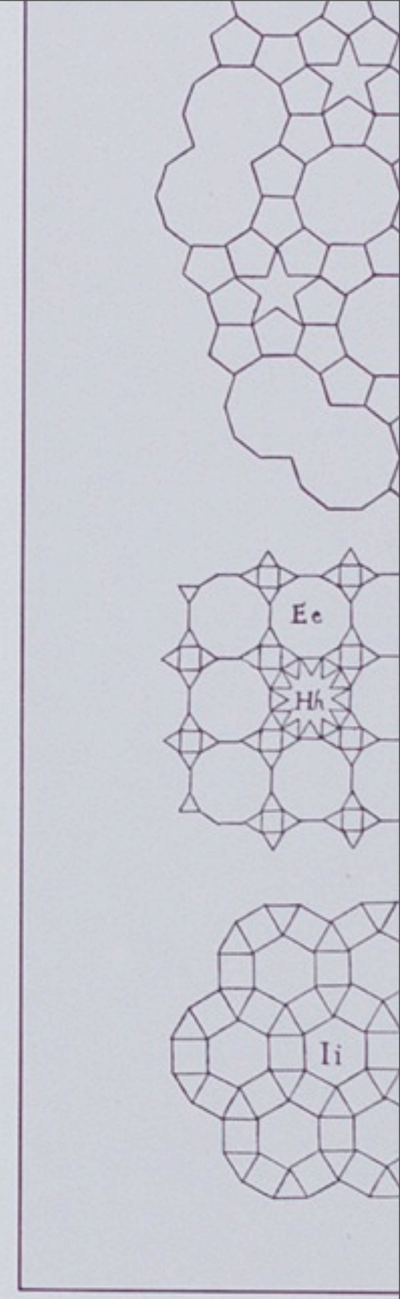


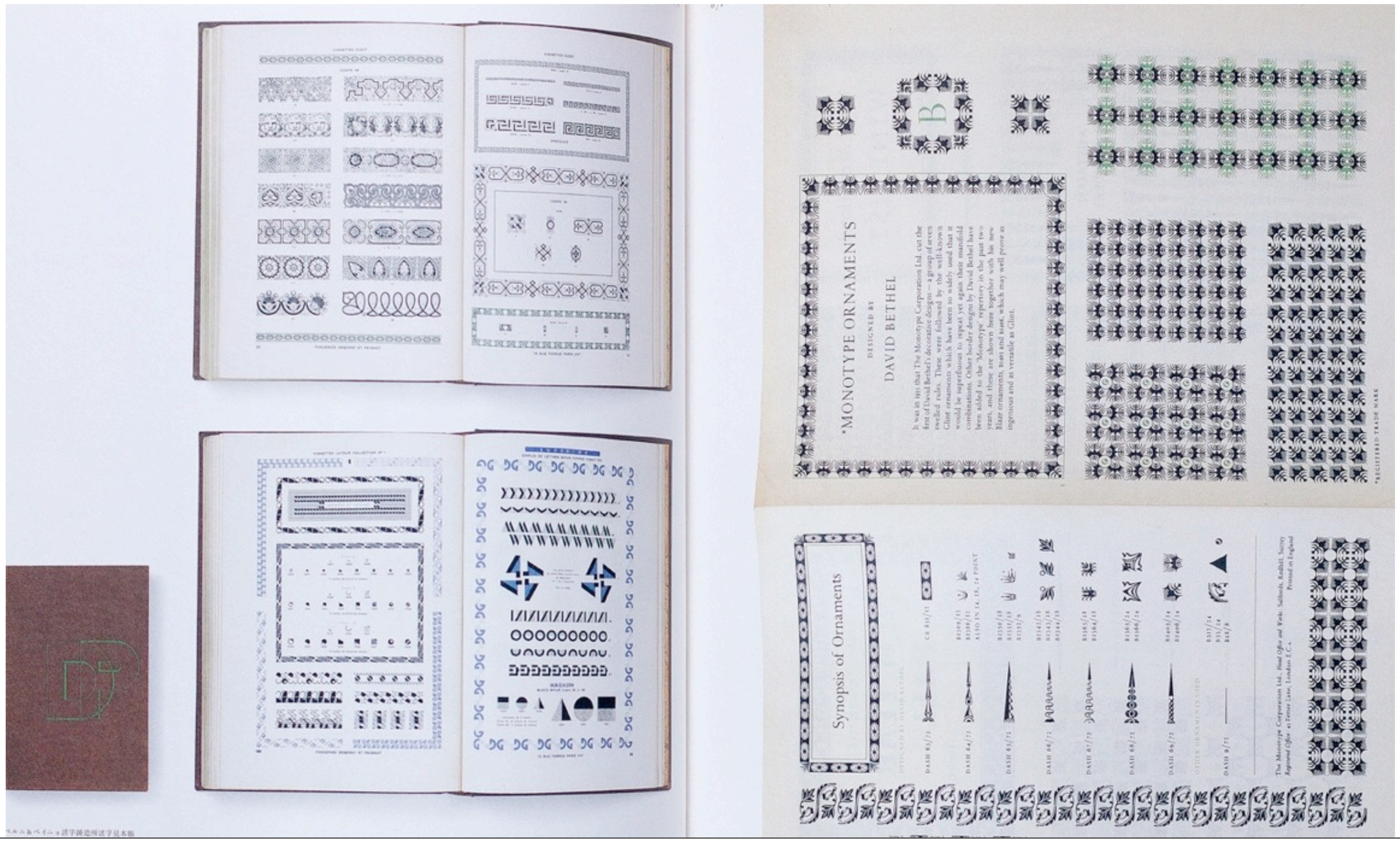
2.2

La géométrie comme loi universelle

L'ordre universel, dans son intégralité, trouve ses racines dans la géométrie. Il est «éternel comme

l'harmonie du monde, publiée en 1619.[12]

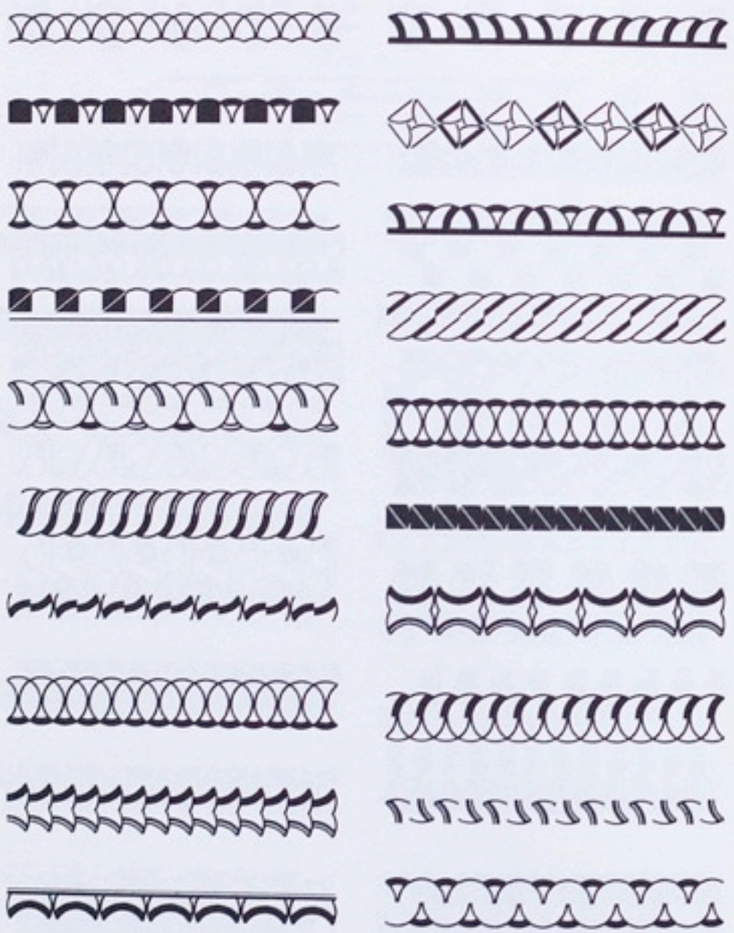
Pour Kepler, harmoniqu
nyme de cosmogonique.


MONOTYPE ORNAMENTS
DESIGNED BY
DAVID BETHEL
Synopsis of Ornaments
DASH 63/72
DASH 64/72
DASH 65/72
DASH 66/72
DASH 67/72
DASH 68/72
DASH 69/72
DASH 9/71
The Monotype Corporation Ltd., Head Office and Works: Salfords, Redhill, Surrey
Registered Office: 43 Fetter Lane, London E.C.4. Printed in England

DÉTAIL DES PIÈCES :

Corps 12

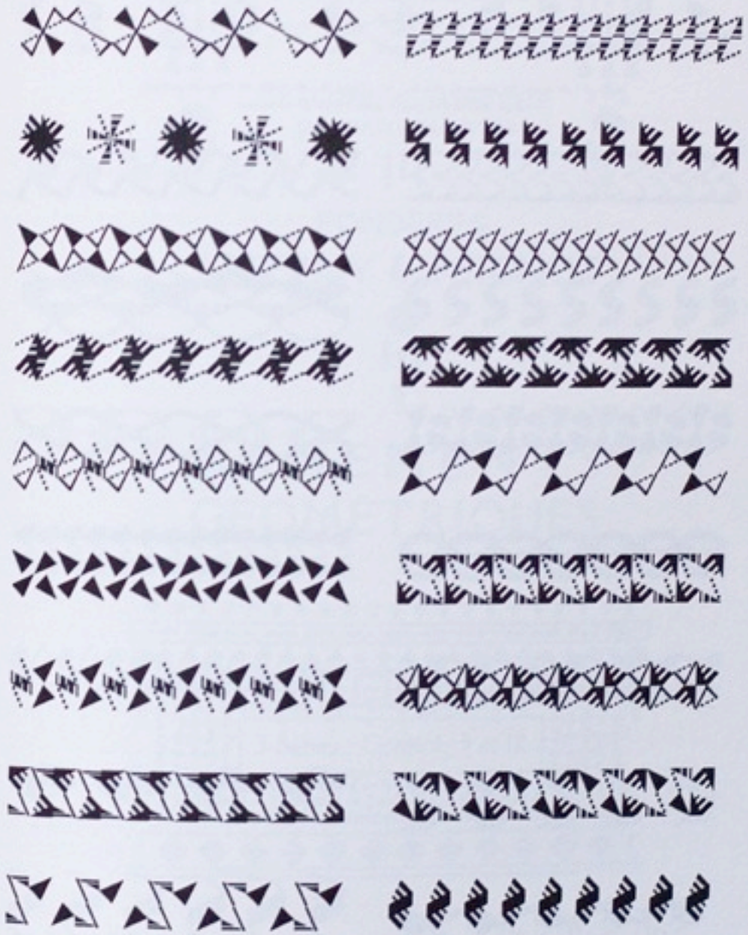
Corps 12 : 12 motifs, 50 pièces de chaque. — Pièces séparées : au kilo, à partir de 250 gr. de chaque.



DÉTAIL DES PIÈCES :

Corps 12

Corps 12 : 5 motifs, 100 pièces de chaque. — Pièces séparées : au kilo, à partir de 250 gr. de chaque.



Zuzana Licko

ズザーナ・リッコ

orthern California. Coinciding
intosh, Emigre was one of the
foundries to establish itself
technology.
ublisher of the critically ac-
nigre magazine which was pub-
2005. The magazine garnered
hen it began to incorporate
esigns, created with the first
sh computer. This exposure of
agazine led to the commercial
re Fonts Library, which is now
ldwide.
n work, Licko is also involved
a-kind ceramic vases, as well
ts using her ornament fonts.
eam, Licko has won numerous
tinctions including the 1994
vation in Design and the 1998
or excellence in the field of
o a recipient of the 1997 Ameri-
Arts Gold Medal Award, and in
ated for the Cooper Hewitt
Achievement Award.
Emigre is in the permanent col-
of Modern Art in New York, The
Museum of Modern Art in San
que Nationale de France, The
y other institutions around the
gre magazine are currently on
m of Modern Art, New York. The
r 22, 2006.

Zuzana Licko

ズザーナ・リッコ

jjj... | jjj... | ...

RoRoRoRo | oRoRoRoR | ...

bbb8 | 8b8b | ...

ccc | ...

ccc | ...

ccc | ccc | ...

cCcCcCcC | CcCcCcCc | ...

ddddddd | DDDDDDD | ...

GdGdGdD | dDdDdDd | ...

eee | EEE | ...

eEe | EeE | ...

f

fff | ...

F

FFF | ...

gGghHh | GgGHhh | ... | HhHGgG | hHhgGg | ...

g

hhh | ...

G

HH | ...

IIIIIIIIIIIIIII | ...

i

I

iii | ...

III | ...

tututu... | tututu... | ...

oo | oo

o

bb | bb

B

oRRo... | oRRo... | RooR... | RooR... | ...

cc | cc

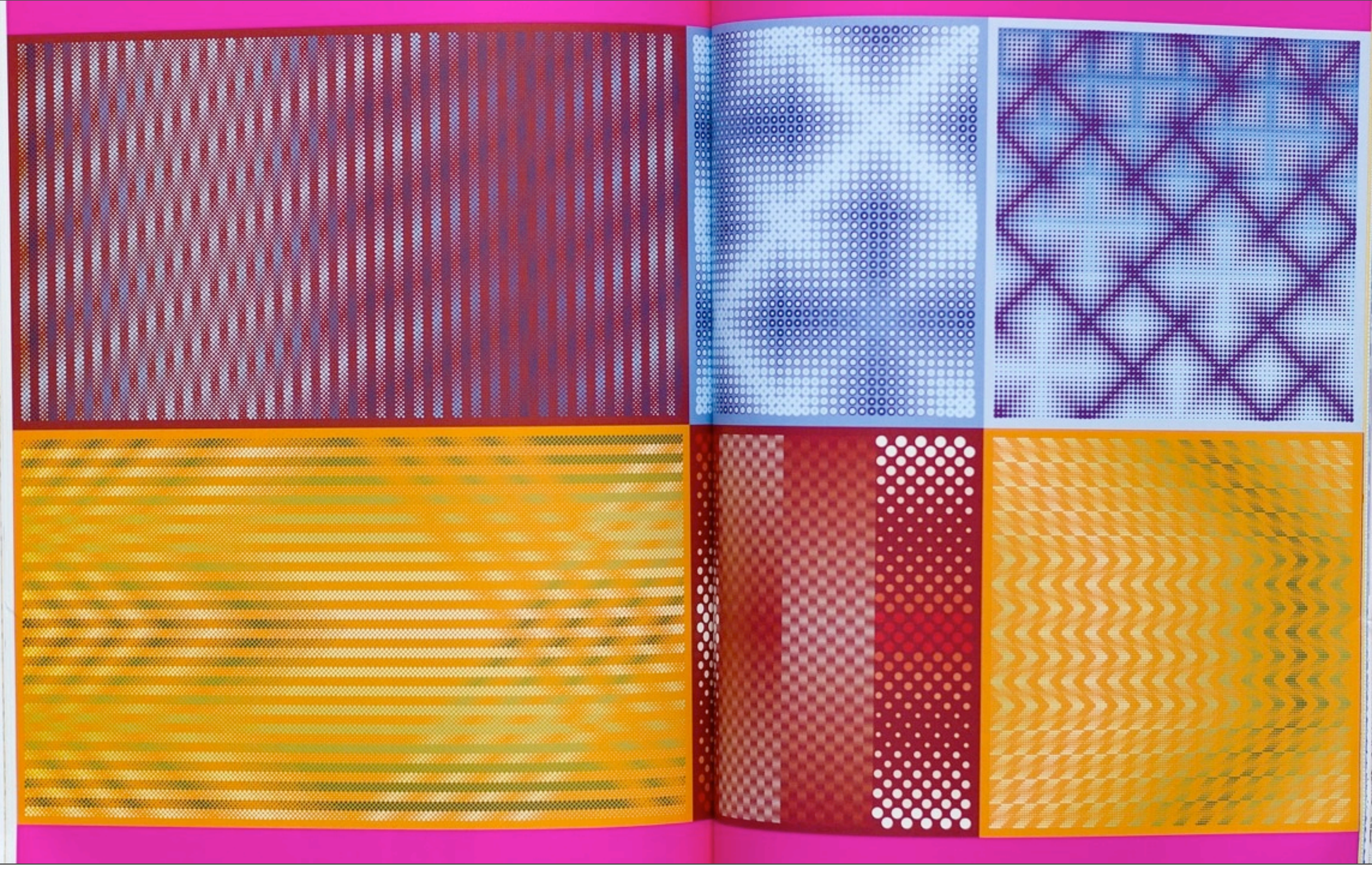
C

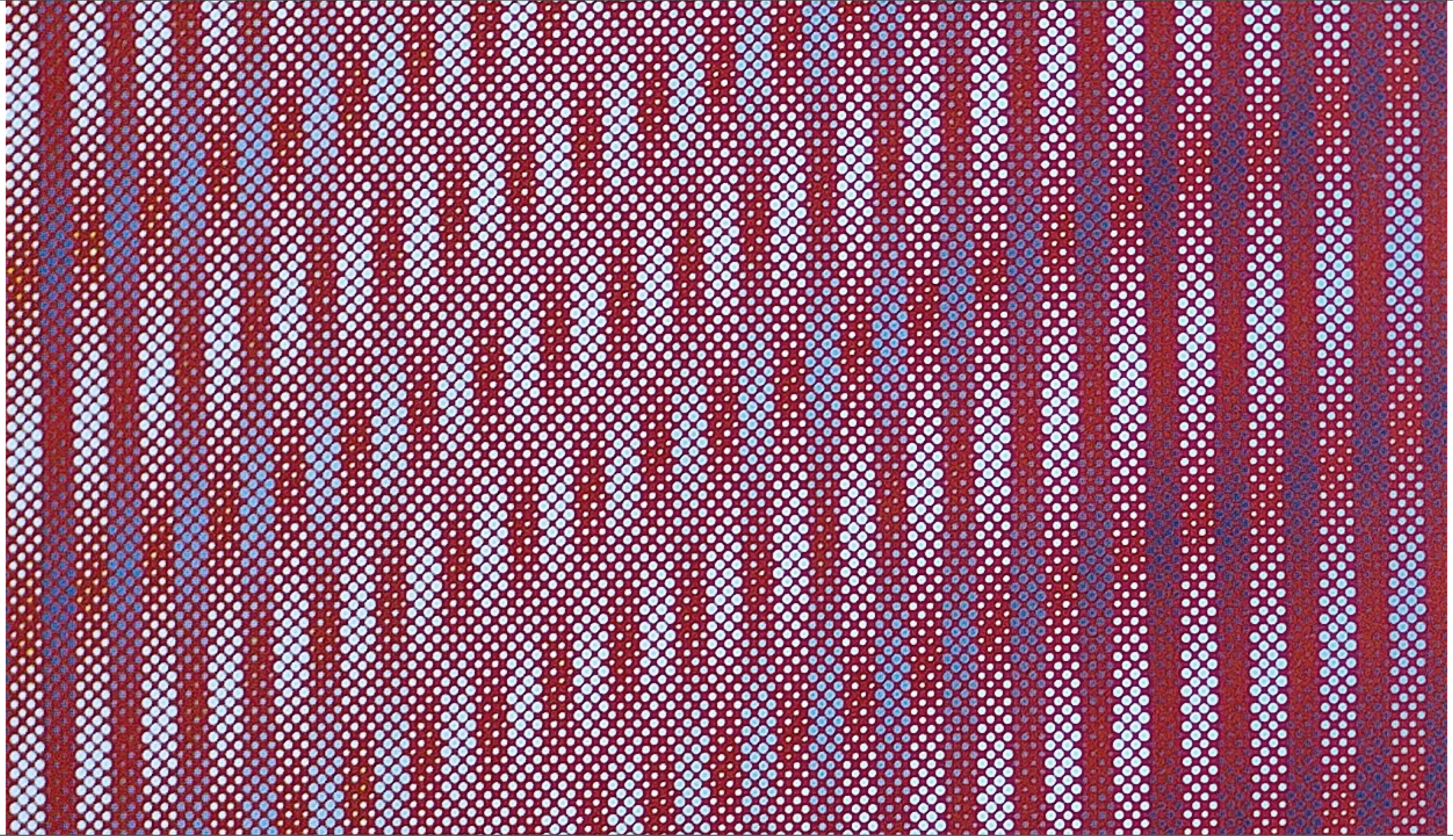
cccCCC | etc.

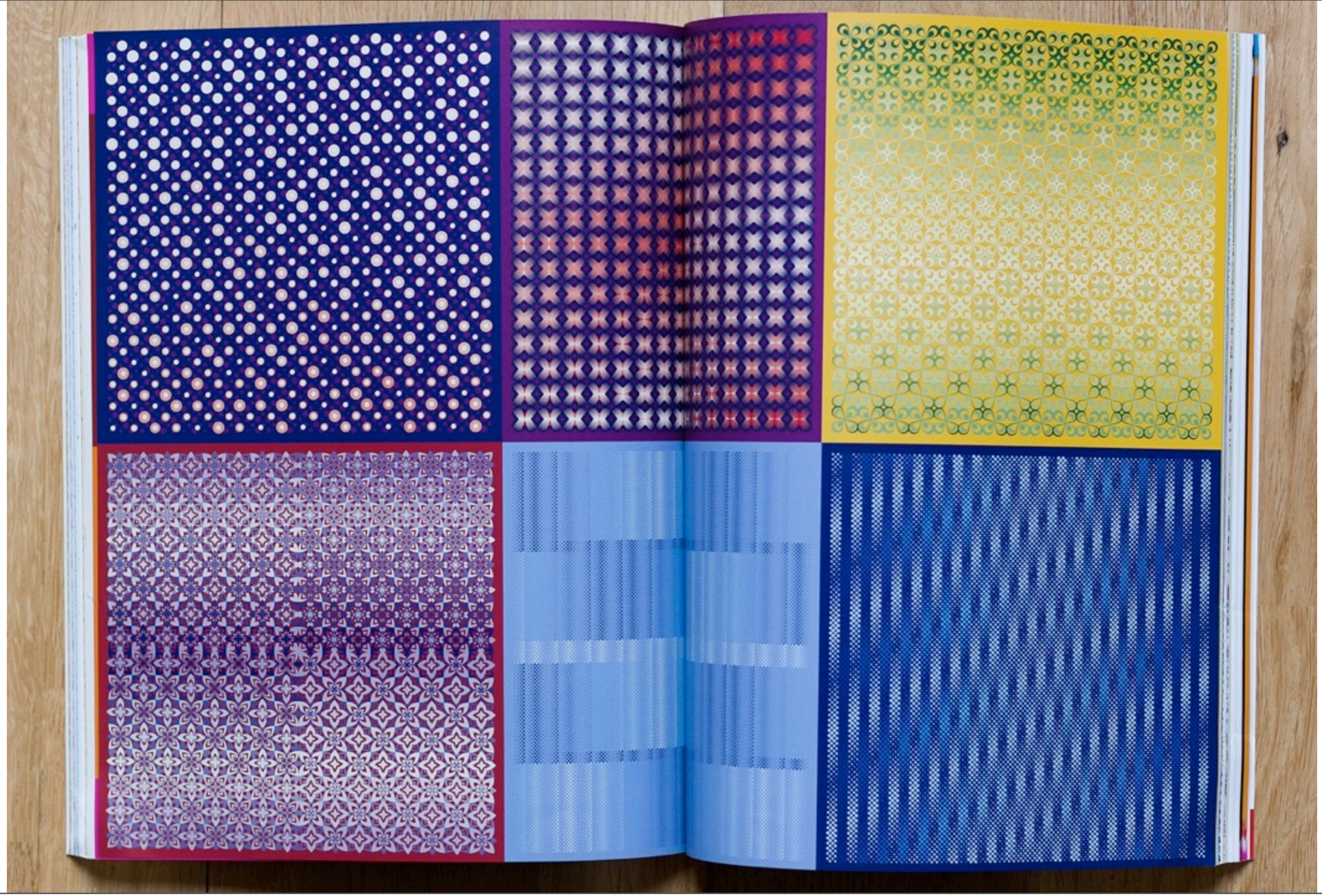
CCcc... | ccCC... | ...

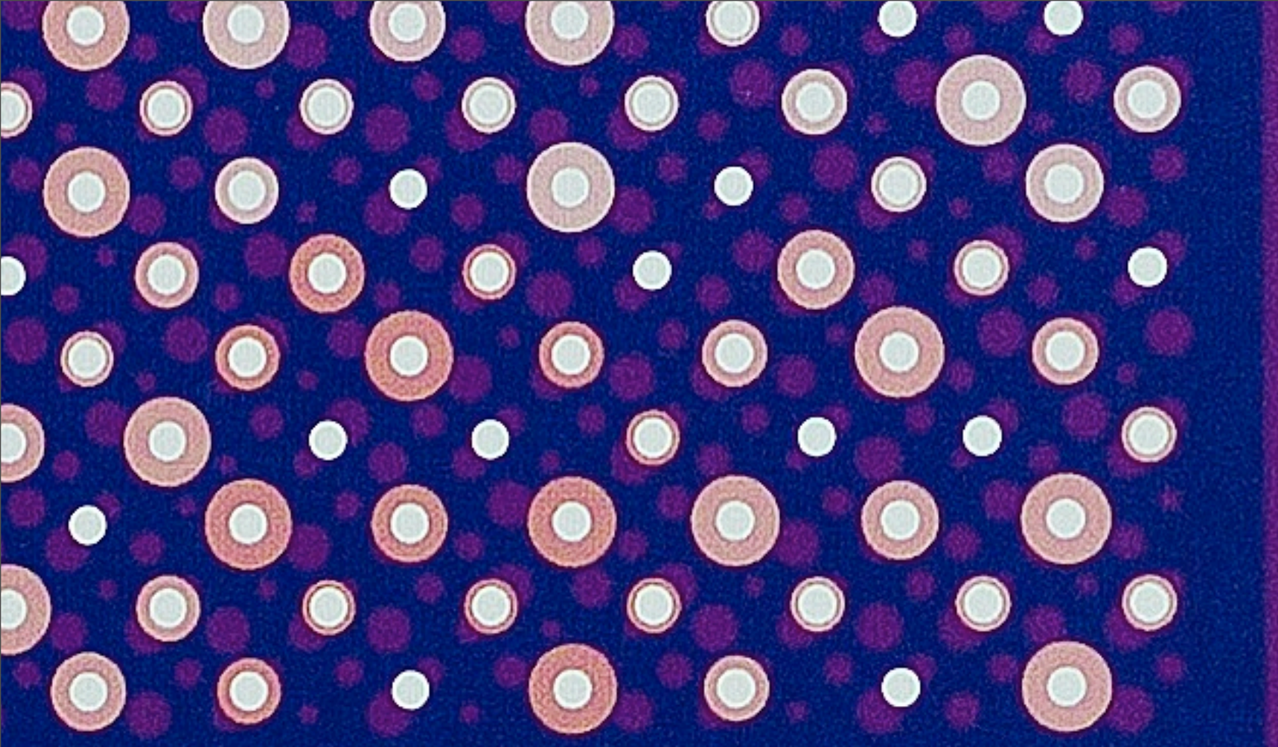
cc... | cc... | cc... | cc... | ...

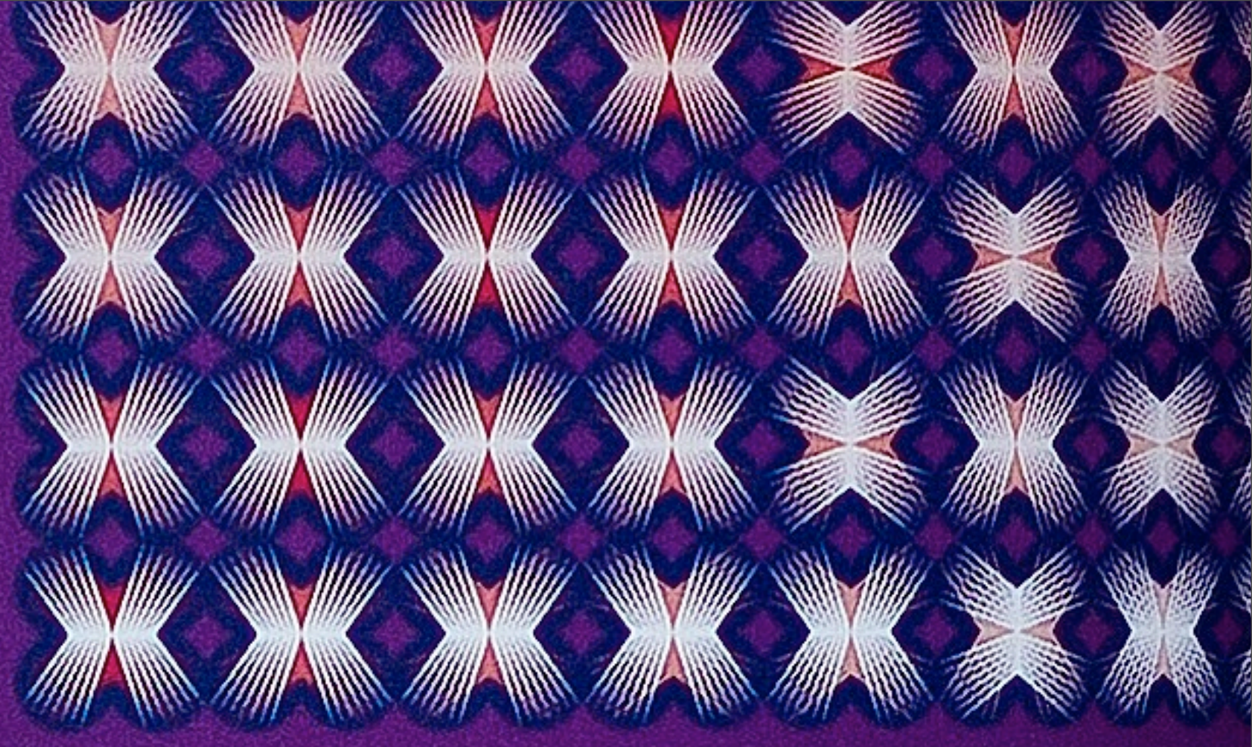
CCcc... | CCcc... | CCcc... | CCcc... | ...

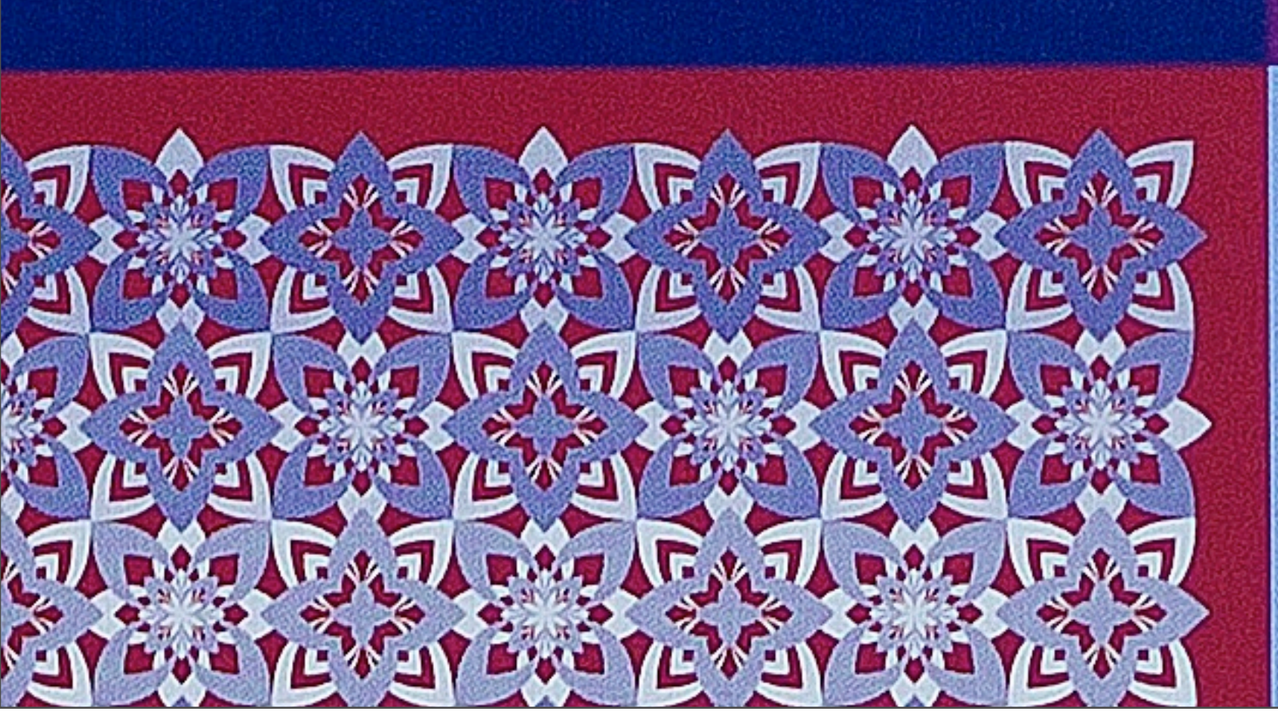


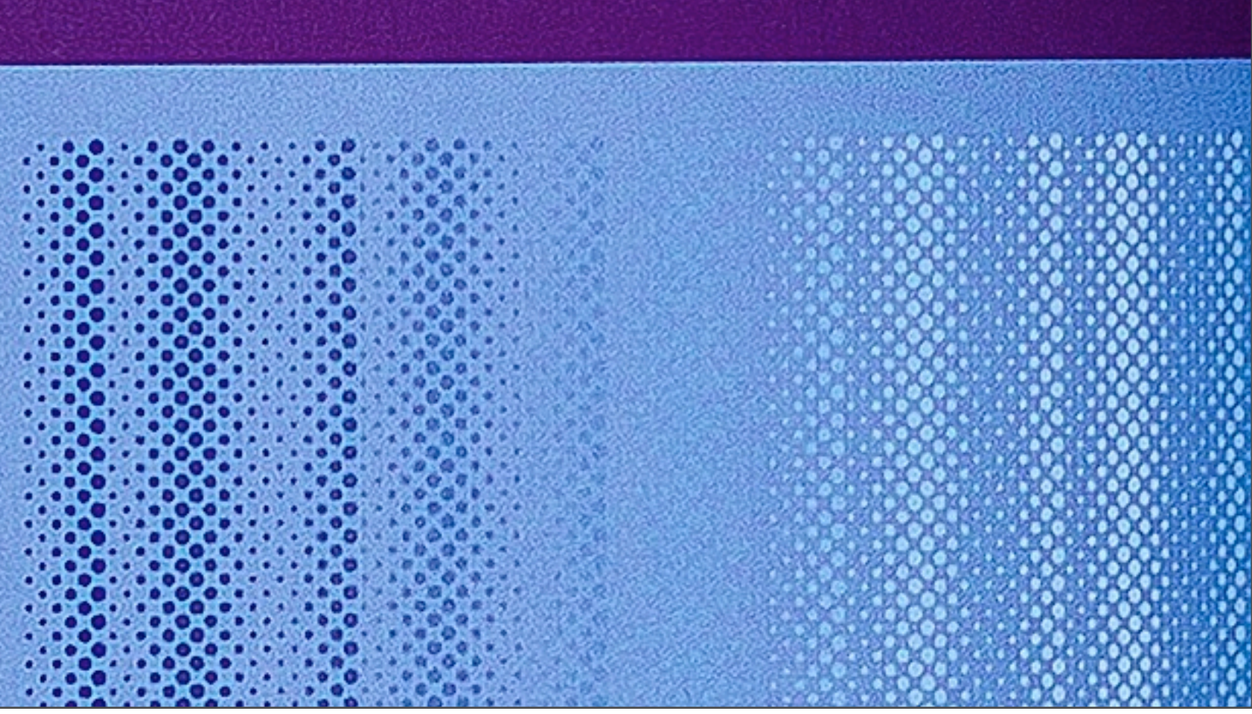













Andrea Tinnes
アンドレア・ティンネス

posing various shapes).

Volvox is inspired by the natural aesthetics of scientific drawings especially by the beautiful illustrations of Ernst Haeckel in *Art forms in nature* as well as D'Arcy Thompson in *On growth and form*.

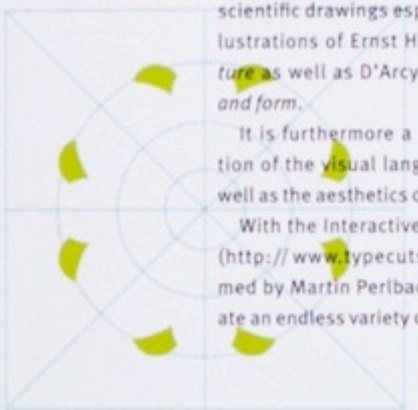
It is furthermore a contemporary interpretation of the visual language of art nouveaux as well as the aesthetics of psychedelic on art.

With the Interactive Volvox flash application (http:// www.typecuts.com/volvox), programmed by Martin Perlbach, the user is able to create an endless variety of Volvox composites.

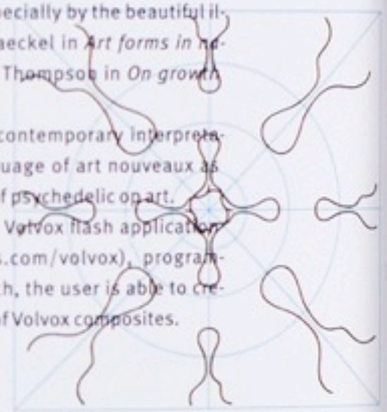
volvox 1 A

volvox 2 A

volvox 3 A

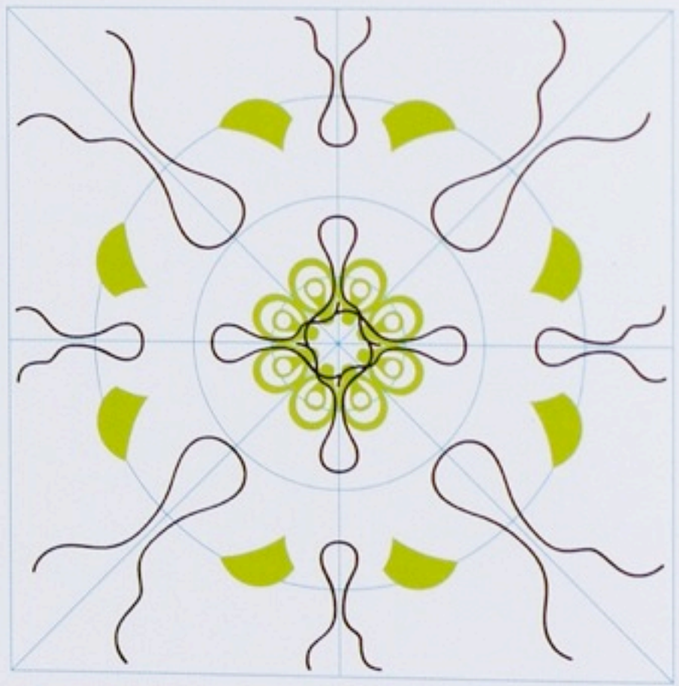


volvox 4 A



volvox 5 A

volvox 1+2 A



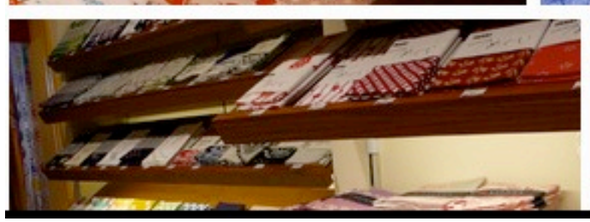
volvox 3+4+5 A

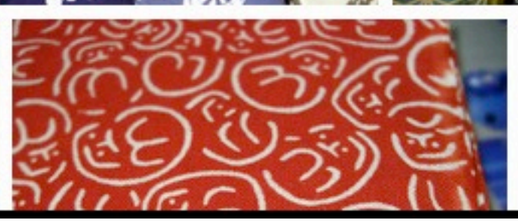
volvox 1+2+3+4+5 A

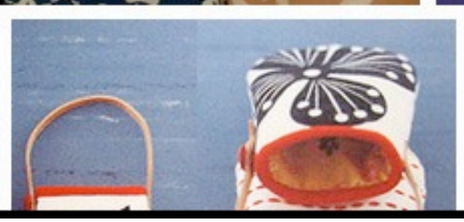

kenema
kenema
kenema

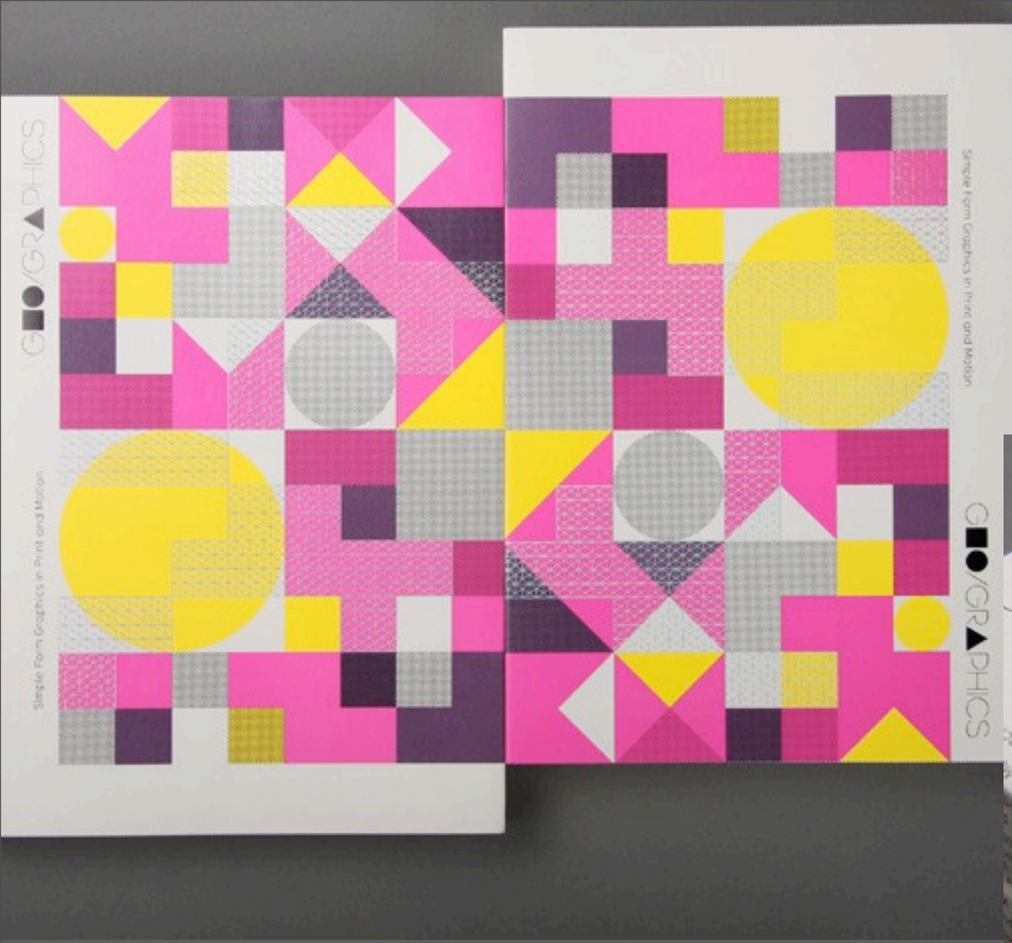

にじゆら
にじゆら


kenema
kenema
kenema
kenema



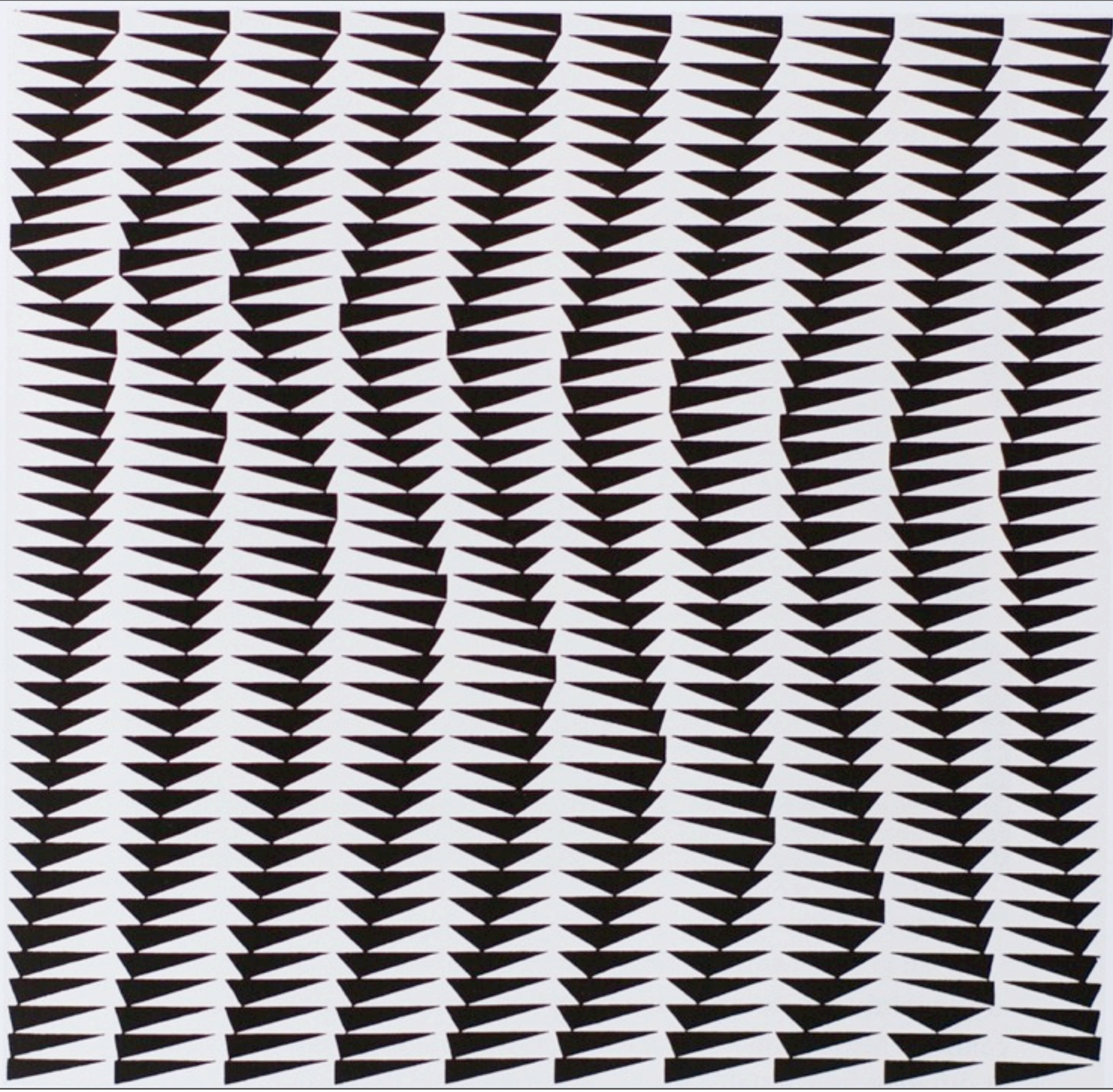


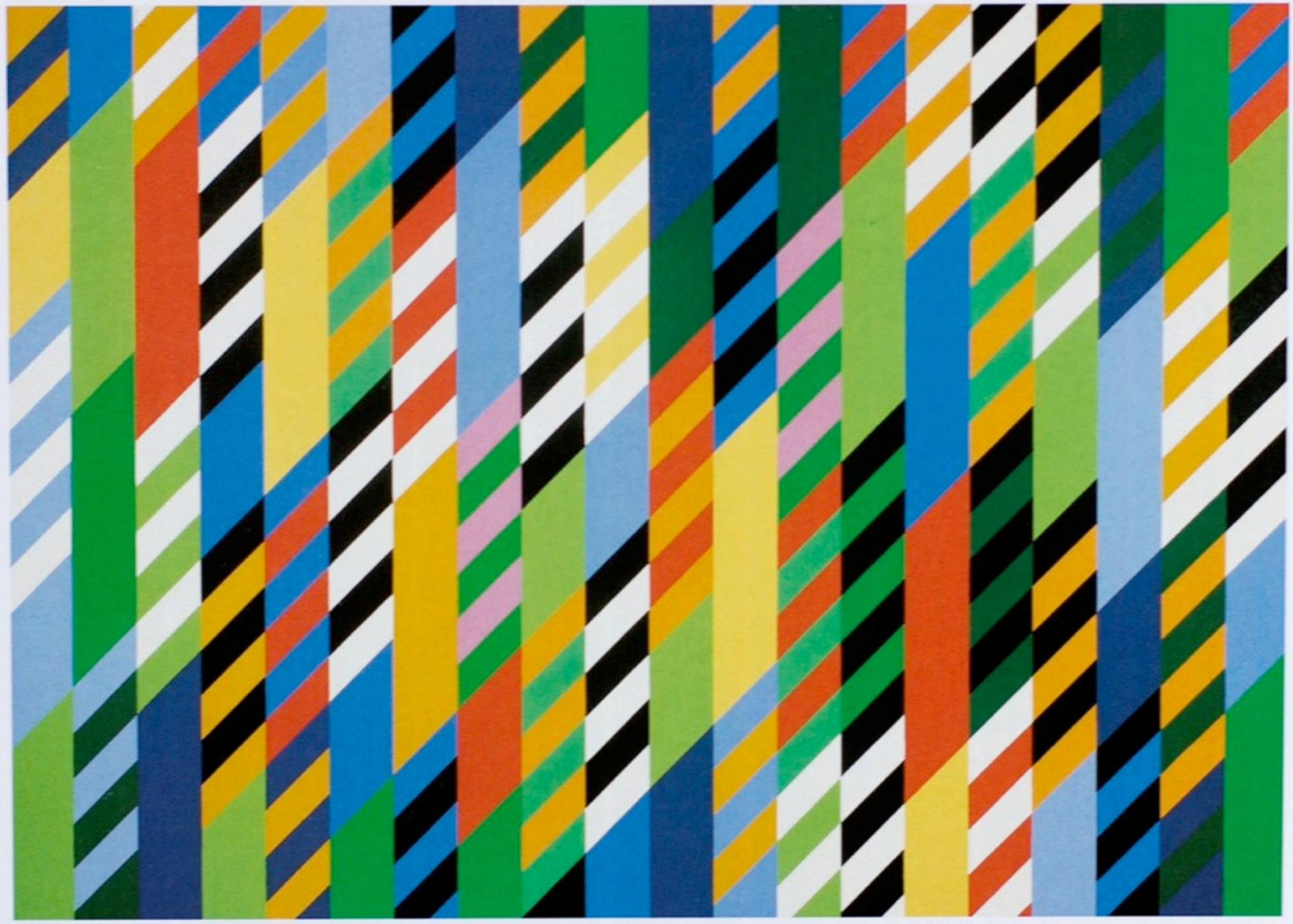


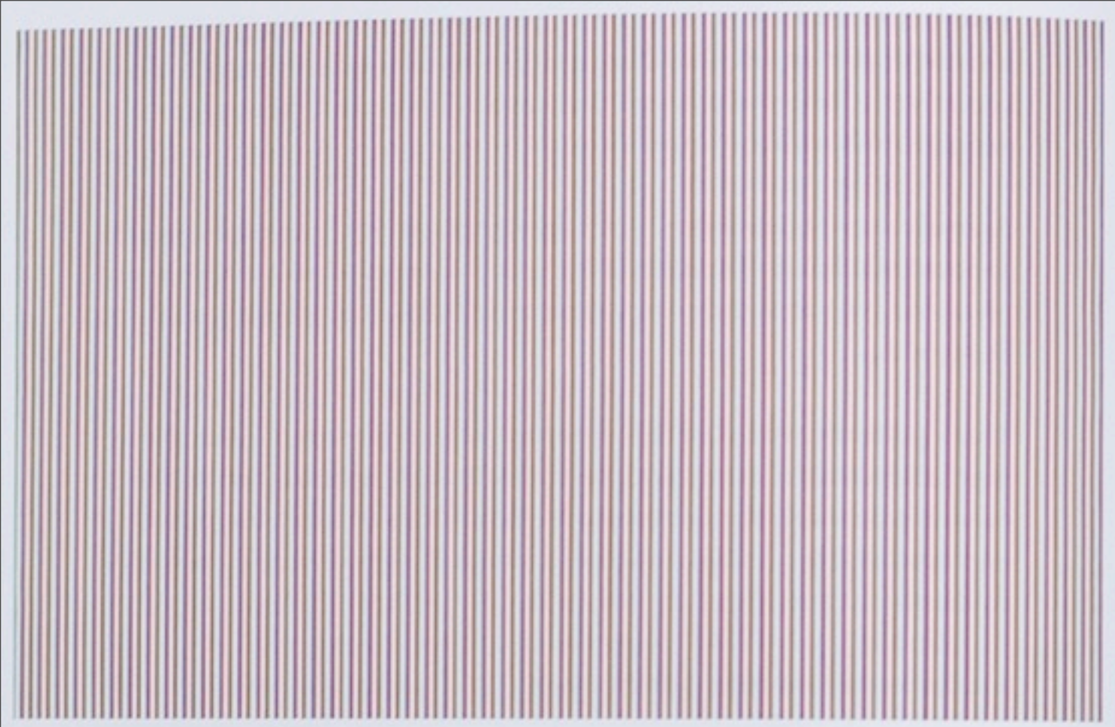

GEO/GRAPHICS
Simple Form Graphics in Print and Motion

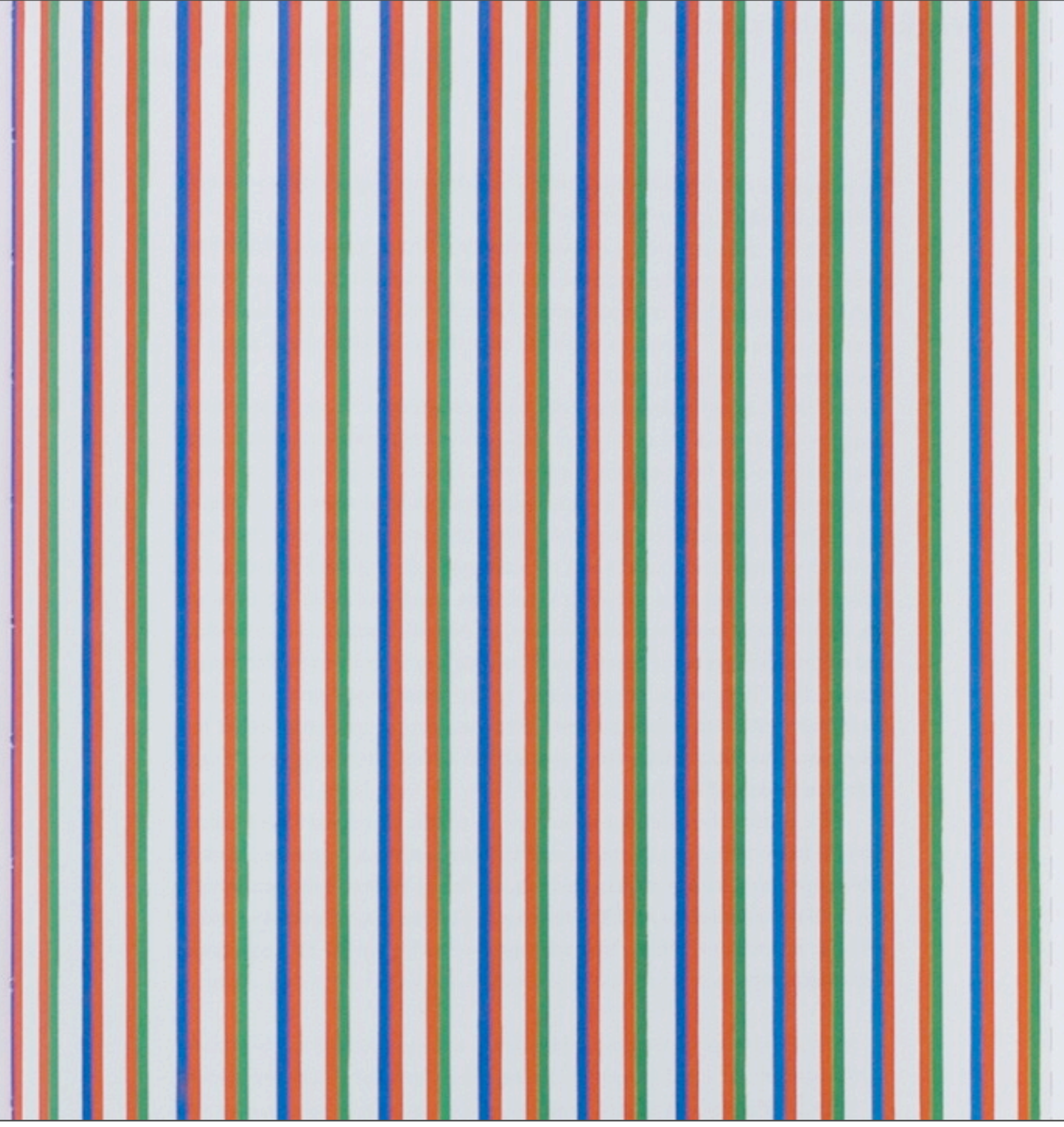

GEO/GRAPHICS
Simple Form Graphics in Print and Motion

PATTERNS









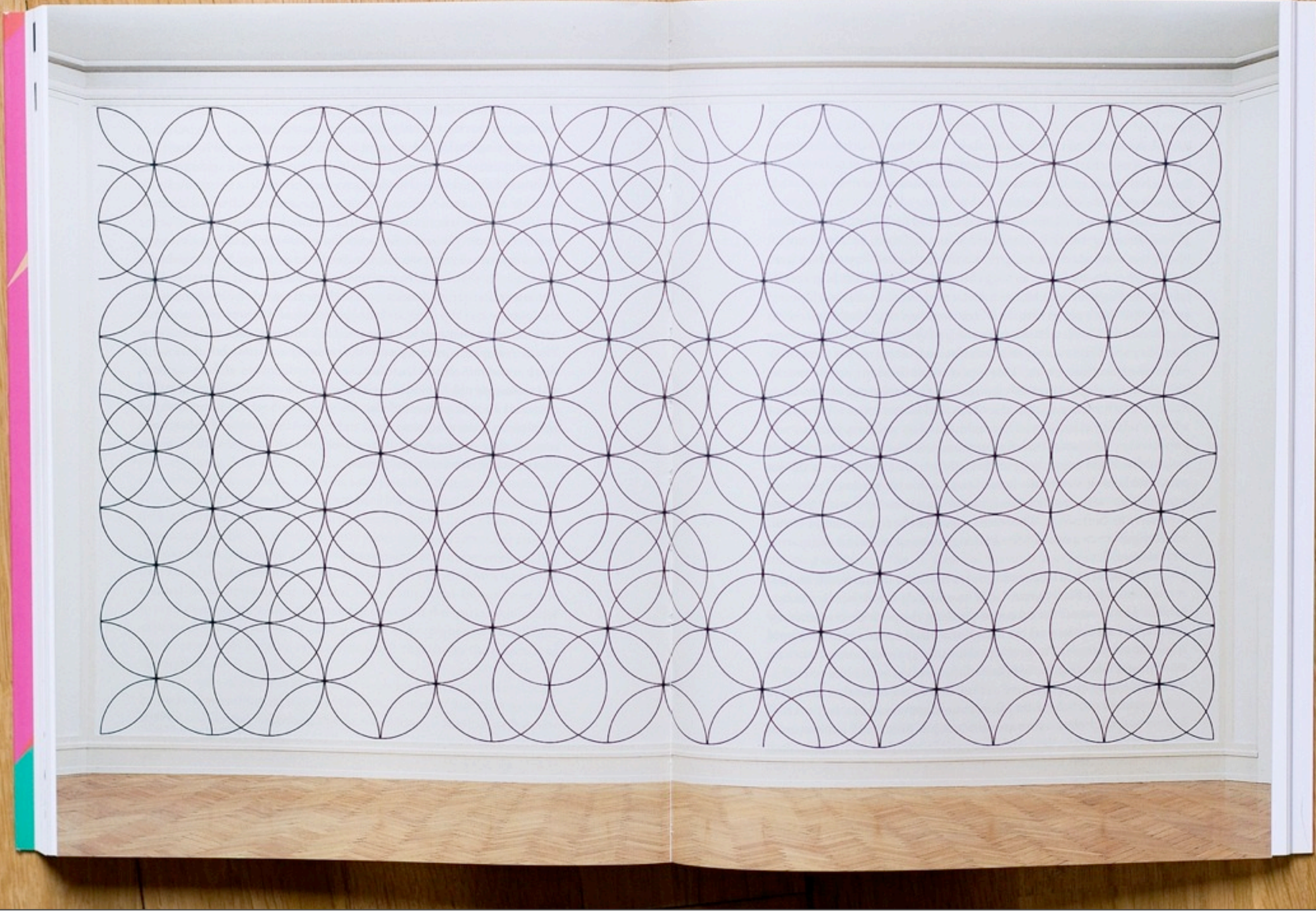
Late Morning 1967 – 68 (right: detail)

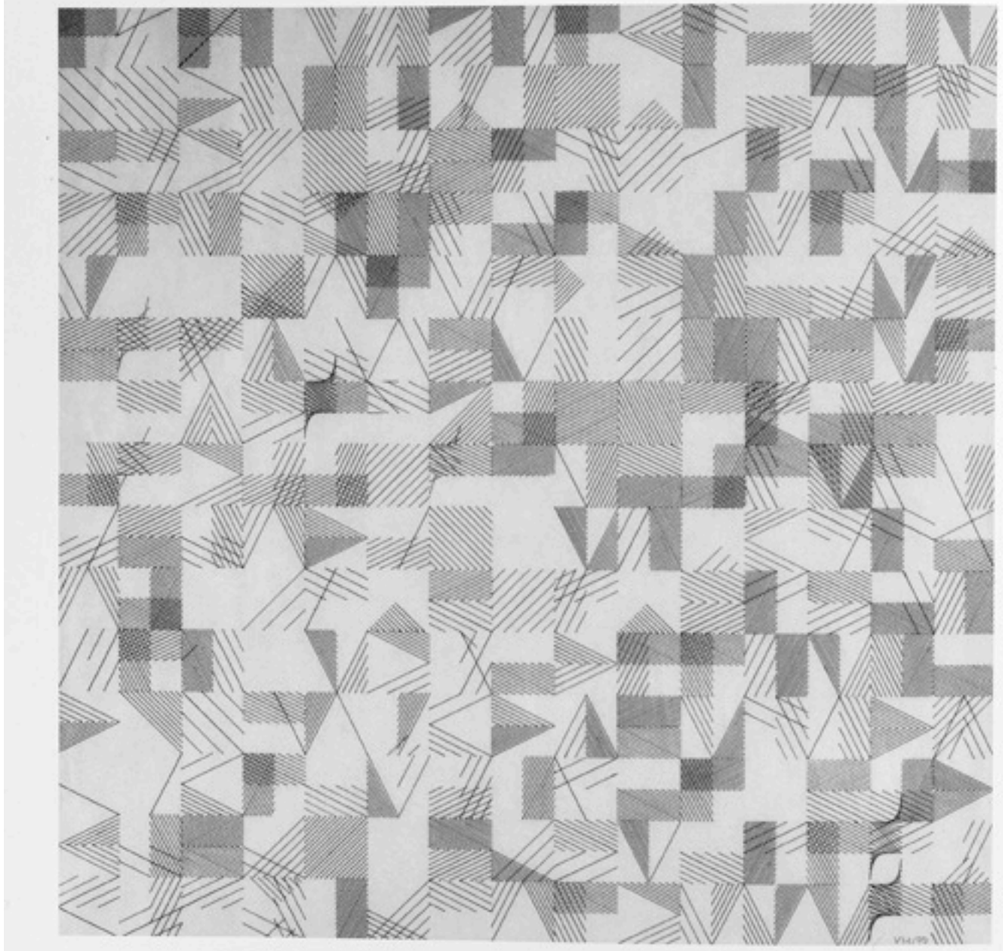
And its absolute dissolution. When grey eclipses the light, the painting is unable to offer anything.[3]

Is that how the spectator experiences the medium?

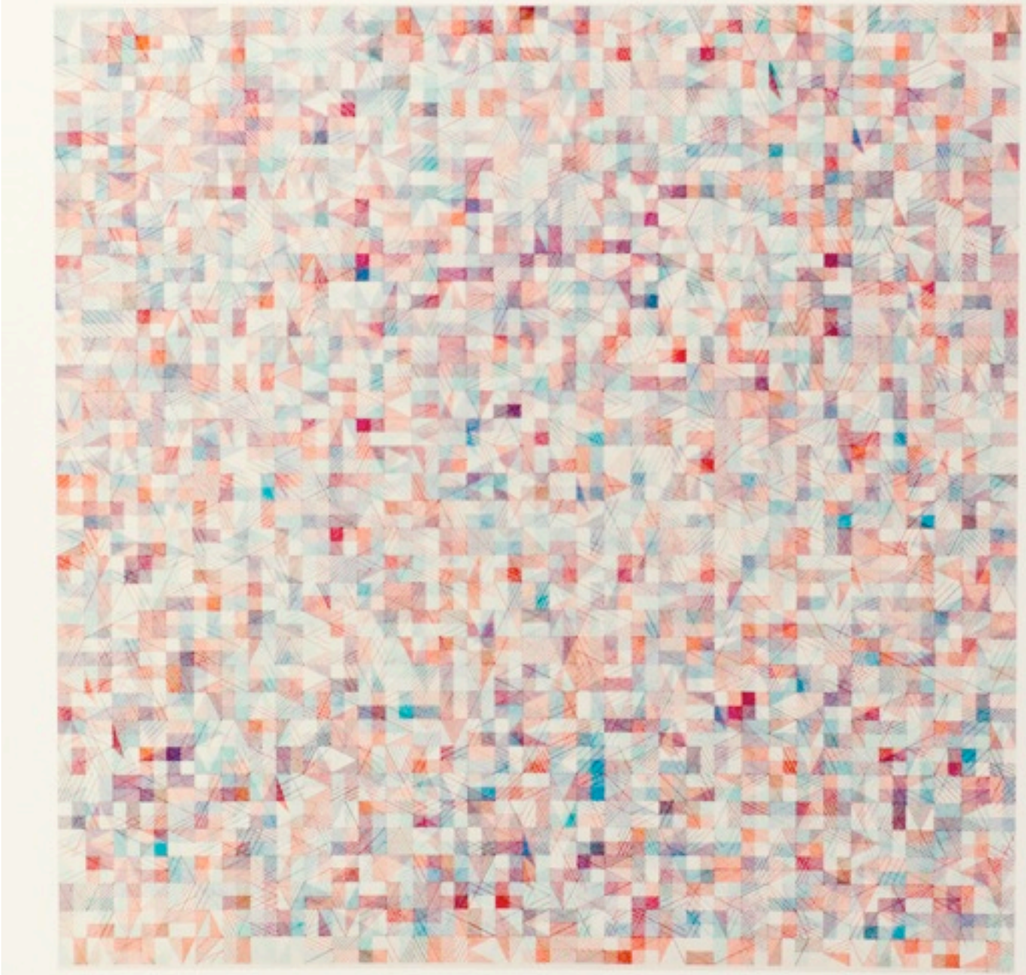
Well, he is probably caught in an dialogue similar to my own. It is interesting to watch people looking at a painting because without any prompting they try to relate to it – they try to find a position in which the thing works for them. A point from which they can experience it. People vary a little – as to how much or how little they can be involved – they unconsciously choose their own relationship to the painting.

Do they choose? They listen.

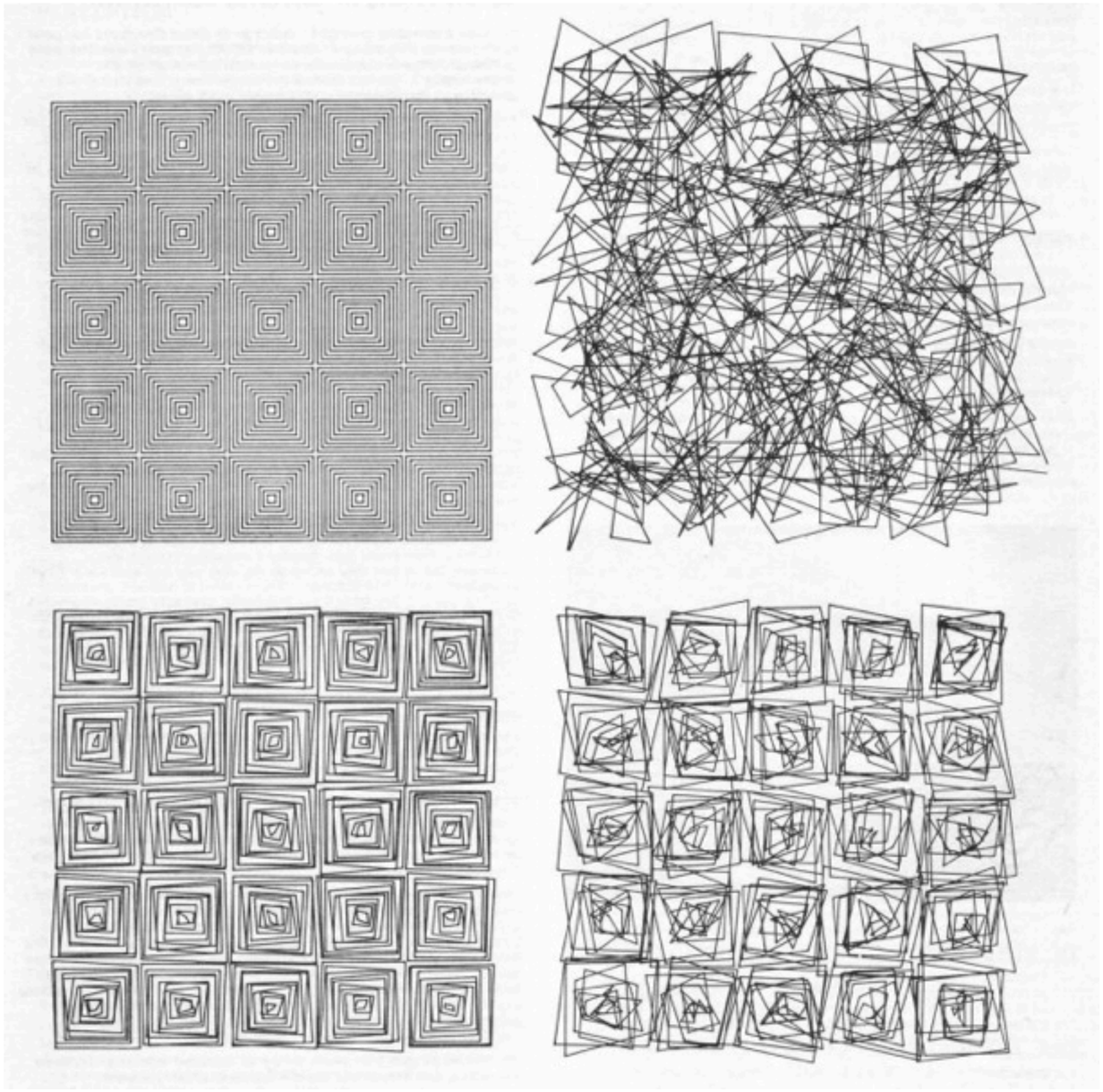




Vera Molnar. SANS TITRE / A LA RECHERCHE DE PAUL KLEE 1970



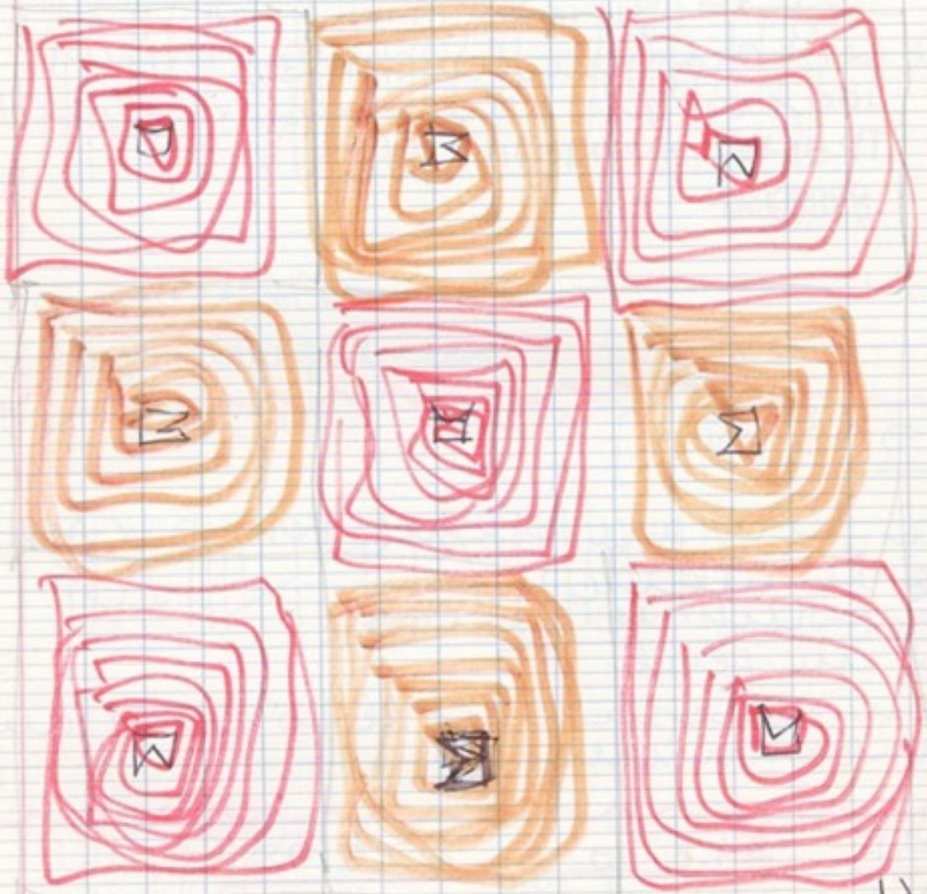
Vera Molnar. A LA RECHERCHE DE PAUL KLEE / VERA MOLNAR / 1970



TRANSFORMATIONS / VERA MOLNAR / 1974

HYPERTRANSFORMATION / 18 B
(TRACE FAIT EN 1974)
TOILE 150 X 150
FOND BLANC - FORMES ROUGES BREUGHEL
FLASH

20.12.79



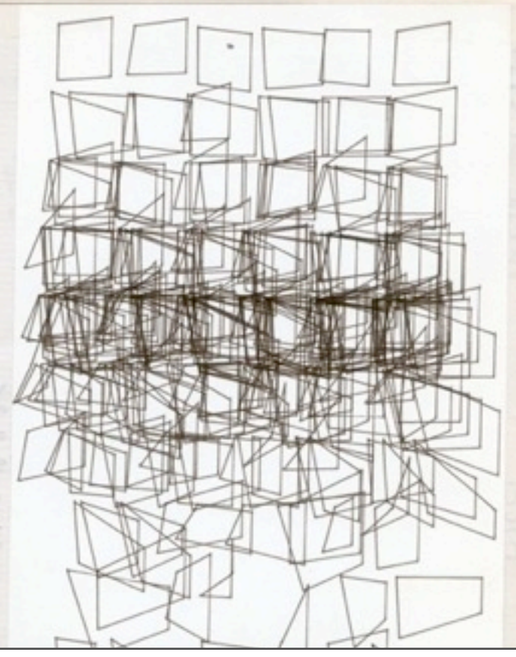
x à essayer avec or et argent sur
2 fonds: gris ou bleu

À EXECUTER SUR 1,50 x 1,50 (difficile!)
tracé 74.353/13.12B
photo n'existe pas, copie existe
maquette sur calque est faite
milieu en BLANC

Suite à 8.1.86

MAIN ↑
MACHINE ↓

à la machine



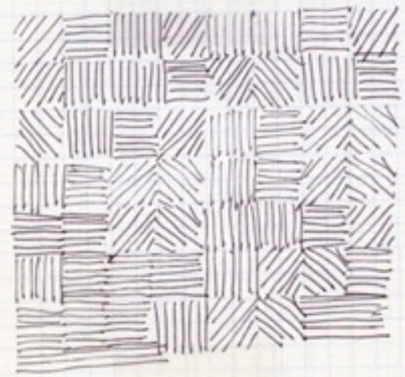
15.11.77

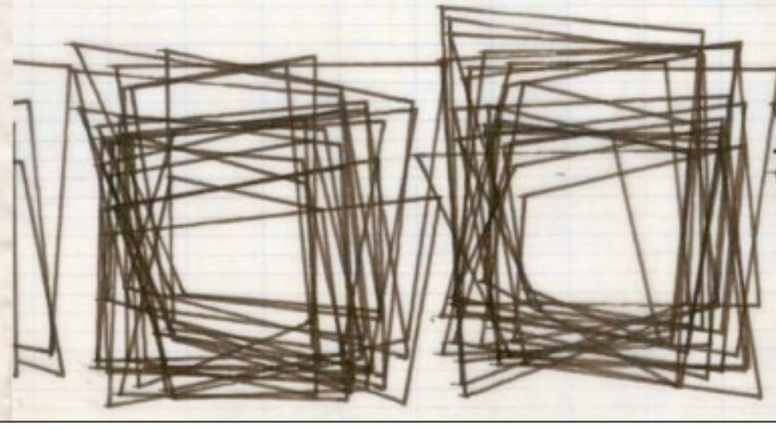
réalisé à Pompidou
LIPA sur calque pour cahier

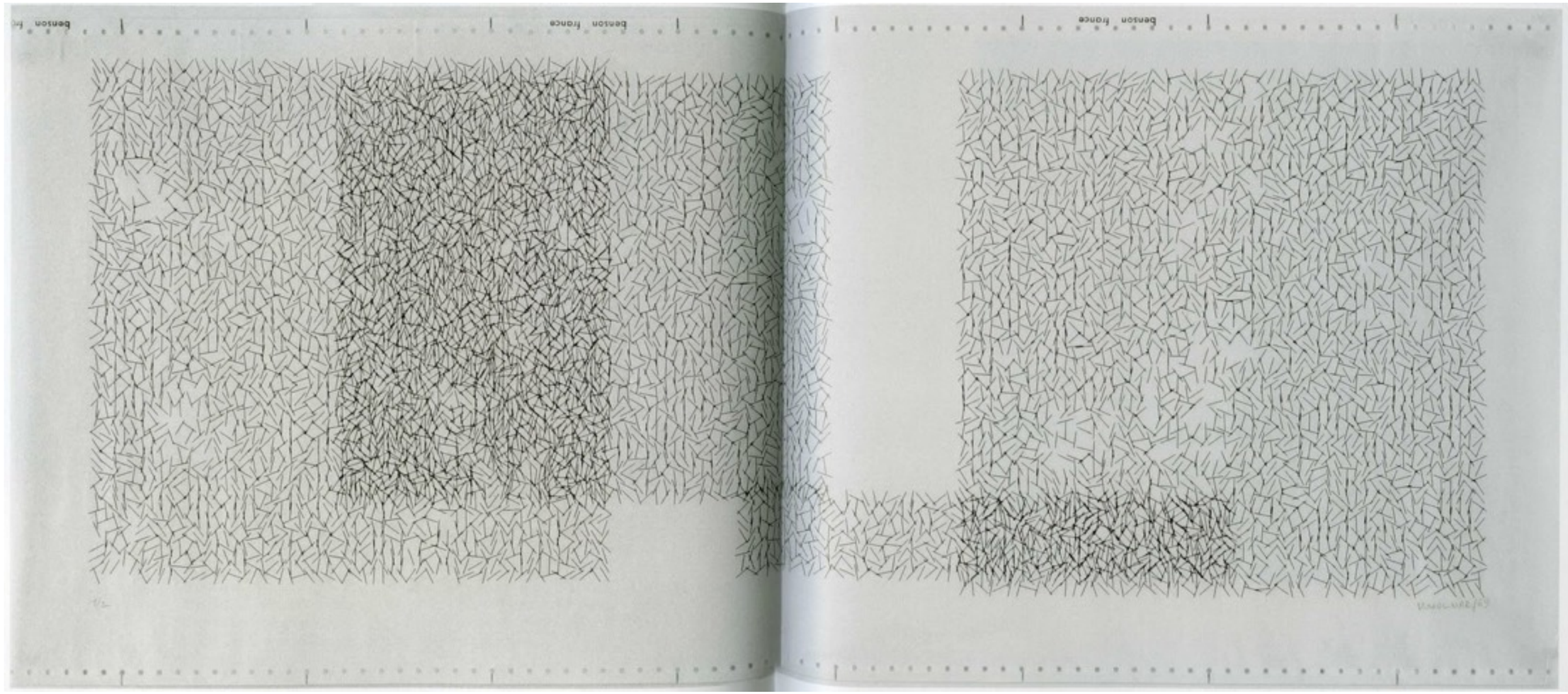
16.11.77

Essaier à refaire LETRI
hachures à densités différentes

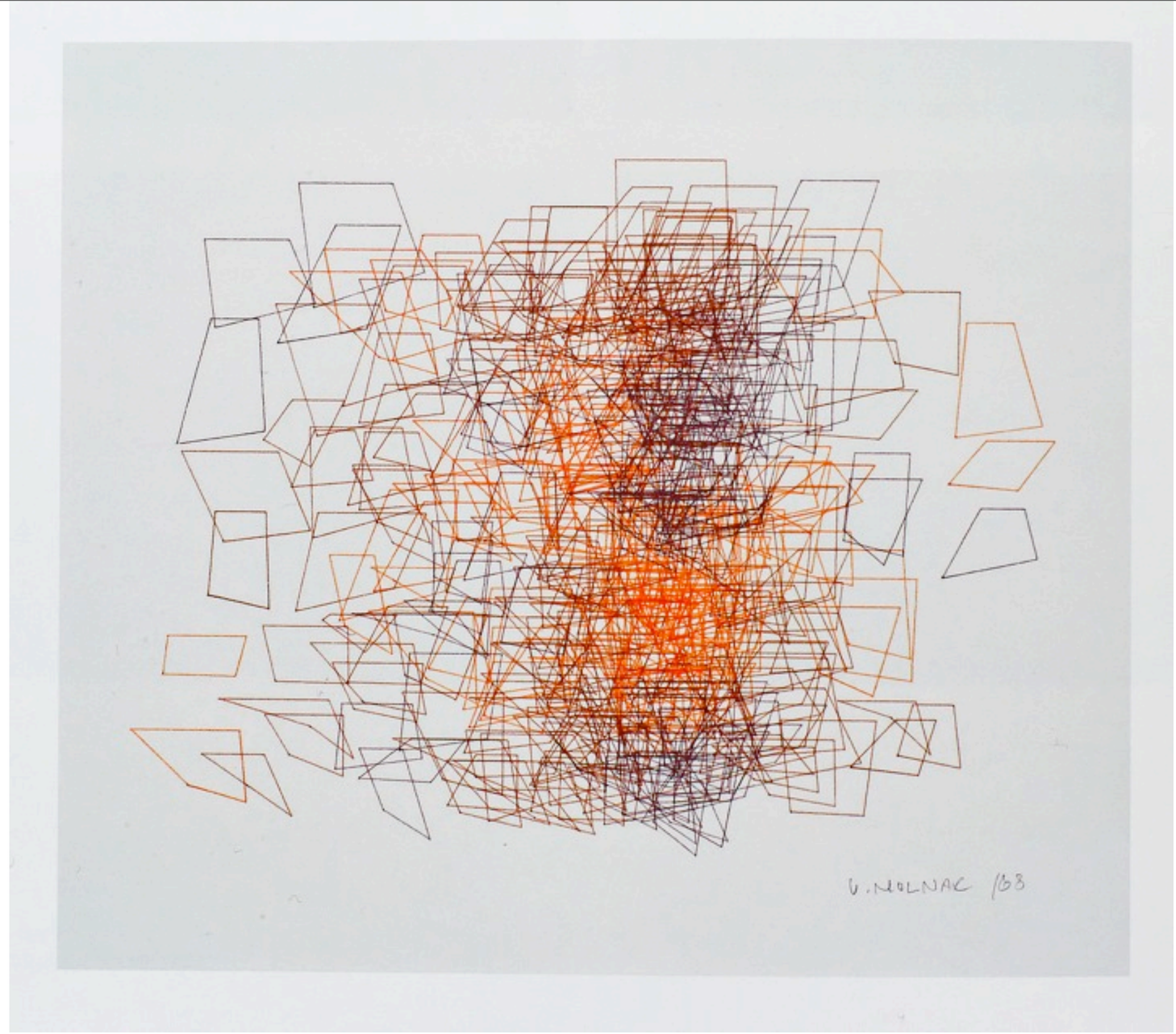
avec 7 lignes paral. (ou 15)
etc



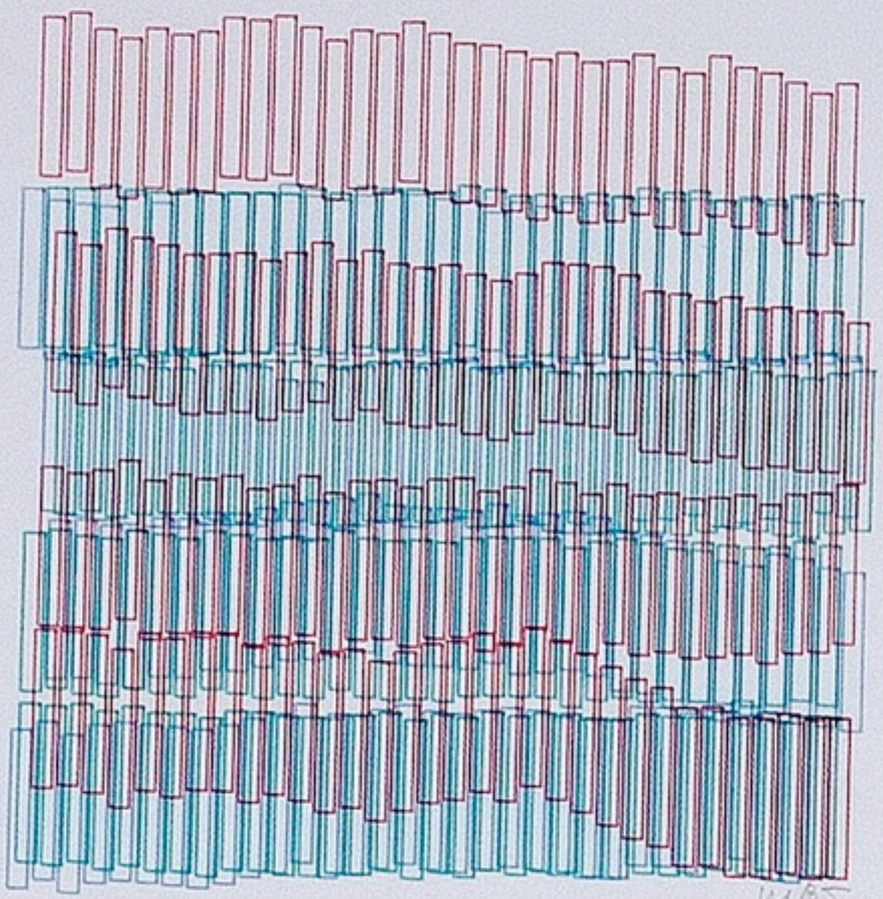


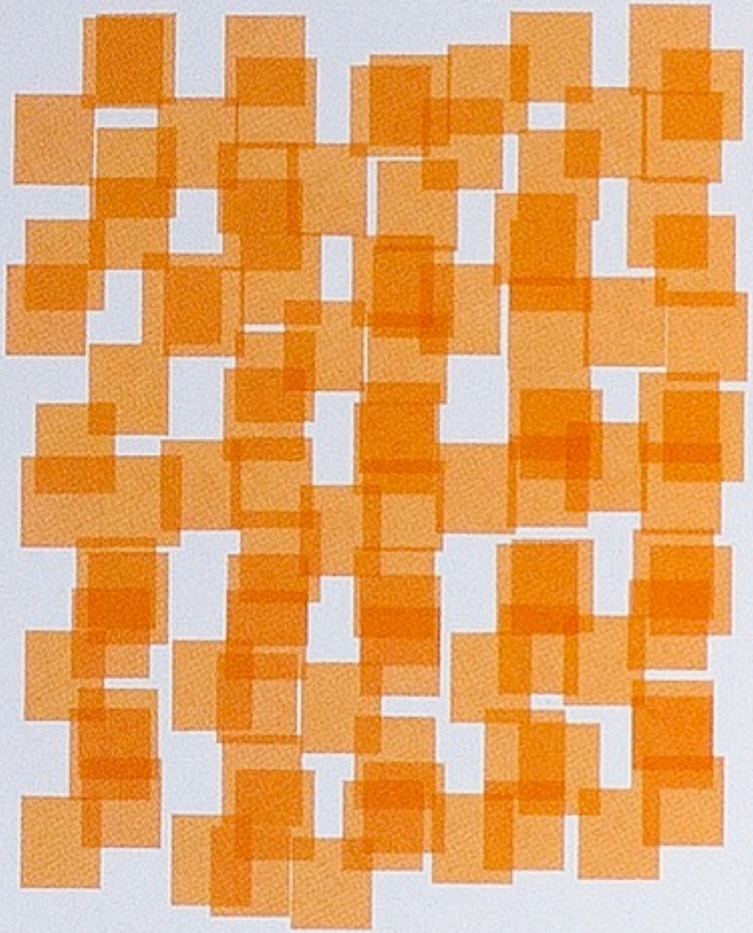


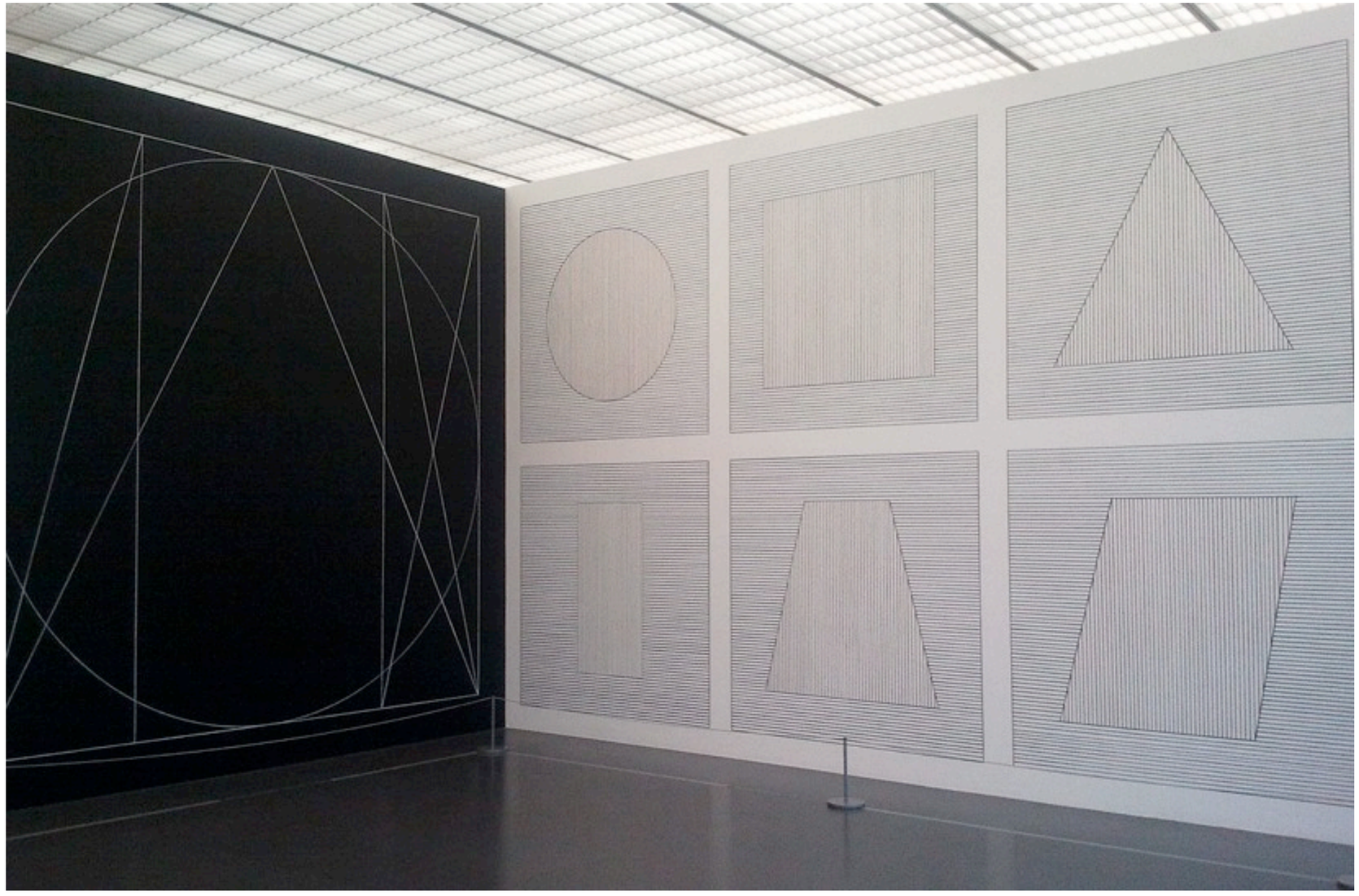
INTERUPTIONS À RECOUVREMENT / VERA MOLNAR / 1969



STRUCTURES QUADRILATÈRES / VERA MOLNAR / 1988







METZ POMPIDOU / SOL LEWITT. 2013

1

1, 3 (DETAIL)
Wall Drawing #2. Drawing Series II (A) (24 drawings) 1968
capcMusée d'art contemporain de Bordeaux

1 (RIGHT)
Wall Drawing #56 1970
LeWitt Collection, Chester, Connecticut

4

2, 4 (DETAIL)
Wall Drawing #414. Drawing Series IV (A) with India ink washes (24 Drawings) 1984
LeWitt Collection, Chester, Connecticut

Sol Lewitt

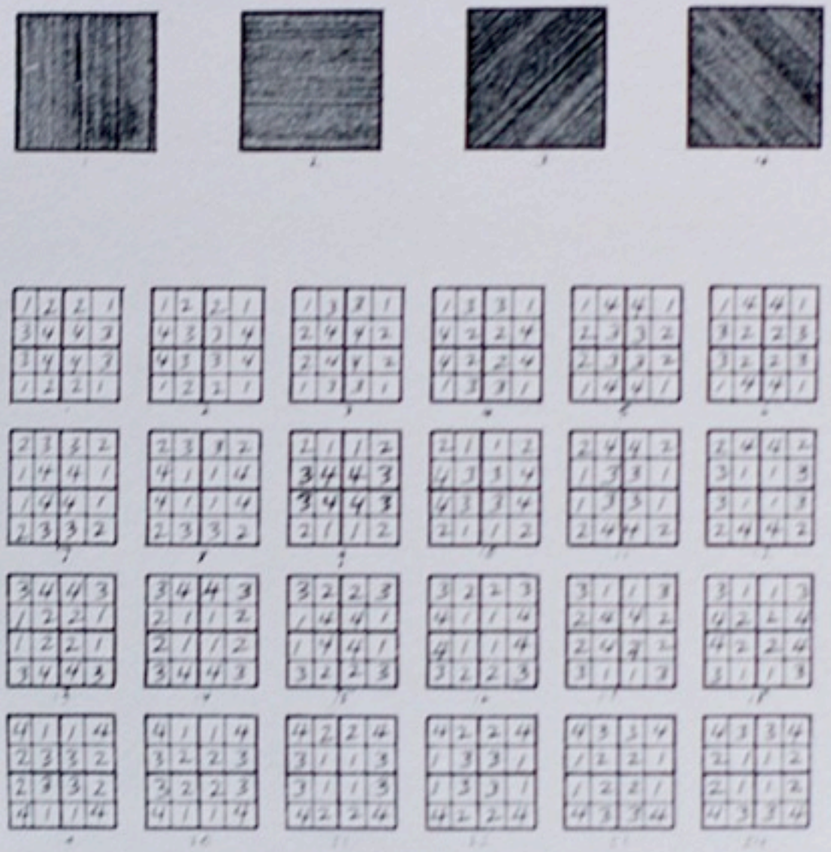
Ace/Los Angeles

662 N. La Peer Dr.

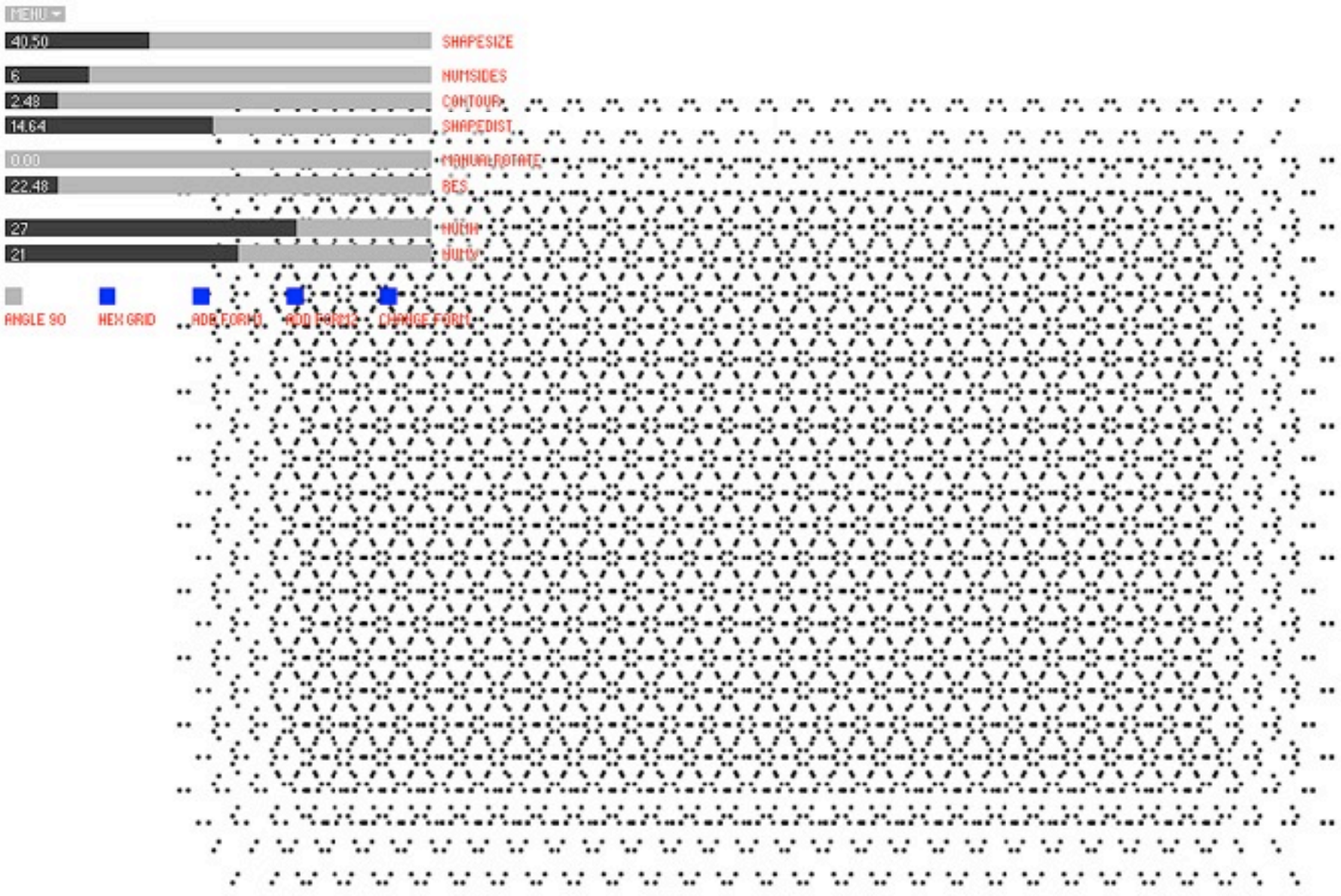
Dec. 2 1968

to

Jan. 11 1969



Mark Webster Dessine-moi des boucles FOR ever !



SO, FOR LOOPS ?

HISTORY : ALGOL

Algol 58 & Algol 60 :

Syntax : *for var := <list_of_stuff> do statement*

Ex : *for index := 1 step 2 until 50, 60, 70,*
80, index + 1 until 100 do

Result : *(index = 1, 3, 5, 7, ..., 49, 60, 70, 80, 81, 82, ..., 100)*

HISTORY : FORTRAN

Fortran do loop

Syntax :
```
do label var = expr1, expr2, expr3
   statements
   label continue
```

Ex :
```
integer i
do 20 i = 10, 1, -2
write(*,*) 'i =', i
20 continue
```

Result : *(i = 10, 8, 6, 4, 2)*

HISTORY : PASCAL

Pascal for loop

Syntax : *for<var>:= <initial value> to <final value> do statement*
statements

Ex :
```
for x := 0 to 50 do:
x := x + 5
WRITELN('iteration number ',x)
ENDFOR
```

Result : *(iteration number x = 0, 5, 10, 15, 20...)*

HISTORY : JAVA

Java For Loop

Syntax :

```
for(initialization; termination; increment) {
 statement(s)
//perform functions within the loop;
}
```

Ex :

```
for(int i = 0; i < 5; i++) {
  x = x + i
       }
```

Result : *(x = 5, 6, 8, 11...,) //if x = 5 to begin.*

Trouver les Patterns

- Les boucles contiennent une variable initiale.
- Les boucles contiennent une valeur finale.
- Les boucles contiennent une valeur d’incrémentation.
- Les boucles contiennent une opération (statement).

iteration

«Écrire, générer, évaluer, bricoler (le code, les paramètres ou les deux), générer à nouveaux, répéter. Les iterations du design sont les iterations du code, le code étant aussi ouvert que le design lui-même.»

Erik Van Blokland. www.letterror.com.

the upper left drawing, we use a large SIDE value, 100. Once again, the grid takes on a new appearance.

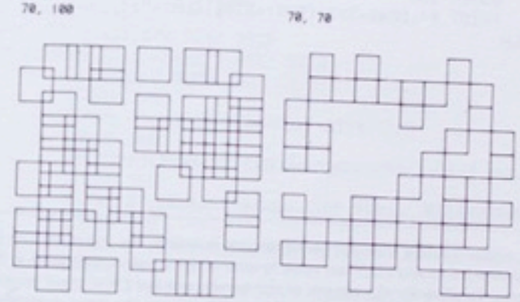
Although these drawings could hardly be described as momentous, they reveal how rapidly drawings can be made and how simple changes in only a single numeric value can create images that are very distinct from one another.

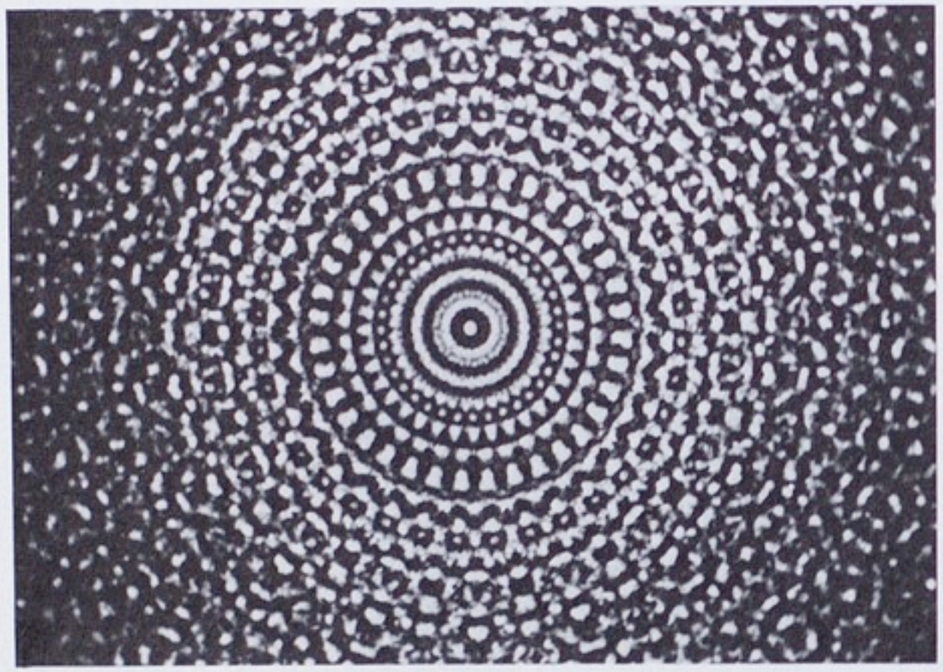
Using these same principles and the same values for SIDE, we will now add a variation to our theme. We modify our program in listing DRAW100SQ2, by adding line 130, which tests whether a randomly generated number is greater than a quantity we place in our program. Each time we invoke the random-number generator, a value is produced between 0 and 1, such as 0.3748938. We will use 0.5 for the value to test the RND number. In about half the cases, our program will execute the commands to draw a square, and the rest of the time it will jump down to the NEXT statement in line 240. The process will then repeat. We will use the same SIDE dimensions as before—20, 60, 70, 100.

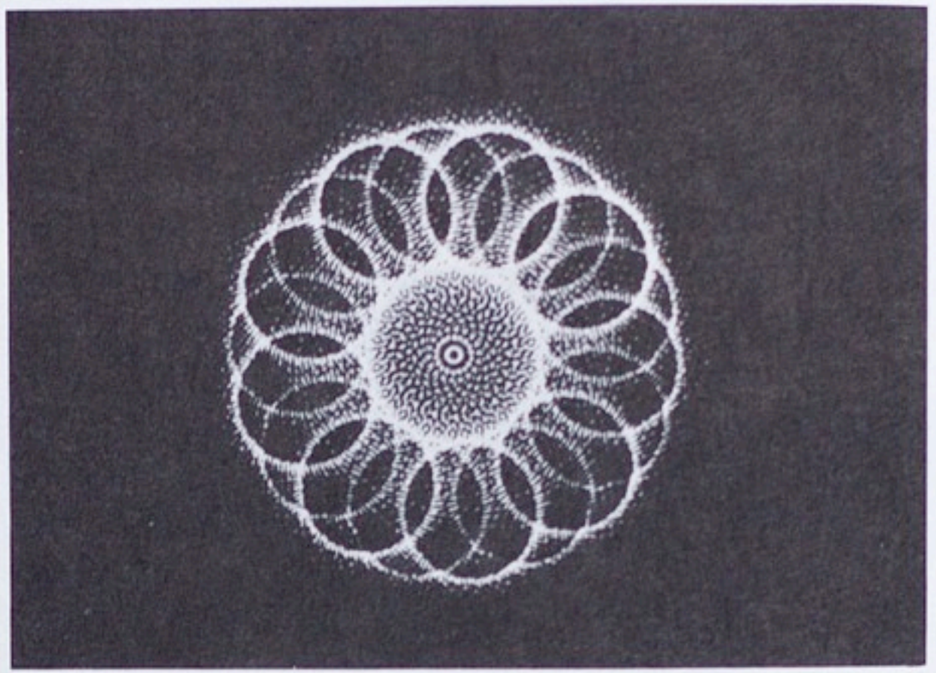
```
10 DEFINT A-Z'     DRAW100SQ2
20 CLS
30 MOVE$="!AX"
40 DRW$="!AY"
50 OPEN "COM1:1200,O,7,1" AS #1
60 PRINT #1,"!AE";
70 INPUT "X origin";XO
80 INPUT "Y origin";YO
90 INPUT "Step size";SIZE
100 INPUT "Side of square";SIDE
110 FOR ROW=XO TO XO+SIZE*9 STEP SIZE
120       FOR CLM=YO TO YO+SIZE*9 STEP SIZE
130             IF RND>.5 THEN 240
140             GOSUB 350
150             PRINT #1,MOVE$+STR$(ROW)+STR$(CLM)
160             GOSUB 350
170             PRINT #1,DRW$+STR$(ROW+SIDE)+STR$(CLM)
180             GOSUB 350
190             PRINT #1,DRW$+STR$(ROW+SIDE)+STR$(CLM+SIDE)
200             GOSUB 350
210             PRINT #1,DRW$+STR$(ROW)+STR$(CLM+SIDE)
220             GOSUB 350
230             PRINT #1,DRW$+STR$(ROW)+STR$(CLM)+";"
240       NEXT CLM
250 NEXT ROW
290 PRINT
300 GOTO 70
310 '
320 '
330 '
340 '
350 'XON/XOFF subroutine
```

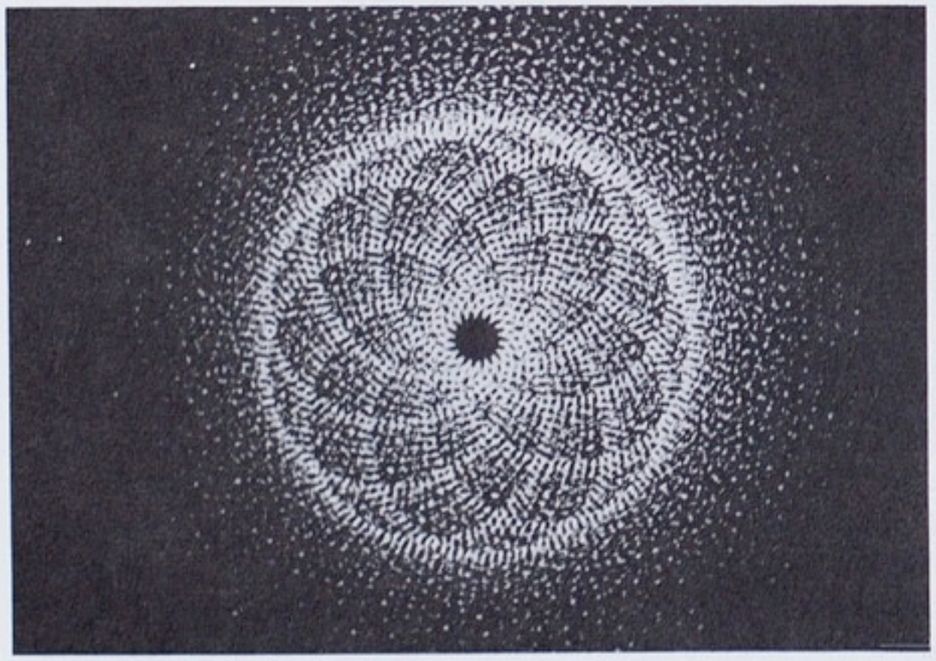
These simple mathematical manipulations produce distinctive visual results. Not only does Fig. 2 give us an immediate graphic depiction of what a random-number generator does, but we also have images that strongly evoke the abstract art of the early twentieth century. The pattern on the upper left seems to be of particular interest. Using a SIDE value of 100 and STEP of 70 creates random squares, but there are also several side effects. Other, smaller, squares and rectangular figures emerge from the network of lines. The unexpected creation of these smaller squares and rectangles is a perfect illustration of the visual excitement computer graphics provide. If we had carefully and systematically planned to make this drawing by hand, we might have been aware of the results we would obtain. But art making is often a spontaneous activity. These unplanned effects encourage our experimentation. Creative impulses are stimulated by the playfulness of this process. All that was necessary in this case, was a rudimentary modification of the program. The machinery does the work for us—quickly, precisely, and patiently.

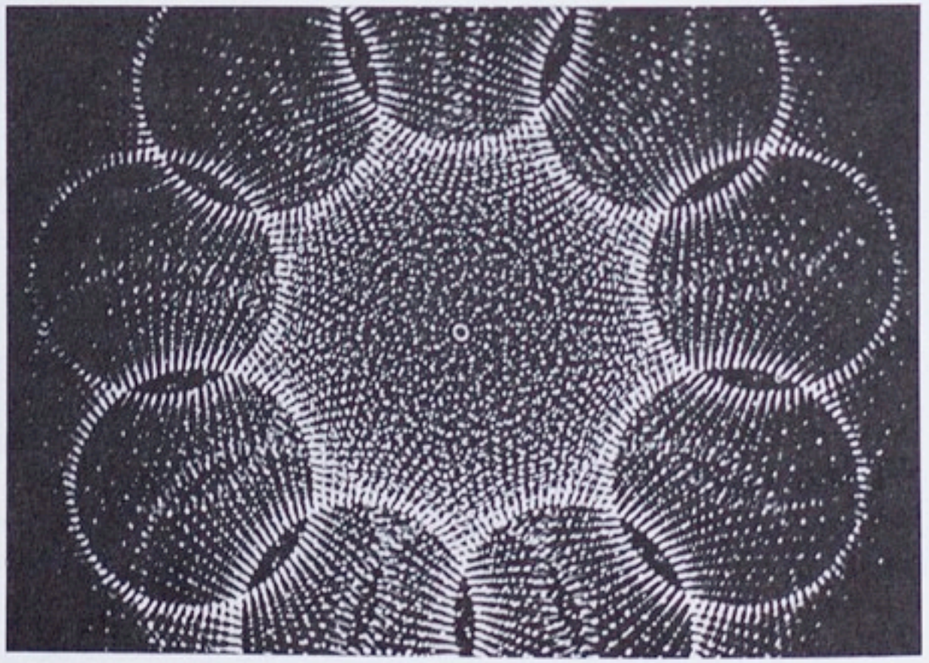
FIG. 2.











them has done things with
more involved. My oldest so
significant refinements o
changing it over—adding a
me, working with servo syst
electrical engineering techr
like Selsun systems, they a
to computerized informatic
run fast or slow and un
actually shaping up is the p
going to become a function
puter control. This we're
finance this next year and,
almost the same potentiali
that I have with the IBM e

Q: What else are you doin

Whitney: Well, that's abo
emphasize beyond that is
starving for want of much m
area of formal esthetic cre

Q: The hardware is so do

Whitney: That's so. And
along when they screw
machines and then finally
time no real flying was ta
approaching a time when
and with that, the really
completely away from the
and we'll be face to face v
quite gratified in these la

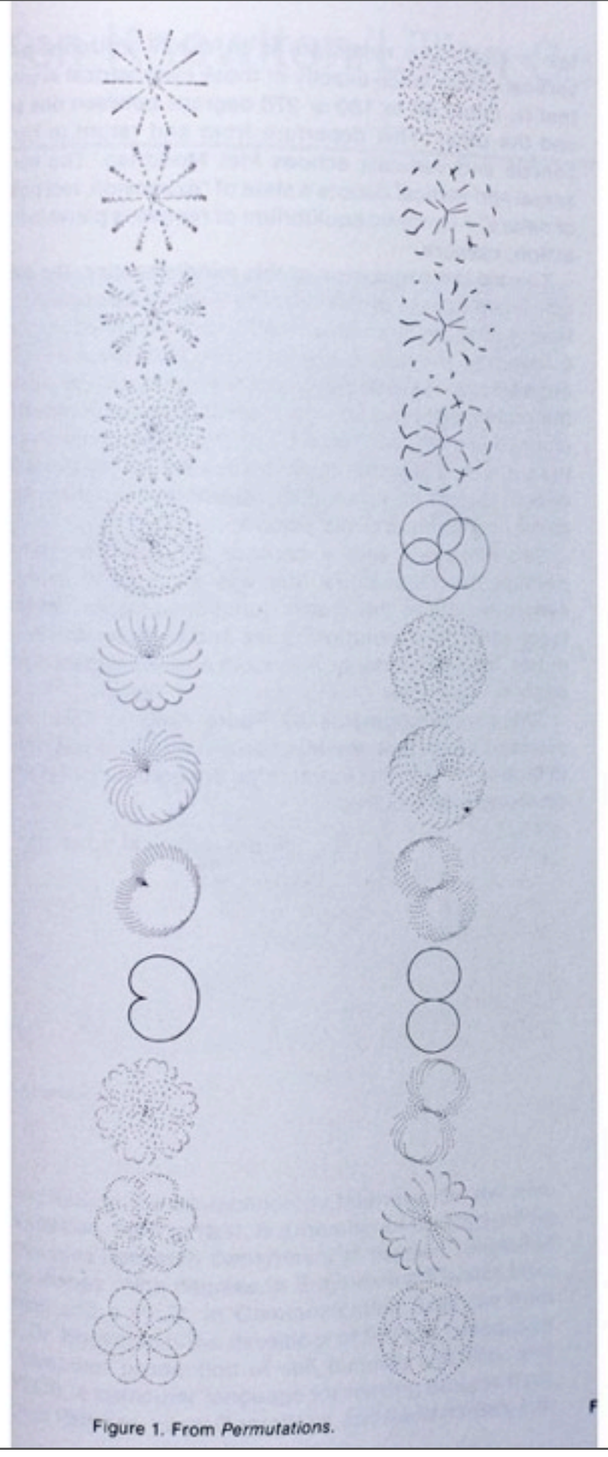
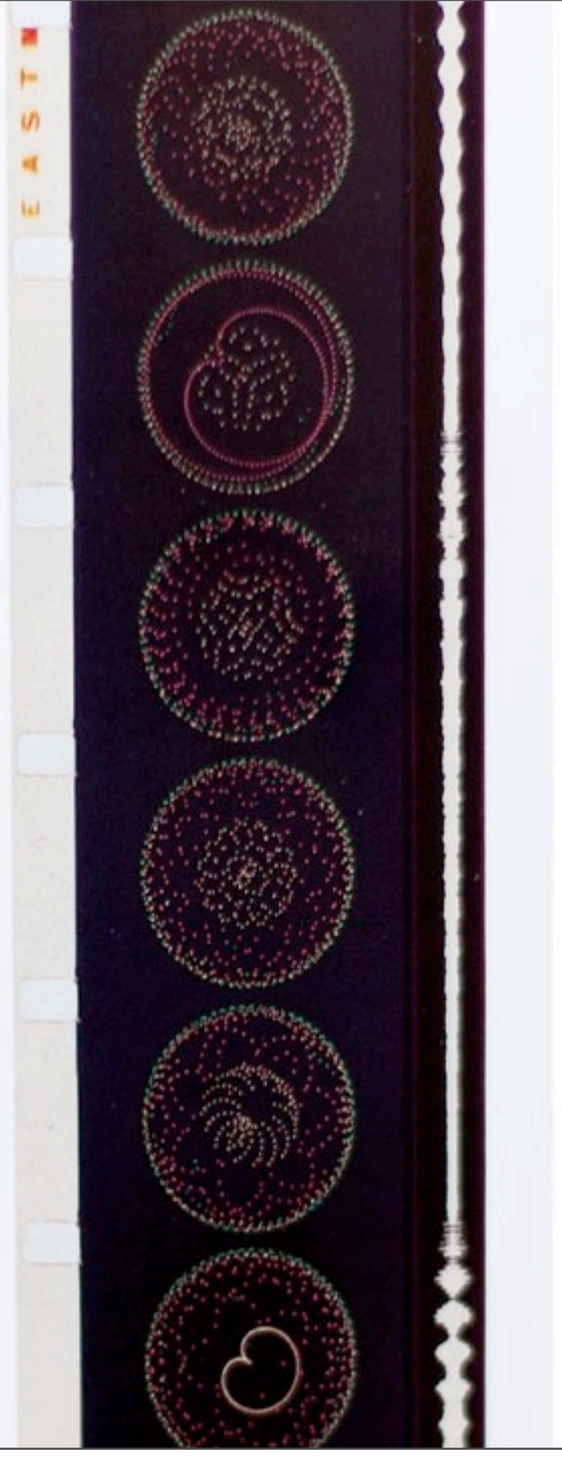
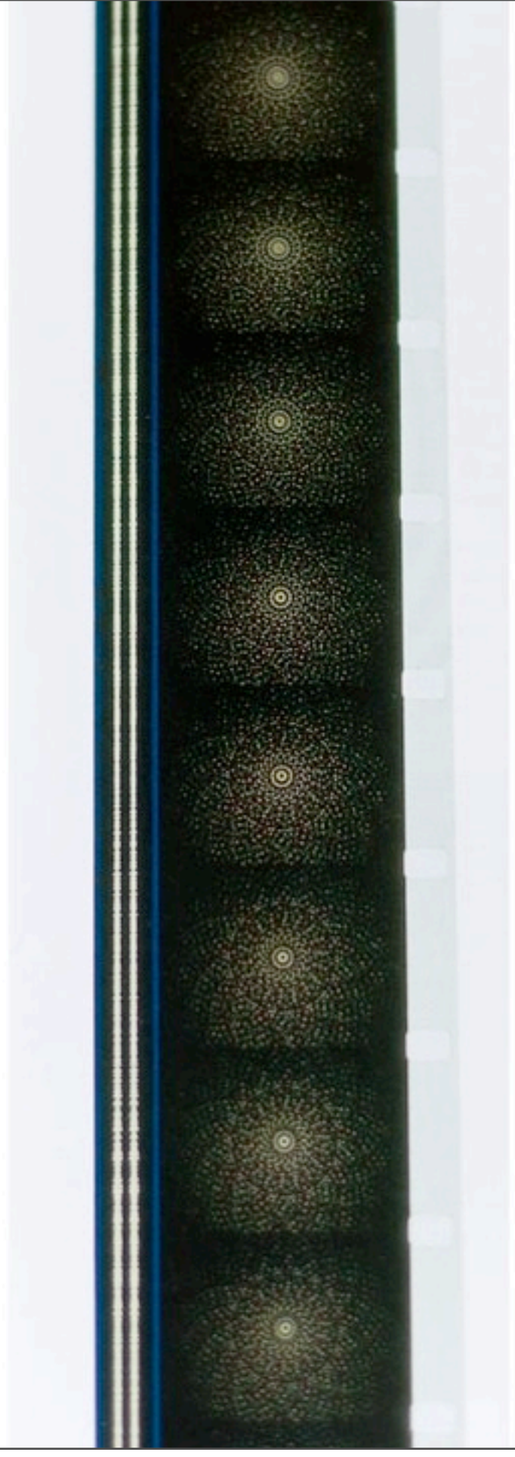


Figure 1. From *Permutations*.





TRANSFORMATION

La répétition d’une forme simple crée la complexité et la transformation de la forme crée la variation.

*** create illustrations in Processing for each concept.