PINO TROGU

SFSU

5 APRIL 2007

.
A sense of place
a starting point
.

Half-way
between Europe and Africa.
.
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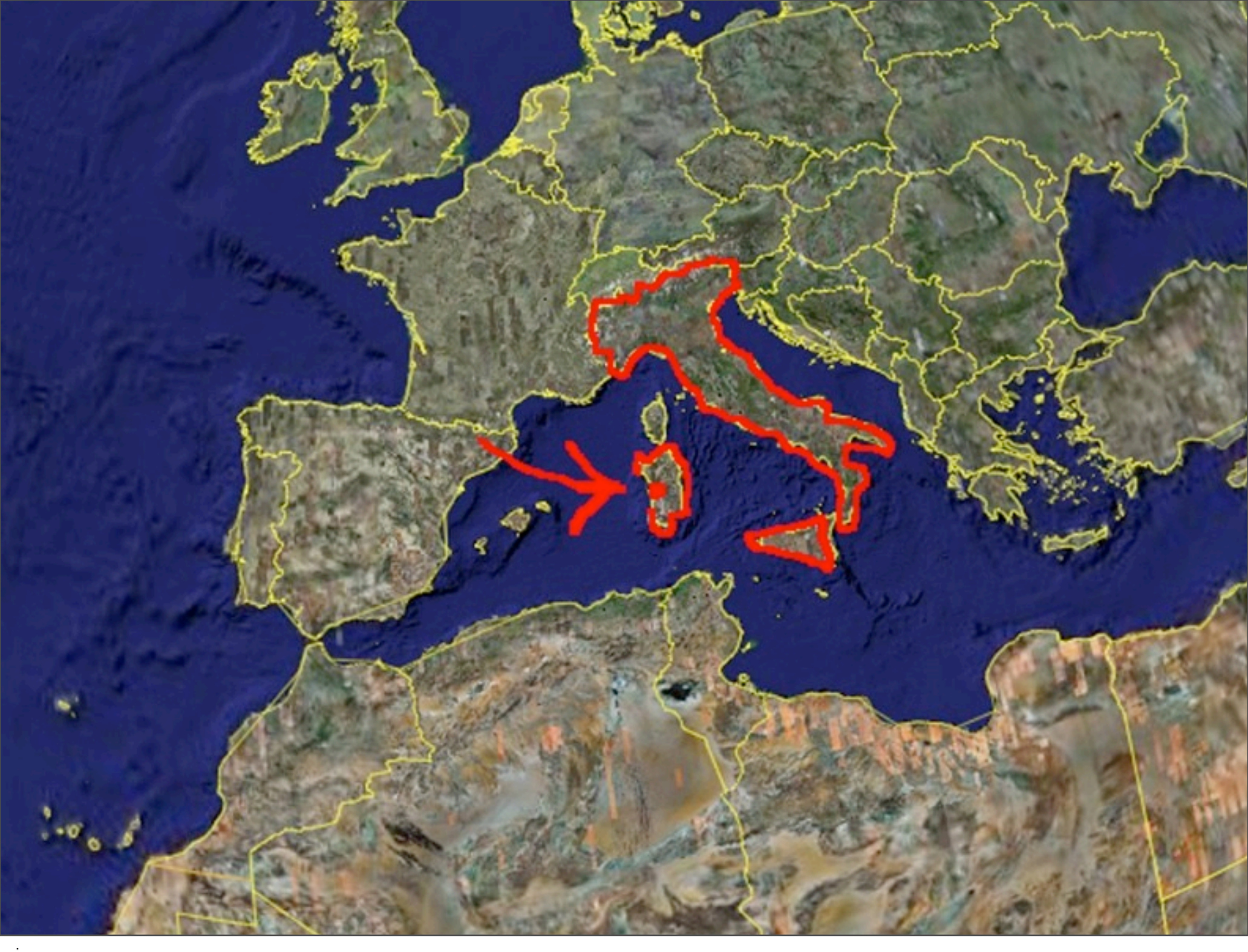

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.
An island of open vistas

.
dotted by bent trees
.
and old stone towers

American heroes.

.

.

a straight shooter

.
Helps the indians
defend their land.
.

A mouse
named TOPOLINO
plays
with ducks

named PAPERINO
and QUI QUO QUA!
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STUDY

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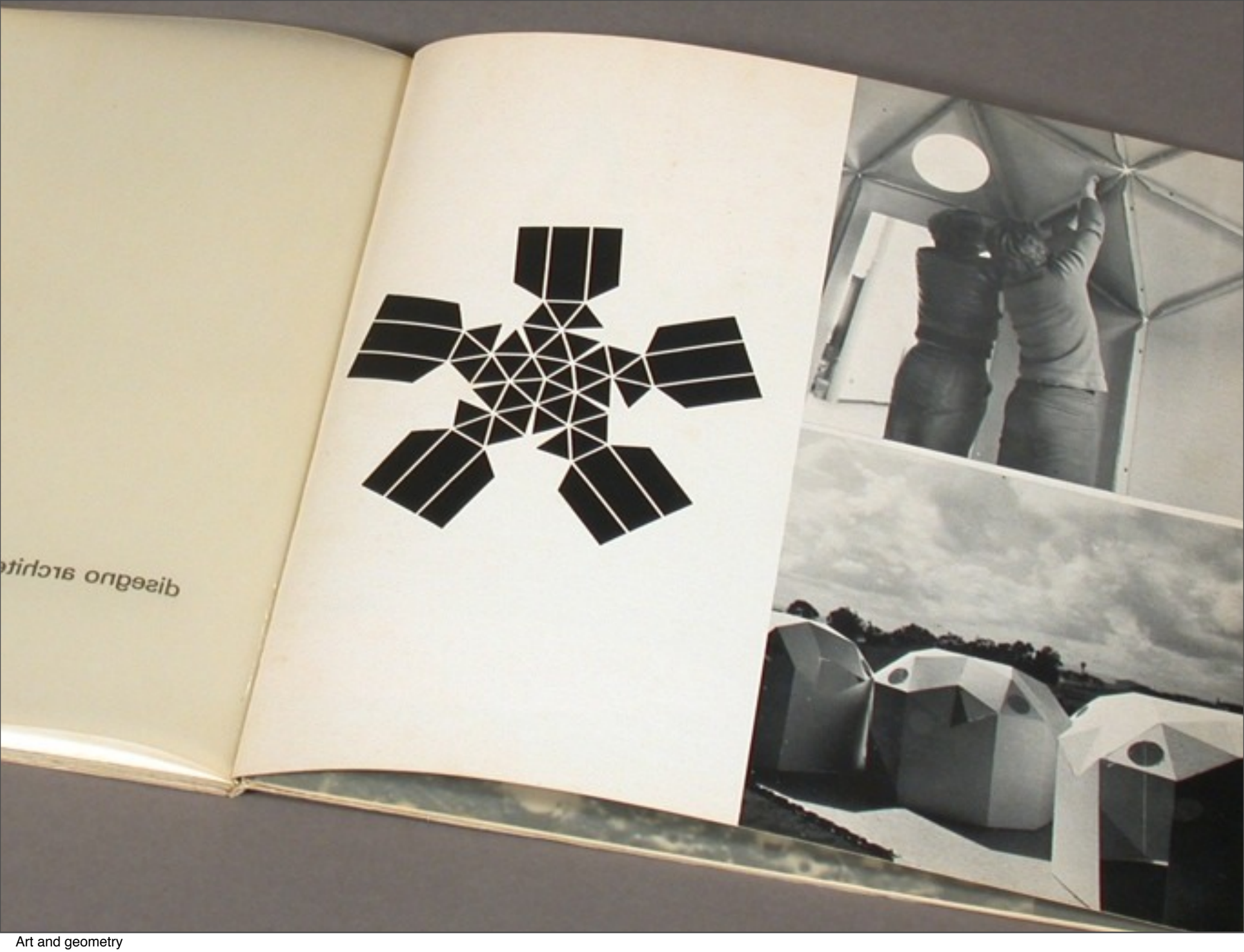
The Art Institute
in Sardinia.
.



Art and geometry
ecology and design
.
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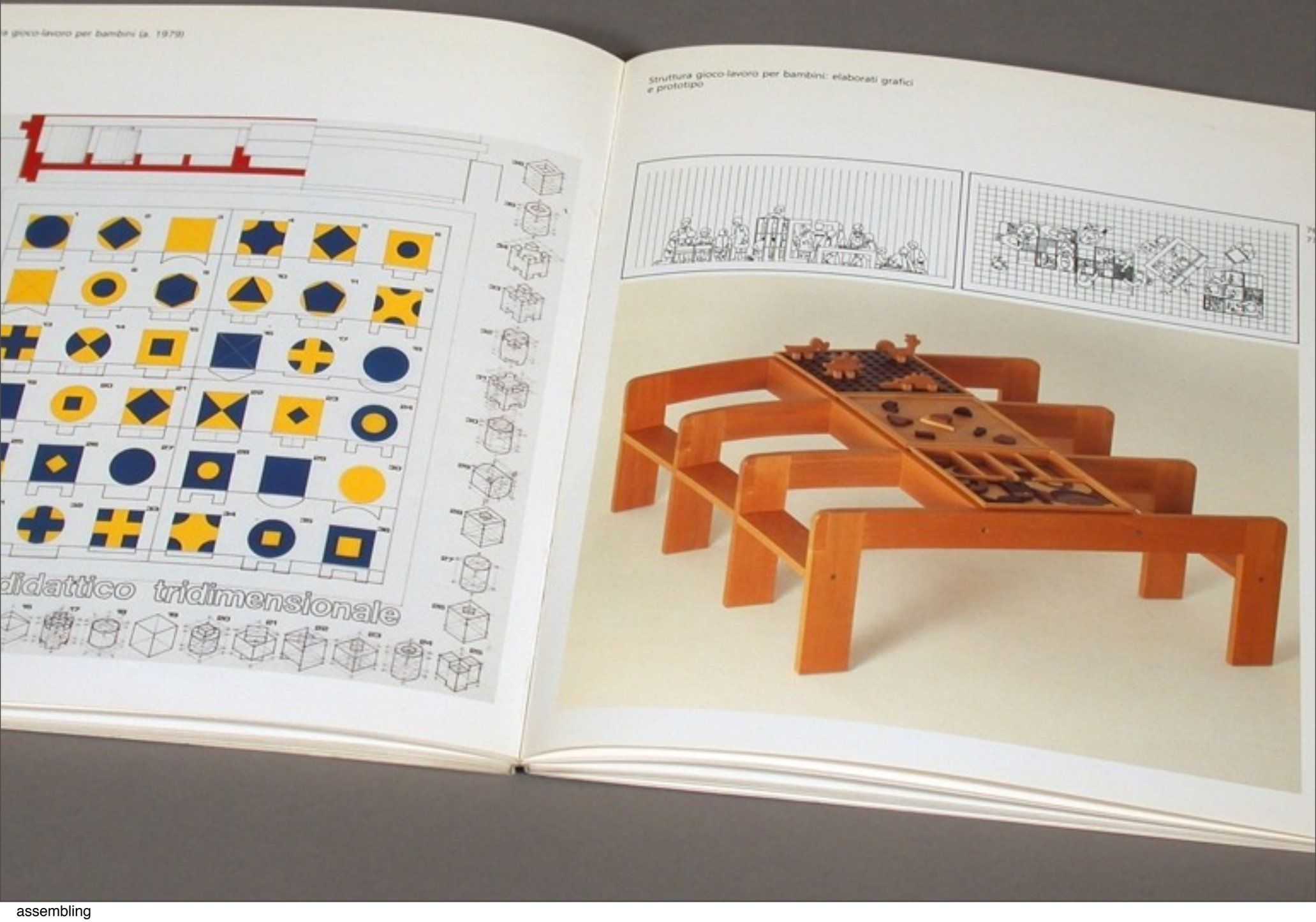
Drawing
cutting
measuring
glueing
sectioning



assembling
.
.
making things.

Observing nature.

.

.

The seeds.

The Institute for Artistic Industries
in Urbino.

.
.

Bricks and marble

.

The humanistic tradition

.

Of the architect,
painter,
scientist.
.

printer,
poet.
.
.

Artist
and
Designer
.

Bricks
of the Rhode Island
School of Design.
.

.
Theory and practice.
.
.

.
Film-making
the design process.
.

.
Short-lived objects.
.
Forever recycled.

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What is design?
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OFFICE

In Milan,
.
the marble in the Duomo,
.

and in the Galleria.

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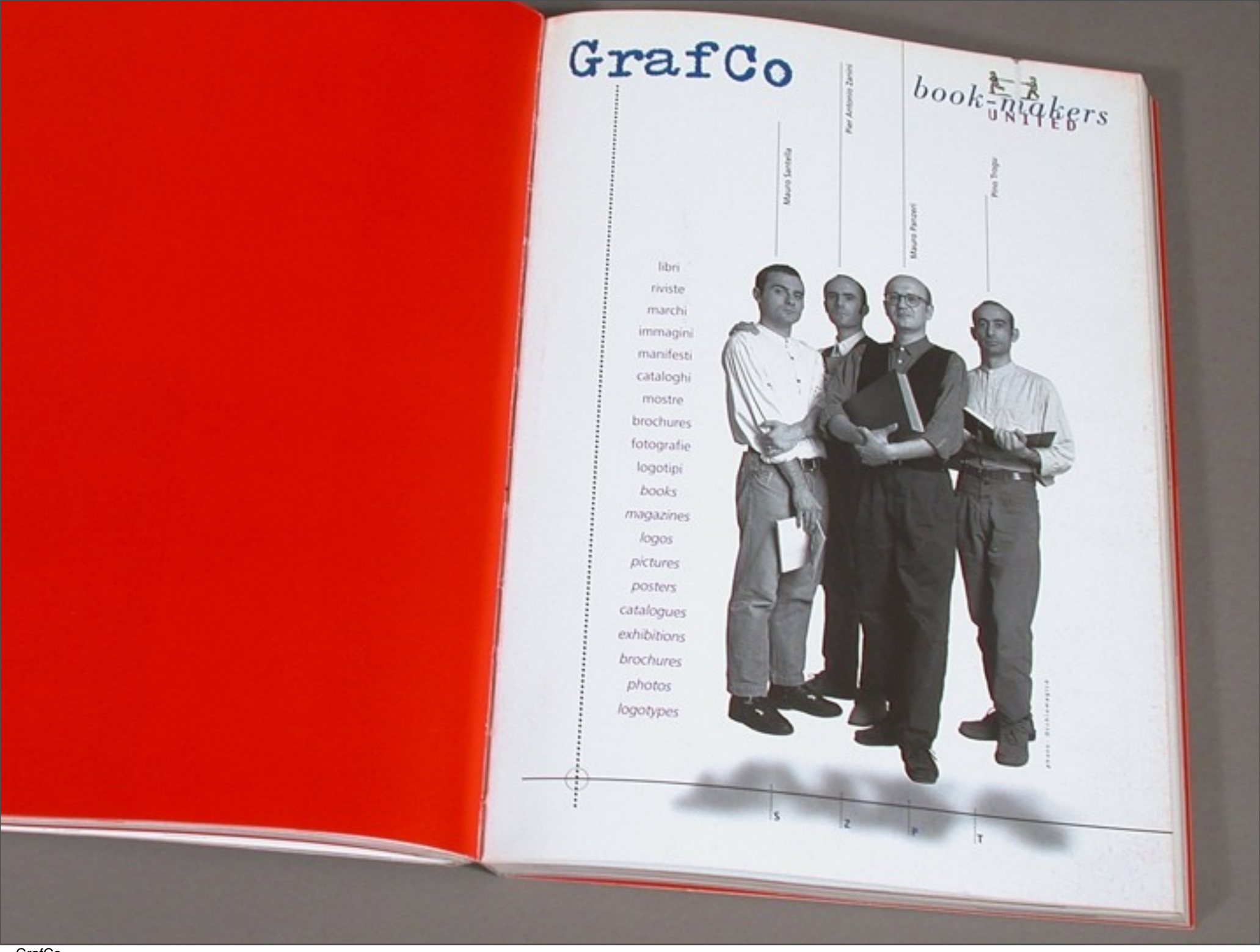

GrafCo,
a small design studio
.
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Istituto Europeo di Design, Istituto Superiore di Comunicazione, Centro ricerche

Comunicare una scuola italiana nel mondo. Manifesti, pieghevoli e prodotti editoriali.

Visual identity for an Italian design school and its international promotional campaign. Posters, pamphlets and various publications.

1991-1995 (P+Z+S)

Rete Ambiente

Marchi per l'Editore e il Network.

Logos for the publisher and its network.

1995 (Z+P)

Edizioni Ambiente

Editore specializzato in temi ambientali. Riviste, libri, pieghevoli.

Publisher specializing in environmental issues. Magazines, books, and pamphlets.

1994-1995 (P+Z+T)

Prenatal-WWF

Diario e calendario scolastico per bambini.

Datebook/diary and calendar for schoolchildren.

1995 (P+S)

Posters
brochures
magazines
Many styles all different.

A self-promotion book.

.

.

Oranges

and orange wrappers

.

.

Vernacular graphics

by printer designers.

.
.
.

A self-promotion book
.
of vintage stamps
.

and modern stamps.

.
.
.

L'ambiente non è "una cosa", ma piuttosto un insieme di processi legati tra loro in un equilibrio complesso e delicato. Oggi la nostra specie – l'umanità nel suo insieme, con tutte le articolazioni di civiltà e di tecnologia che ha costruito – è la protagonista principale di questi processi, ed è quindi un tutt'uno con l'ambiente che la circonda, naturale o artificiale che sia.

Questo libro parla contemporaneamente di fatti e di idee, di teoria e di pratica, perché quando si entra in temi complessi che si intrecciano con la vita di tutti i giorni, non è possibile affrontare in modo soddisfacente una cosa senza ricorrere anche all'altra.

Una guida pratica per pensare all'ambiente e valutare di volta in volta le soluzioni, gli accorgimenti, i progetti e le attenzioni per convivere il meglio possibile con il nostro pianeta.

ISBN 88-85684-27-0

Lire 25.000

AMBIENTARIO

Guida pratica per pensare all'ambiente

AMBIENTARIO

le idee i metodi le qualità

i confronti le regole i consigli

i dati le ipotesi le invenzioni

per convivere con il pianeta

ARCADIA EDIZIONI

ARCADIA EDIZIONI

A book
on the environment.
.
.

venire eliminate in breve tempo oppure depositarsi nei tessuti corporei; qui possono rimanere immutate, accumularsi, o venir modificate, combinandosi con altre sostanze o reagendo ad esse. I prodotti risultanti da questi processi possono a loro volta essere espulsi o accumularsi in noi. In ogni caso tutti questi elementi che penetrano nell'organismo possono influenzarlo fortemente, alterando il funzionamento dell'insieme o delle singole parti. Gli inquinanti possono fissarsi a sostanze che compongono i tessuti; reagire con esse e modificarle. Possono addirittura bloccare alcuni meccanismi biochimici, cioè impedire l'elaborazione di sostanze necessarie al buon funzionamento dell'organismo oppure, al contrario, potenziare alcune funzioni o innestare reazioni impreviste.

Sostanze nocive o effetti nocivi?

Ogni anno migliaia e migliaia di nuovi composti vengono immessi nell'ambiente senza che se ne conoscano gli effetti tossicologici a lungo termine; solo una minima parte di essi, infatti, è stata vagliata da un'analisi rigorosa capace di prevedere almeno alcune tra tutte le possibili conseguenze che potranno avere sull'ambiente e in particolare sulla salute.

Quest'ultimo, del resto, non è un problema semplice. Spesso quando si parla di sostanze nocive si parte infatti dal presupposto che la tossicità (o comunque la nocività) sia una ***caratteristica*** delle sostanze, mentre in realtà è un ***effetto*** delle sostanze, il che è ben diverso.

Un effetto dipende sempre da molte variabili: dalle dosi, dai modi e dai tempi di azione sull'uomo, dalle interferenze di altre sostanze, dalle particolari condizioni di chi ne subisce l'azione.

Questo significa che – se si escludono alcune evidenti conseguenze a esposizioni molto concentrate (ad esempio quelle legate ad attività lavorative particolarmente tossiche) – per individuare l'impatto sulla salute dovuto alla presenza nell'ambiente di una certa sostanza sono indispensabili studi complessi, lunghi e costosi.

Purtroppo questo dato di fatto ha portato a limitare, anziché ad approfondire, le ricerche in proposito. Anziché partire dal presupposto che, ad esempio, un prodotto chimico nuovo debba essere considerato potenzialmente rischioso per la salute finché non si sia dimostrato innocuo (come succede, ad esempio, per i farmaci), si è continuato di fatto a considerare ogni composto nuovo innocente fino a prova contraria, cioè

dannoso solo quando è dimostrato che provoca dei danni. Così alla fine è stata ed è la comunità umana a fare da cavia e, solo a posteriori, dopo tardive indagini sollecitate da un problema già in atto, si riesce ad attribuire a questo o a quel prodotto la responsabilità di tanti danni alla salute. Anche a posteriori, riuscire a trovare i nessi tra l'aumento di certe patologie e questa o quella componente ambientale comunque non è mai semplice. Ciò è tanto più vero quanto più l'effetto nocivo che si prende in considerazione richiede tempi lunghi per manifestarsi. E' il caso del potere cancerogeno, ad esempio: il cancro ha un periodo "di incubazione" che può durare non solo anni, ma addirittura decenni.

I tumori sono in aumento, sono anzi l'unica grande patologia in crescita continua. Ciò in parte è dovuto al generale processo di invecchiamento della popolazione, ma certamente anche all'aumento del potenziale cancerogeno che ci circonda.

Secondo l'Organizzazione Mondiale della Sanità (OMS), circa l'80% dei casi di cancro dipendono da cause ambientali, intendendo per ambiente non solo tutto ciò che ci circonda, ma anche il modo con cui interagiamo con esso (l'inquinamento, quindi, ma anche le nostre personali abitudini di vita, il posto di lavoro, il modo di nutrirsi, la gestione dei rifiuti, ecc.). Risultato: ogni anno nel mondo ci sono da 13 a 14 milioni di nuovi malati.

Nessuno oggi può sapere quante siano le sostanze chimiche cancerogene immesse nell'ambiente in conseguenza dello sviluppo industriale. A questo ha in parte contribuito il fatto che, per quanto riguarda il cancro nel suo complesso, la ricerca ha puntato molto di più sulla diagnosi e la terapia che non sulla prevenzione.

Questo è un grave handicap perché è evidente che per la prevenzione il ruolo della ricerca scientifica è essenziale: non esiste infatti nessuna possibilità di controllo tecnico o di intervento legale se non sulla base di precisi segnali di rischio che soltanto l'indagine scientifica ha la possibilità di accertare.

Ma anche ciò che già si sa non viene tenuto in grande considerazione. Da molti anni, addirittura da decenni, sono state identificate con certezza 28 sostanze cancerogene alcune delle quali, come il catrame o il benzene,

.
A system
of relations
.
and comparisons.

gestione familiare del cibo, a viverci continuamente in mezzo, ad averlo continuamente sotto agli occhi. E' lei che fa la spesa e che quindi è la destinataria naturale di tutte le campagne pubblicitarie dei prodotti alimentari; in più cucina, quindi ci si aspetta da lei una "cultura del cibo" continuamente aggiornata. Ma specialmente è alla figura femminile che è legata simbolicamente la nutrizione: non c'è madre che ancora oggi in fondo non si senta un pò in colpa se suo figlio è magro. Dall'altro lato è alle donne che si chiede con maggiore insistenza il rispetto dei nuovi canoni di bellezza. Essere una donna grassa è certamente più difficile che non essere un uomo grasso.

I segnali

Affrontare il problema della sovralimentazione (o del sovrappeso) da questo particolare punto di vista, che certo non è l'unico e neppure quello prioritario, permette comunque di individuare qualche strumento in più per aiutare se stessi a ritrovare un equilibrio nel rapporto con il cibo.

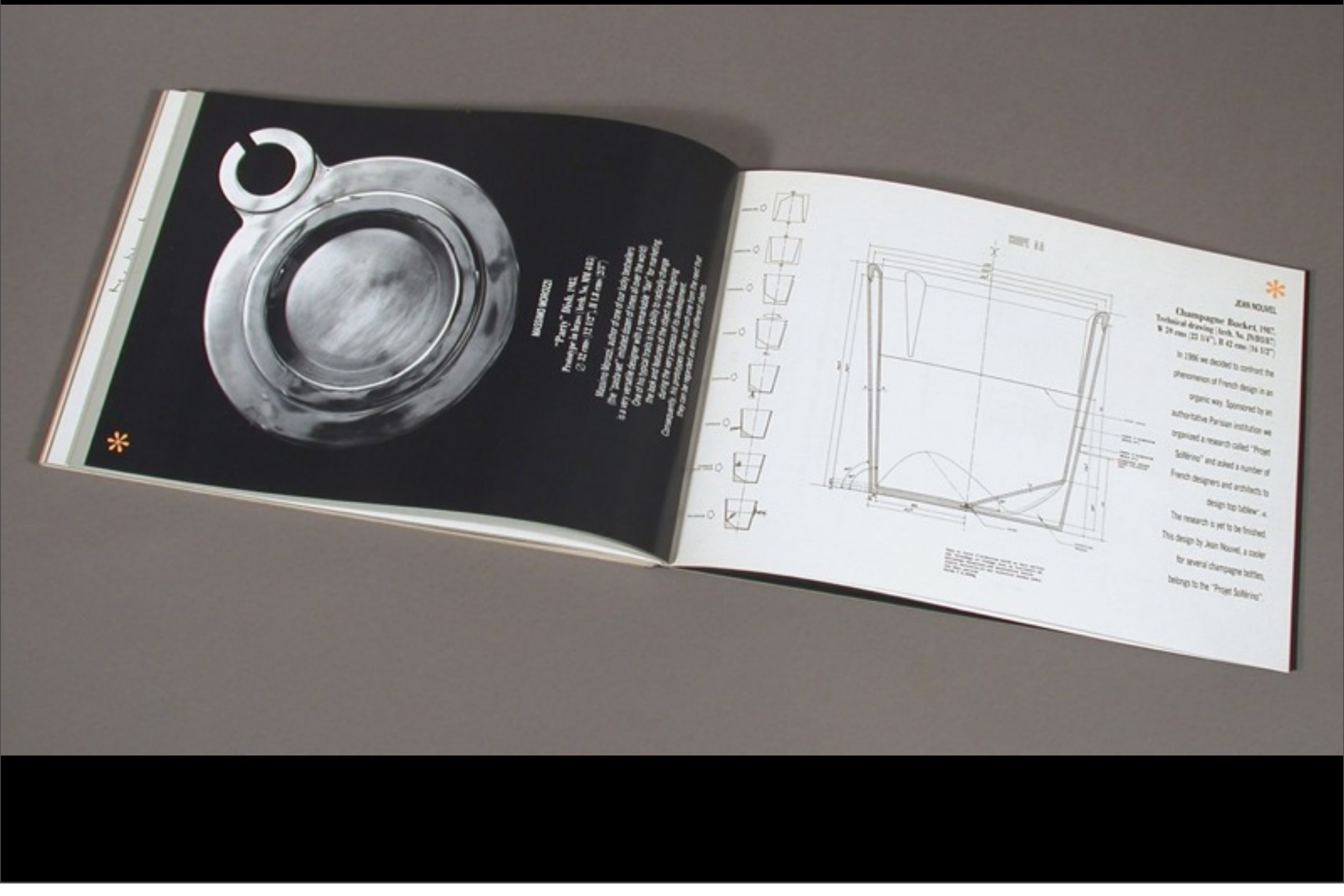
Se il problema è mangiare di meno, si può cercare di controllare il proprio rapporto con l'ambiente limitando per quanto è possibile l'"inquinamento da eccesso di stimoli alimentari", specie nei momenti di maggior vulnerabilità individuale.

In fondo si tratta di selezionare (scartandoli) alcuni segnali relativi al cibo per facilitare la selezione (e lo scarto) di alcuni cibi di troppo: tipica operazione di controllo sul rapporto con l'ambiente di un animale culturale.

Ecco alcuni accorgimenti pratici:
– Tutto ciò che è commestibile va concentrato in cucina. Dove si riposa o si lavora abitualmente non deve esserci niente da mangiare, neppure una caramella.
– Anche in cucina, nessun cibo deve essere tenuto in bella vista. Meglio riporre sempre tutto in frigo o negli armadietti, possibilmente in contenitori non trasparenti. Niente cibi tentatori (cioccolatini, salatini e golosità varie).
– Quando si cucina per la famiglia, occorrono ricette che permettano di cucinare in anticipo, possibilmente subito dopo mangiato, cioè a stomaco pieno.
– Lo stesso discorso vale per la spesa: va fatta quando si è già a stomaco pieno e mai nei momenti in cui si è particolarmente affamati o depressi.
– Gli avanzi del pasto, il pane, il vino e la frutta devono sparire dalla tavola appena terminato di mangiare.
– Se negli itinerari abituali (ad esempio per andare al lavoro) si passa davanti a un negozio particolarmente tentatore, è meglio studiare un percorso alternativo o almeno passare sul marciapiede opposto.
– Se si deve mangiare al ristorante o in mensa, conviene scegliere prima ancora di entrare. Scorrere i menu il meno possibile.

A design catalog
for Alessi.
an Italian
tableware company.

Five different kinds of paper are used
.



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and bound by hand.
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A catalog of missing books
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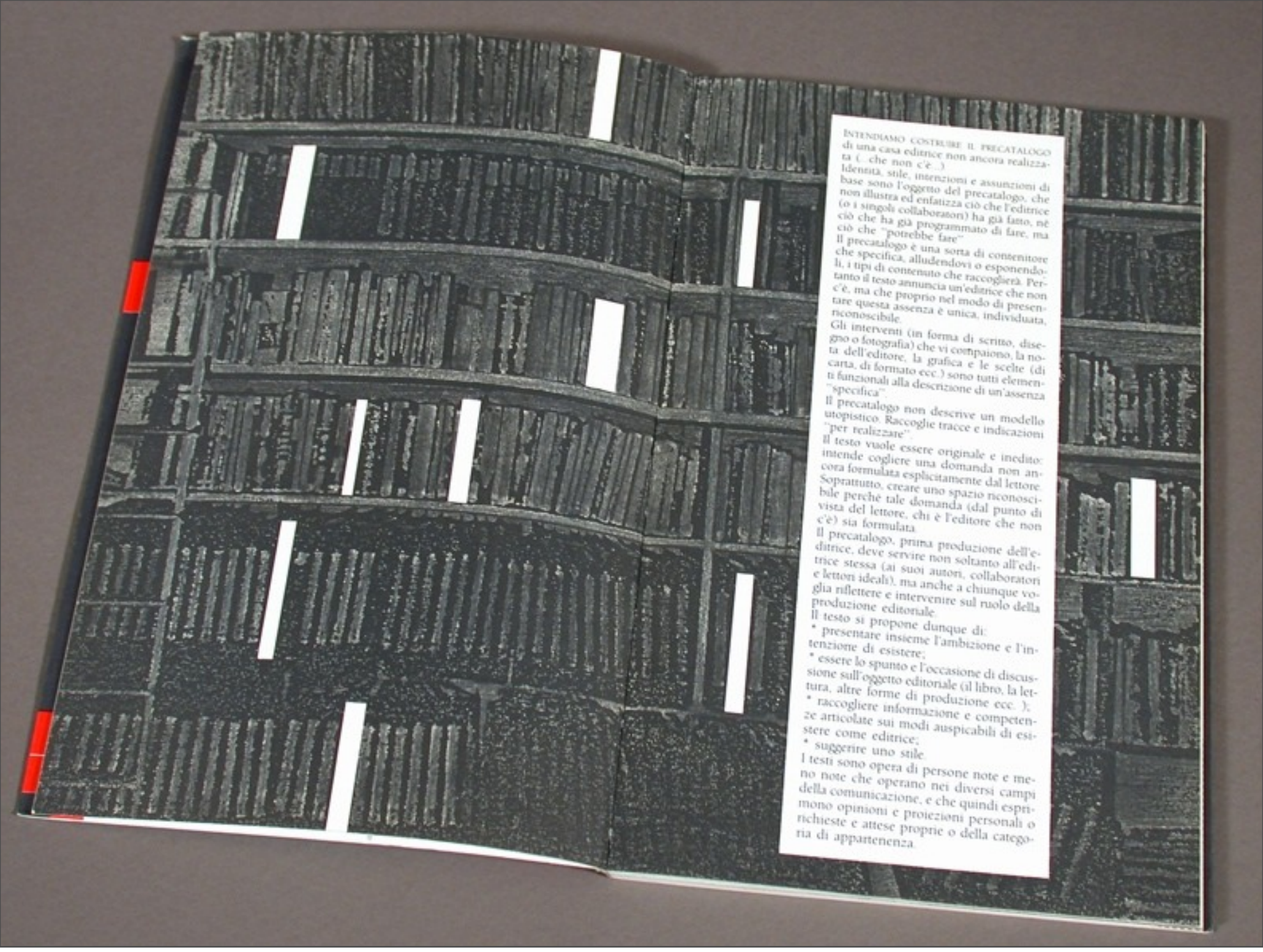

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yet to be published.
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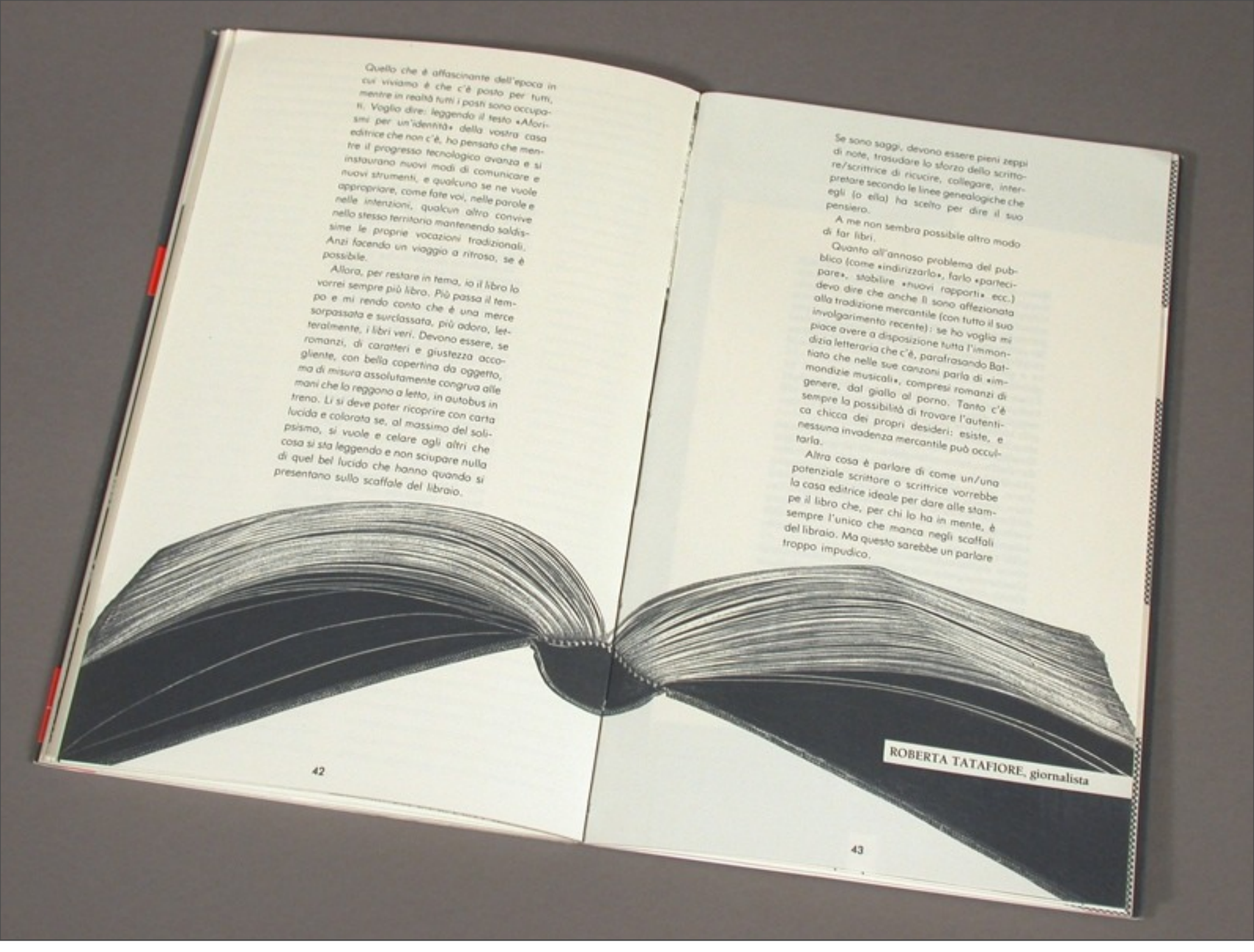

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open
or closed.
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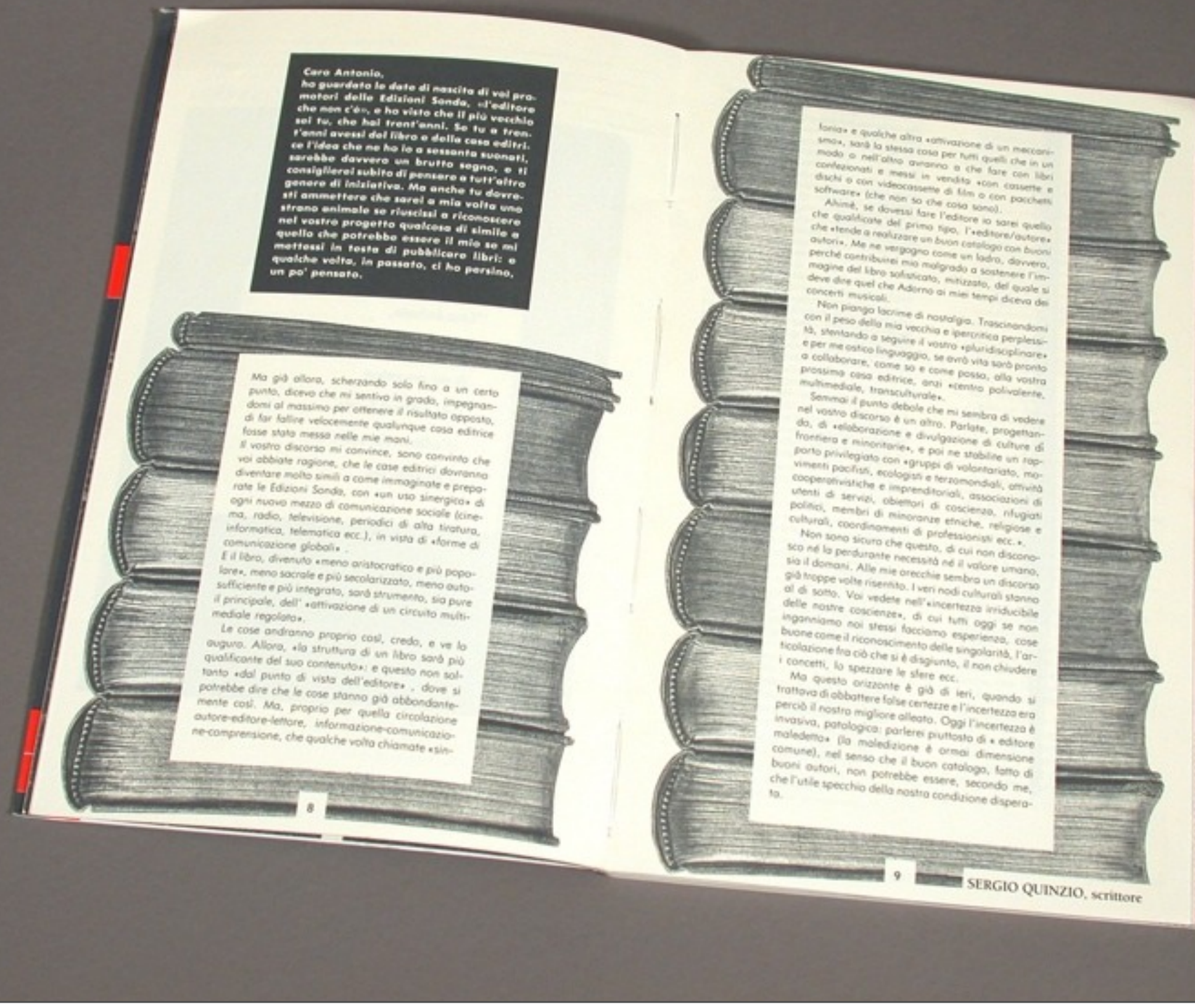

Caro Antonio,
ho guardato le date di nascita di voi promotori delle Edizioni Sonda, «l'editore che non c'è», e ho visto che il più vecchio sei tu, che hai trent'anni. Se tu a trent'anni avessi del libro e della casa editrice l'idea che ne ho io a sessanta suonati, sarebbe davvero un brutto segno, e ti consiglierei subito di pensare a tutt'altro genere di iniziativa. Ma anche tu dovresti ammettere che sarei a mia volta uno strano animale se riuscissi a riconoscere nel vostro progetto qualcosa di simile a quello che potrebbe essere il mio se mi mettessi in testa di pubblicare libri: e qualche volta, in passato, ci ho persino, un po' pensato.

Ma già allora, scherzando solo fino a un certo punto, dicevo che mi sentivo in grado, impegnandomi al massimo per ottenere il risultato opposto, di far fallire velocemente qualunque casa editrice fosse stata messa nelle mie mani.

Il vostro discorso mi convince, sono convinto che voi abbiate ragione, che le case editrici dovranno diventare molto simili a come immaginate e preparate le Edizioni Sonda, con «un uso sinergico» di ogni nuovo mezzo di comunicazione sociale (cinema, radio, televisione, periodici di alta tiratura, informatica, telematica ecc.), in vista di «forme di comunicazione globali».

E il libro, divenuto «meno aristocratico e più popolare», meno sacrale e più secolarizzato, meno autosufficiente e più integrato, sarà strumento, sia pure il principale, dell'«attivazione di un circuito multimediale regolato».

Le cose andranno proprio così, credo, e ve lo auguro. Allora, «la struttura di un libro sarà più qualificante del suo contenuto»: e questo non soltanto «dal punto di vista dell'editore», dove si potrebbe dire che le cose stanno già abbondantemente così. Ma, proprio per quella circolazione autore-editore-lettore, informazione-comunicazione-comprensione, che qualche volta chiamate «sinfonia» e qualche altra «attivazione di un meccanismo», sarà la stessa cosa per tutti quelli che in un modo o nell'altro avranno a che fare con libri confezionati e messi in vendita «con cassette e dischi o con videocassette di film o con pacchetti software» (che non so che cosa sono).

Altrimé, se dovessi fare l'editore io sarei quello che qualificate del primo tipo, l'«editore/autore» che «tende a realizzare un buon catalogo con buoni autori». Me ne vergogno come un ladro, davvero, perché contribuirei mio malgrado a sostenere l'immagine del libro sofisticato, mitizzato, del quale si deve dire quel che Adorno ai miei tempi diceva dei concerti musicali.

Non piango lacrime di nostalgia. Trascinandomi con il peso della mia vecchia e ipercritica perplessità, stentando a seguire il vostro «pluridisciplinare» e per me ostico linguaggio, se avrò vita sarà pronto a collaborare, come so e come posso, alla vostra prossima casa editrice, anzi «centro polivalente, multimediale, transculturale».

Semmai il punto debole che mi sembra di vedere nel vostro discorso è un altro. Parlate, progettando, di «elaborazione e divulgazione di culture di frontiera e minoritarie», e poi ne stabilite un rapporto privilegiato con «gruppi di volontariato, movimenti pacifisti, ecologisti e terzomondisti, attività cooperativistiche e imprenditoriali, associazioni di utenti di servizi, obiettori di coscienza, rifugiati politici, membri di minoranze etniche, religiose e culturali, coordinamenti di professionisti ecc.».

Non sono sicura che questo, di cui non disconosco né la perdurante necessità né il valore umano, sia il domani. Alle mie orecchie sembra un discorso già troppe volte risentito. I veri nodi culturali stanno al di sotto. Voi vedete nell'«incertezza irriducibile delle nostre coscienze», di cui tutti oggi se non inganniamo noi stessi facciamo esperienza, cose buone come il riconoscimento delle singolarità, l'articolazione fra ciò che si è disgiunto, il non chiudere i concetti, lo spezzare le sfere ecc.

Ma questo orizzonte è già di ieri, quando si trattava di abbattere false certezze e l'incertezza era perciò il nostro migliore alleato. Oggi l'incertezza è invasiva, patologica: parlerei piuttosto di «editore maledetto» (la maledizione è ormai dimensione comune), nel senso che il buon catalogo, fatto di buoni autori, non potrebbe essere, secondo me, che l'utile specchio della nostra condizione disperata.

8

9

SERGIO QUINZIO, scrittore

.
to read out loud
or in silence.
.
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.
From Italy to America.
A visit to Ray Eames.
.

The 1984 Summer Olympics.

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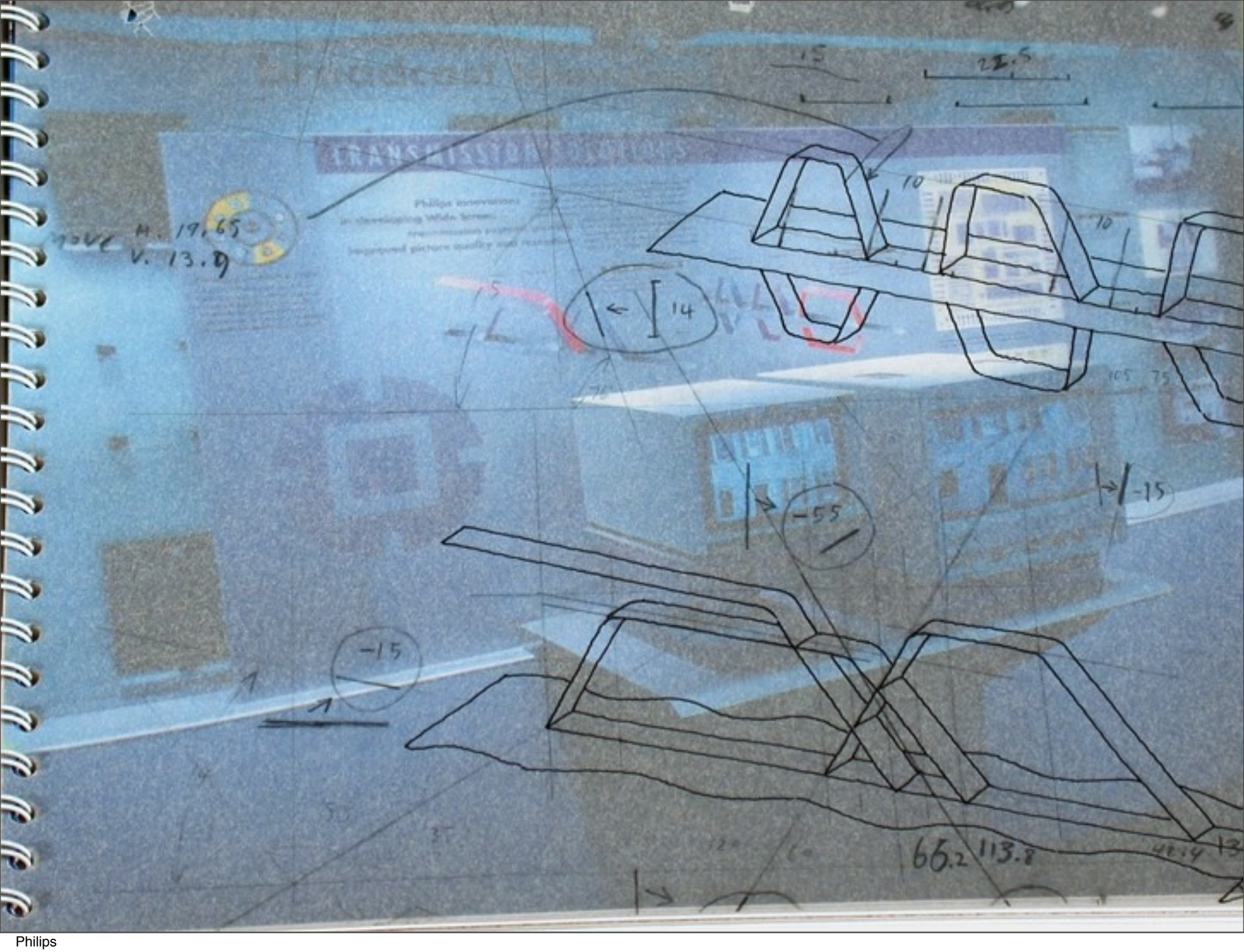
.

.
The light and color
of the West Coast.
.

Towers of fabric.



Philips
Electronics
Museum.
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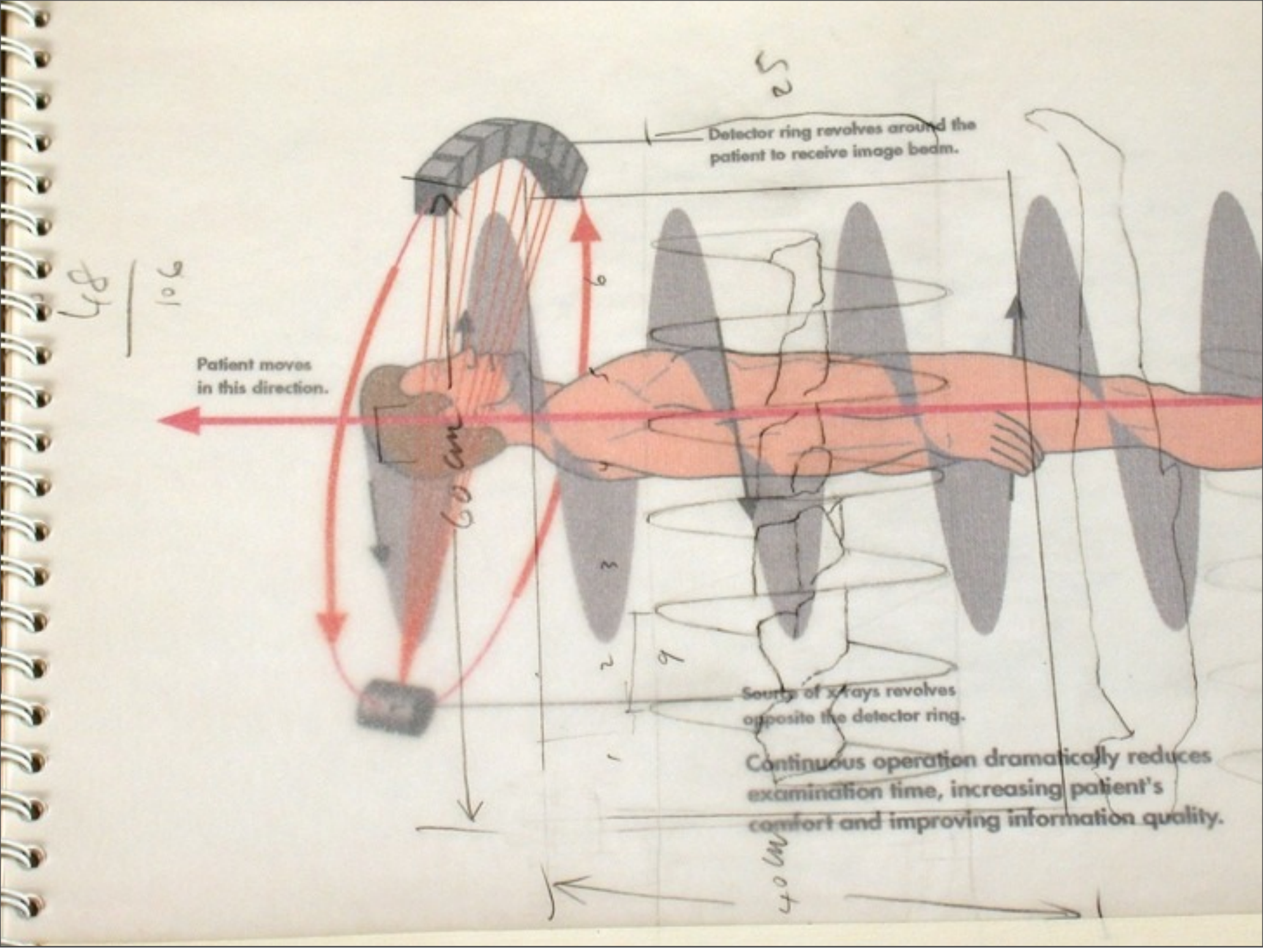

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Exhibit graphics
and Illustrations.
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Multiple layers
of artwork.
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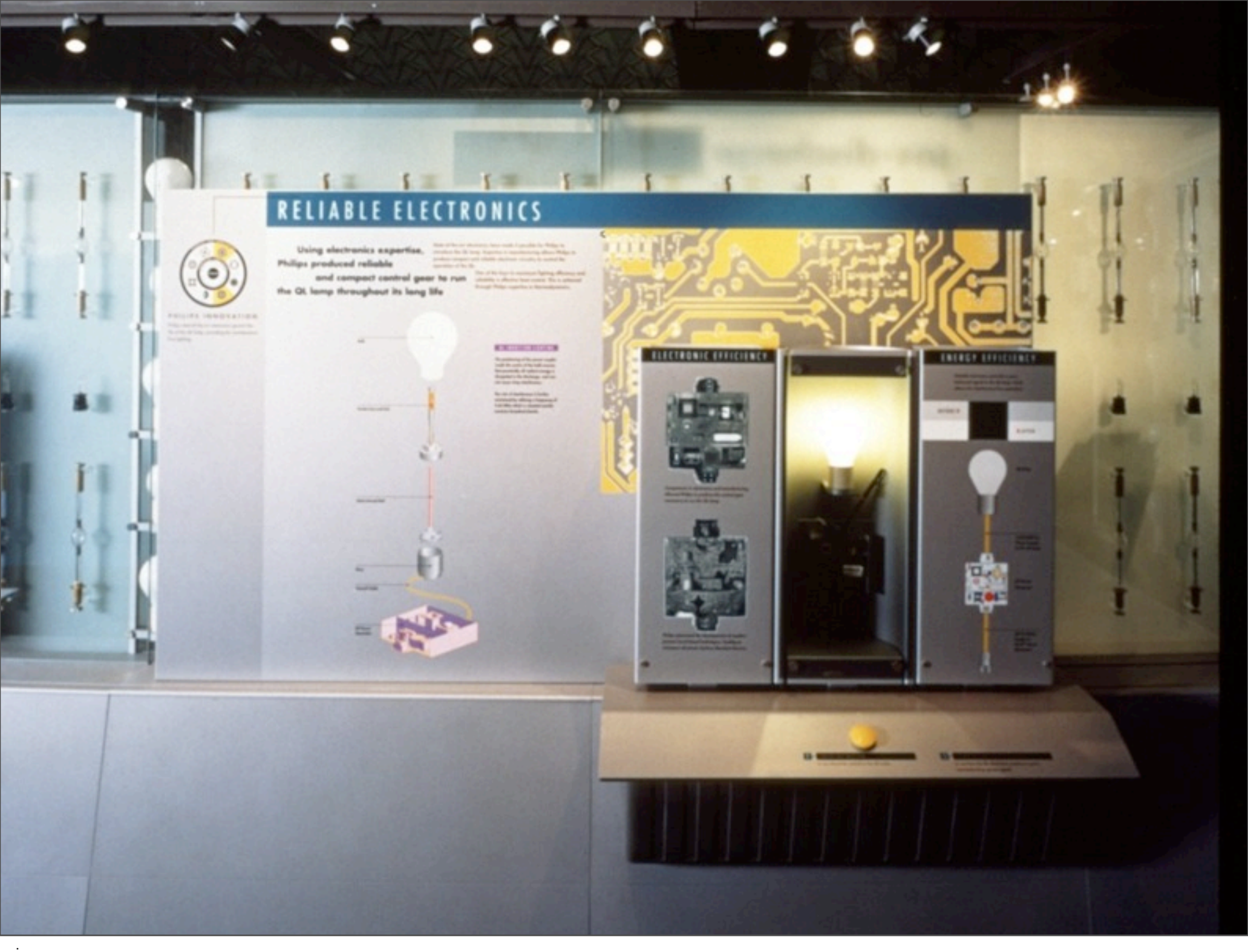

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Printed on glass
and steel.
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California Museum
of Science and Industry.
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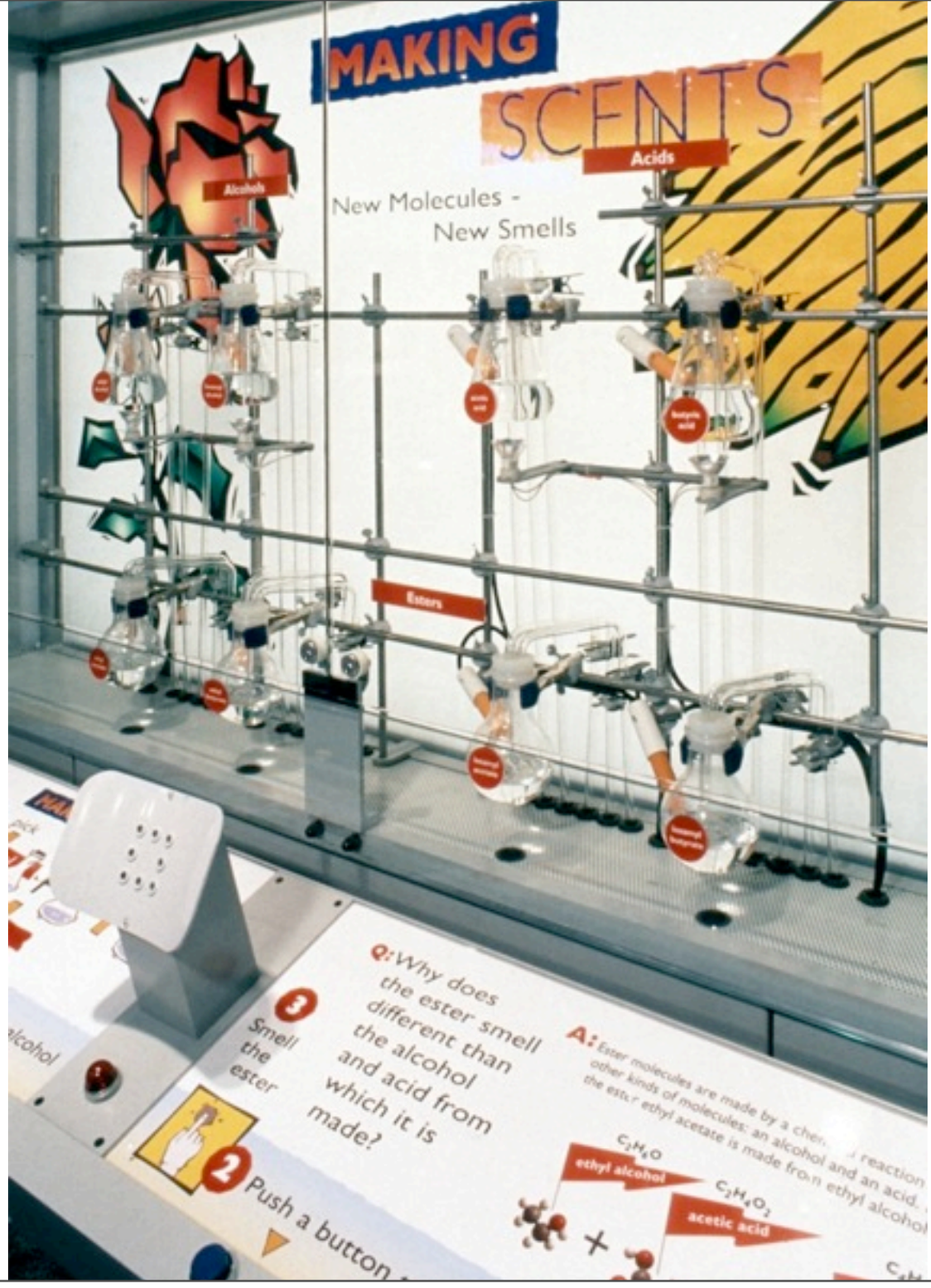

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A chemistry
Exhibit.
.

High-Tech
machines
and wood-cut
illustrations.

.
.
Smell
and touch.


neoprene molecules to one another make sure the ball returns to its original shape.
Polynorbornene molecule
2
Unlike neoprene, the polynorbornene molecules in Ball 2 contain a bulky five-carbon ring which makes it more difficult for them to move past one another. Because the molecules rub one another a lot as they stretch and then return to their original shape after impact, most of the ball's impact energy is lost as heat due to friction. Little energy is left to make the ball bounce.
8
ball 1
ball 2
Compare the balls:
• Do they look the same?
• Do they feel the same?
• Is their chemical structure the same?

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An exhibit
on special effects.
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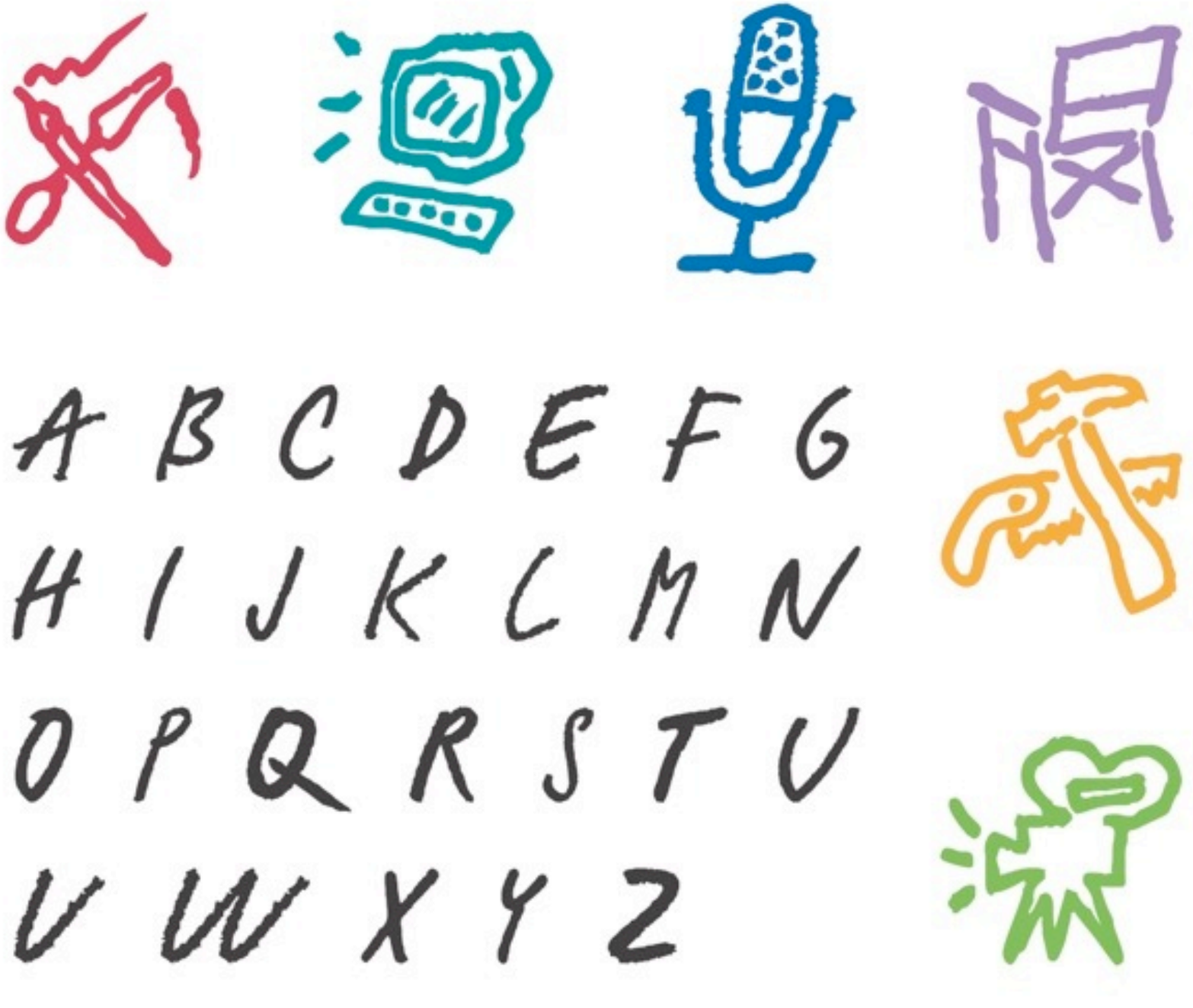

.
A typeface
designed for the show.
.

.
The craft of film-making
.
The craft of the carpenters.

.
Sculptors and painters
.
Make-up artists.


ANIMATRONICS
ANIMATRONIC PUPPETS

.
and Computer
Artists.
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Washington State
History Museum.

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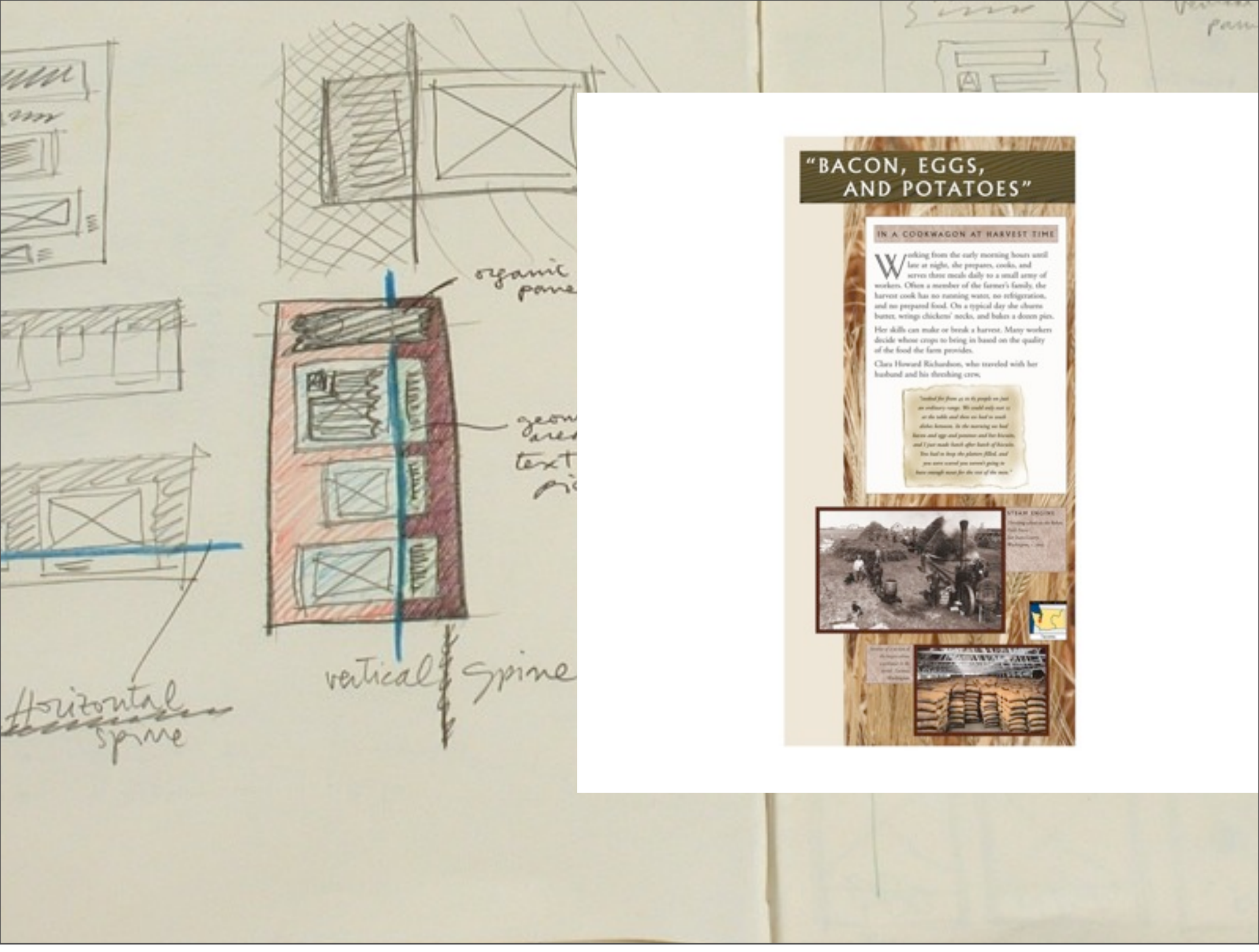

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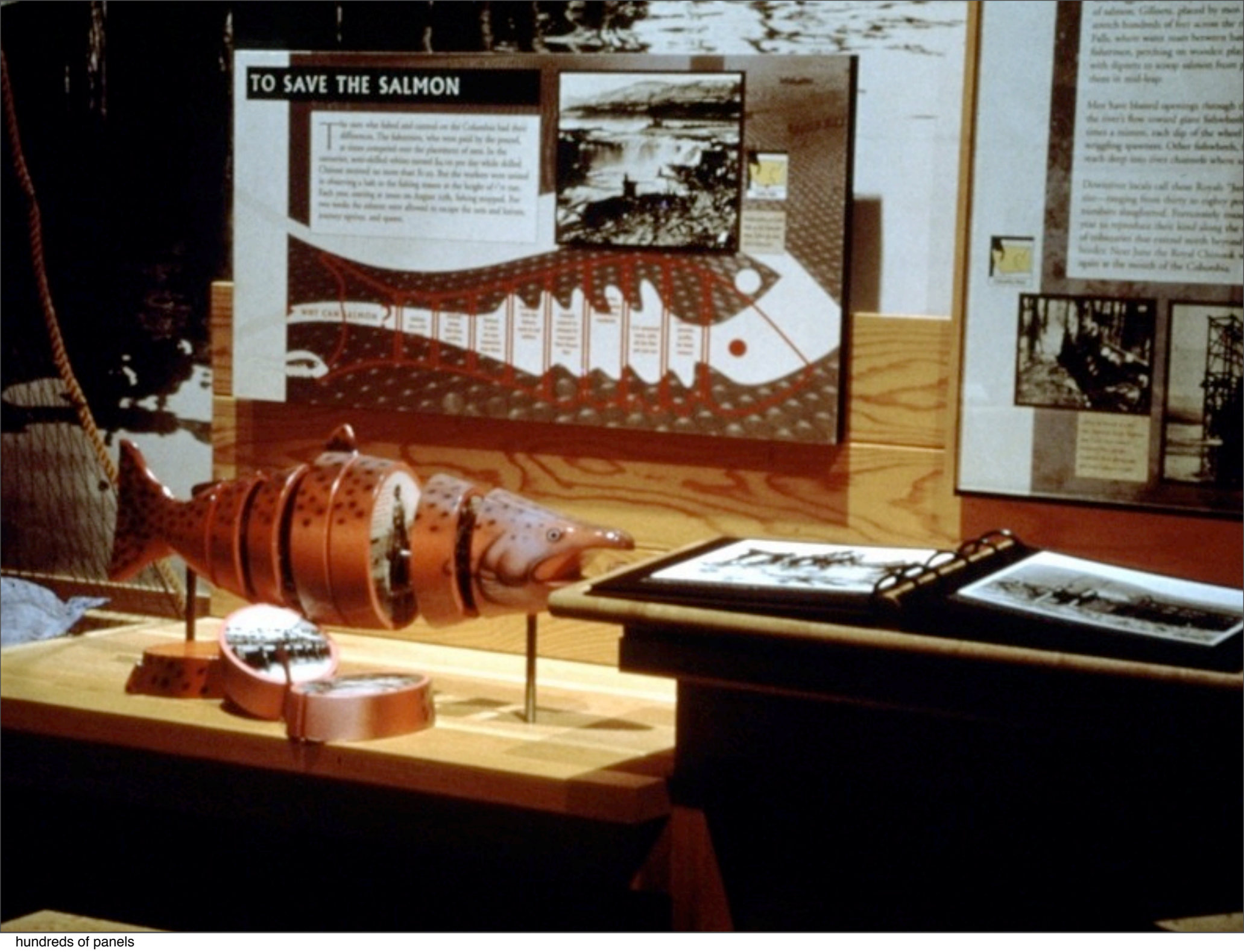
A sketch
is always
the beginning.



hundreds of panels
and artifacts.
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SHIP BUILDING

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An exhibit
on affordable housing.
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A found-object
is the inspiration.
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.
An exhibit on recycling.
.
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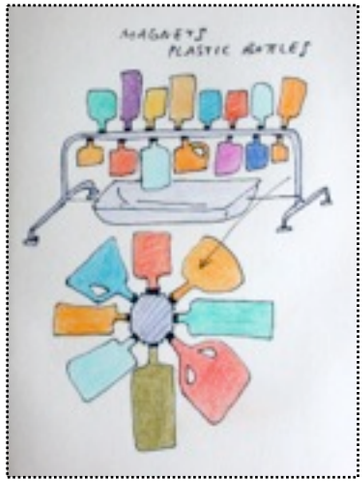
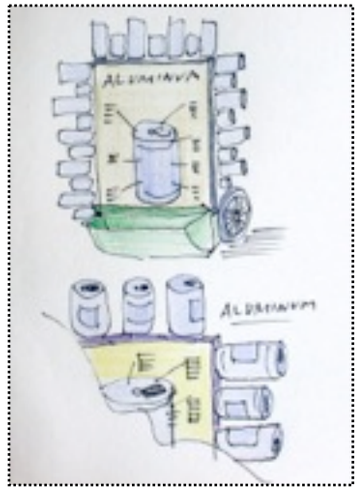
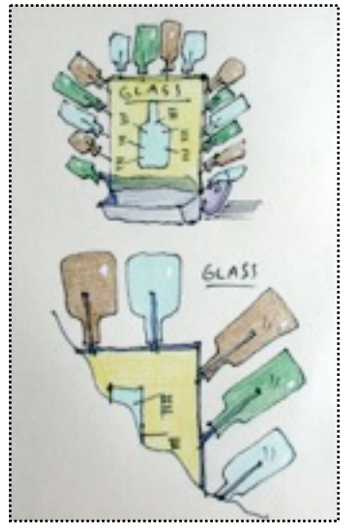
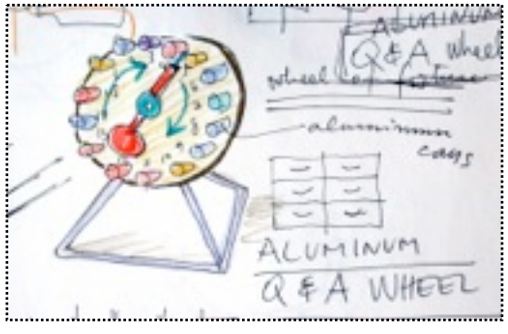
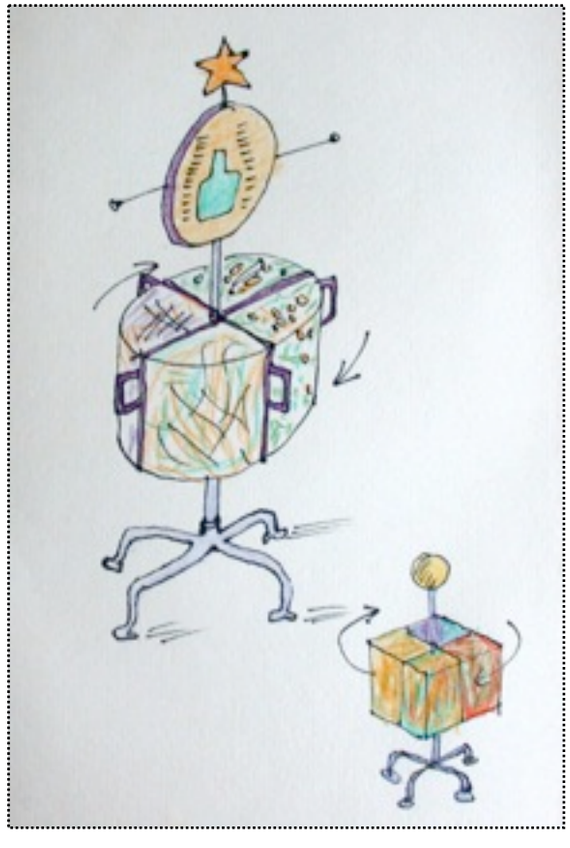
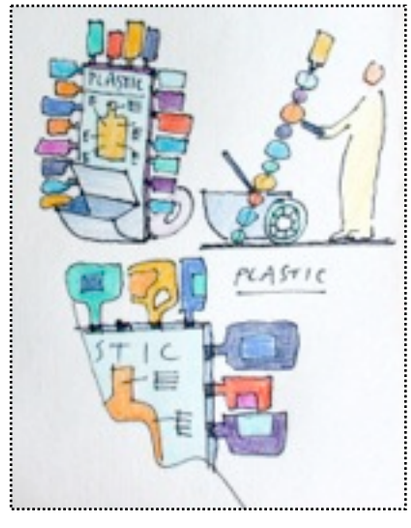


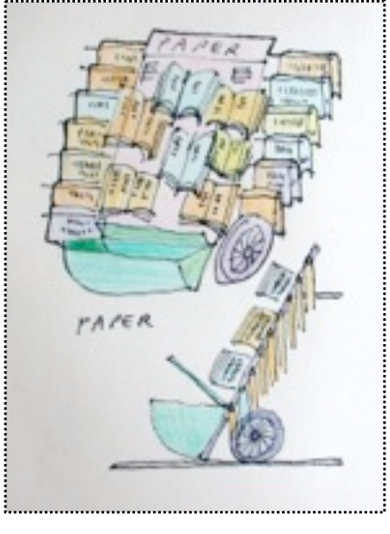








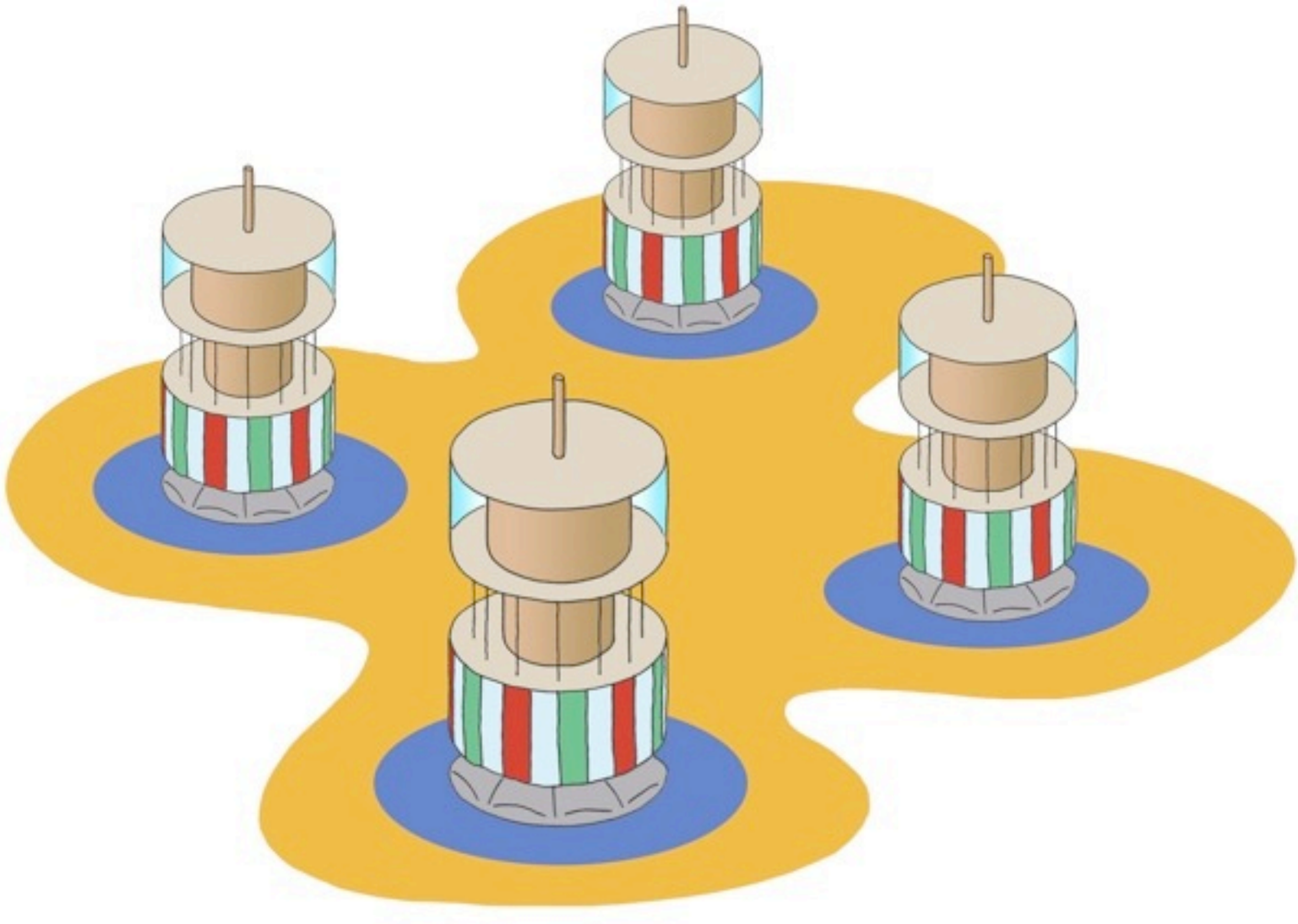




.
Things
drawn by hand
speak to you.

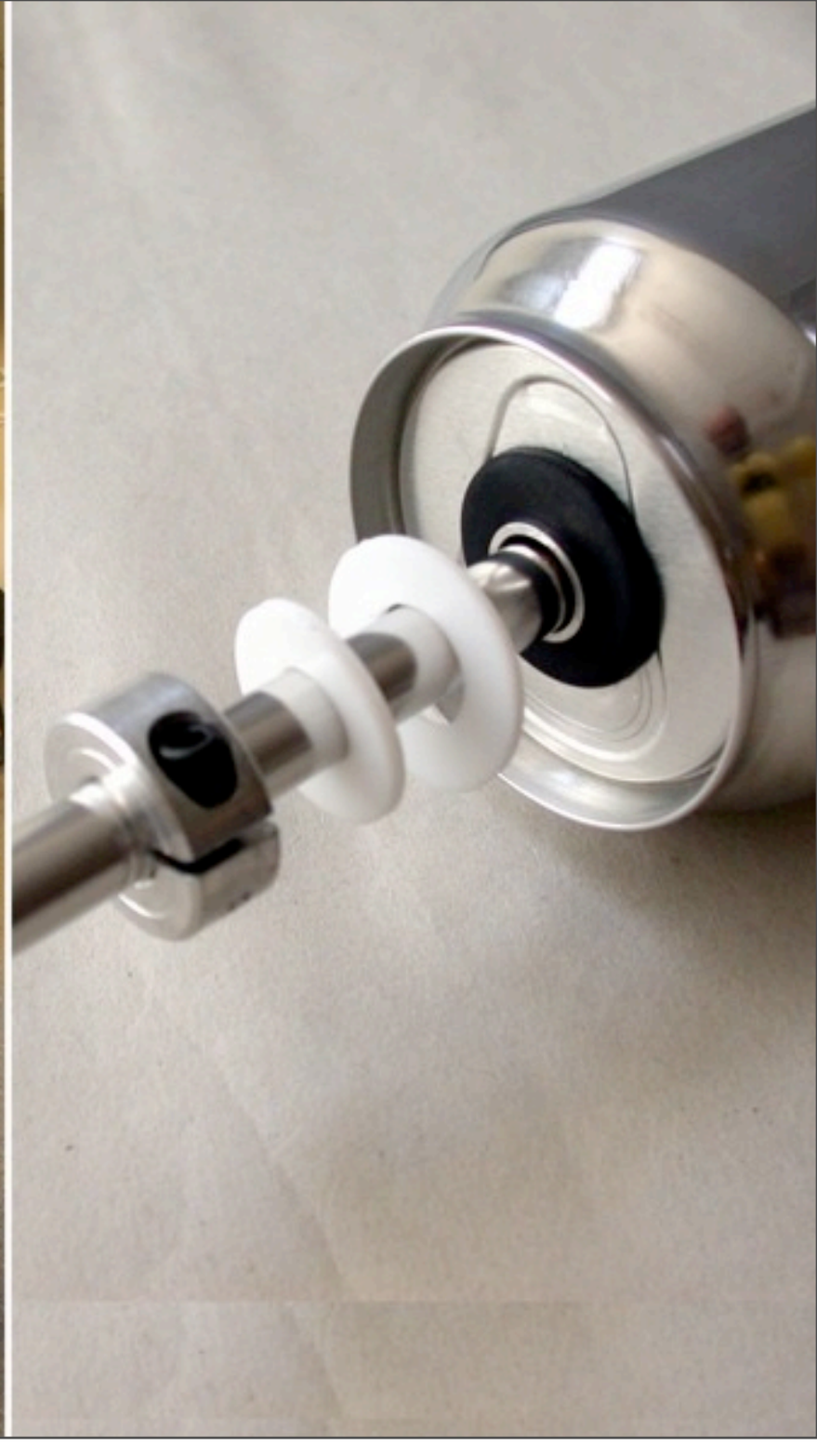
Making
connections.
.
a carousel
is the inspiration.

Bottles and cans
go round and round
.
.



.
like in a carousel.
.
.

The simplicity
of the objects.
.
.



.
the turning motion.
like a fast
spinning top
.


WORKSHOP

Blobs of paint
on folded paper.
Drawing
without a brush.

Dripping
paints.

.

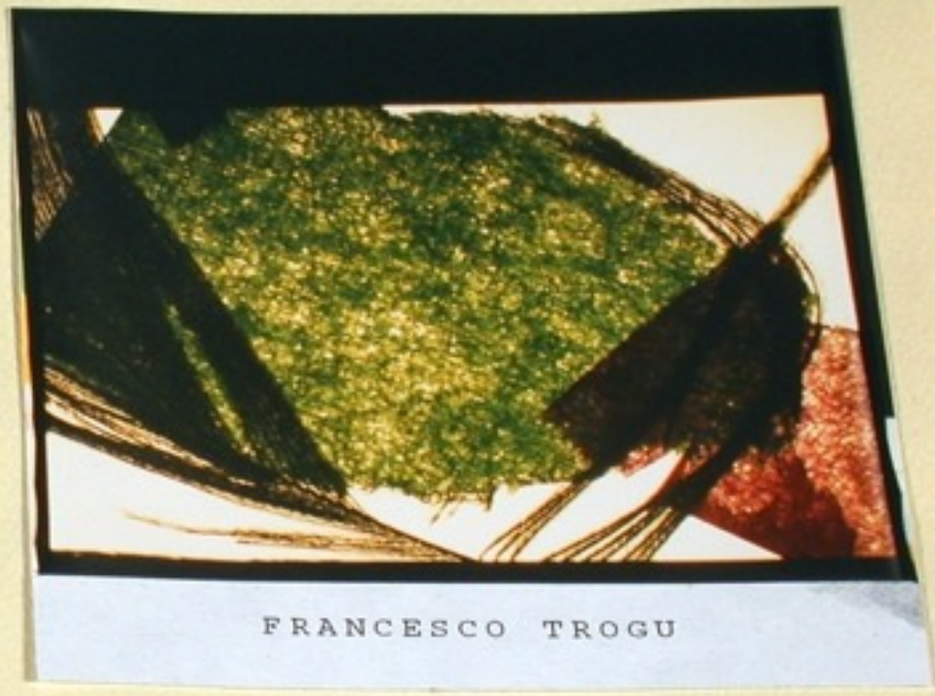
Shapes

of clowds,
trees and rivers.
.
.


Giordano

Direct projections (using materials)

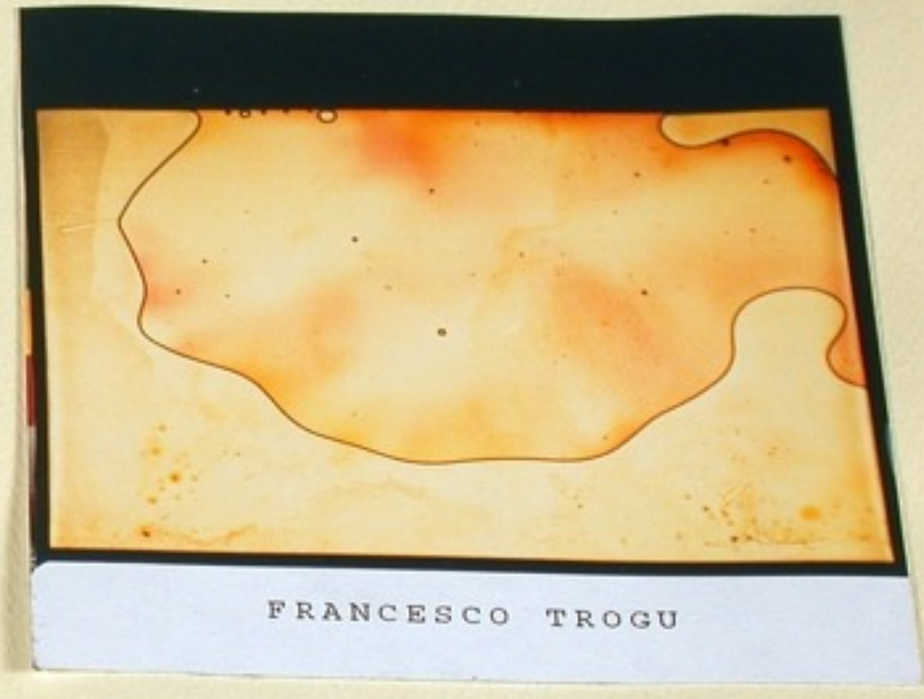
We are used to taking pictures with a camera, getting back the prints, and looking at them on a table. We can also take slide pictures, which can then be projected on a white wall or screen. Slide mounts sometimes are made of two pieces of thin glass that can hold the film or other materials, so we can use these mounts to create our own pictures, without a camera, and project them. Small things can be placed between the glass, like seeds, threads, onion skin, dragonfly wings. All these things, when projected, reveal their beautiful patterns and details. The children can see each slide projected and comment on their peers' designs. These images don't represent anything in themselves, much like "abstract" art, and they can be appreciated in their own right.



A slide projector
becomes
a microscope.
.

Direct projections
(using glue and ink)

The same glass mounts can be used to hold various colors with the help of a bit of transparent glue. The colors and the glue will mix in unexpected ways. Air bubbles will form in the glue, creating yet more patterns. Only one or two colors are used together. If one doesn't like the "composition", the colors can be changed and a new experiment begins. Again, the children will be able to look at the enlarged images as a group and comment on them.



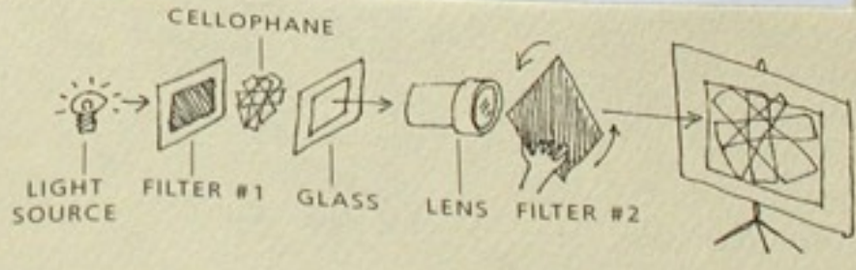
.
a changing
canvas.
.

Direct projections (using polarizing filters)

An interesting variation of direct projections is in the use of ordinary transparent materials such as cheap scotch tape and cellophane, placed between two pieces of polaroid filters and seen projected on the screen. These filters are similar to the glass of regular polarizing sunglasses. When two pieces are rotated together, they can cut the amount of light going through. When cellophane and tape are put between these filters, all the colors of the spectrum are made visible by the interference of these materials with the filters.

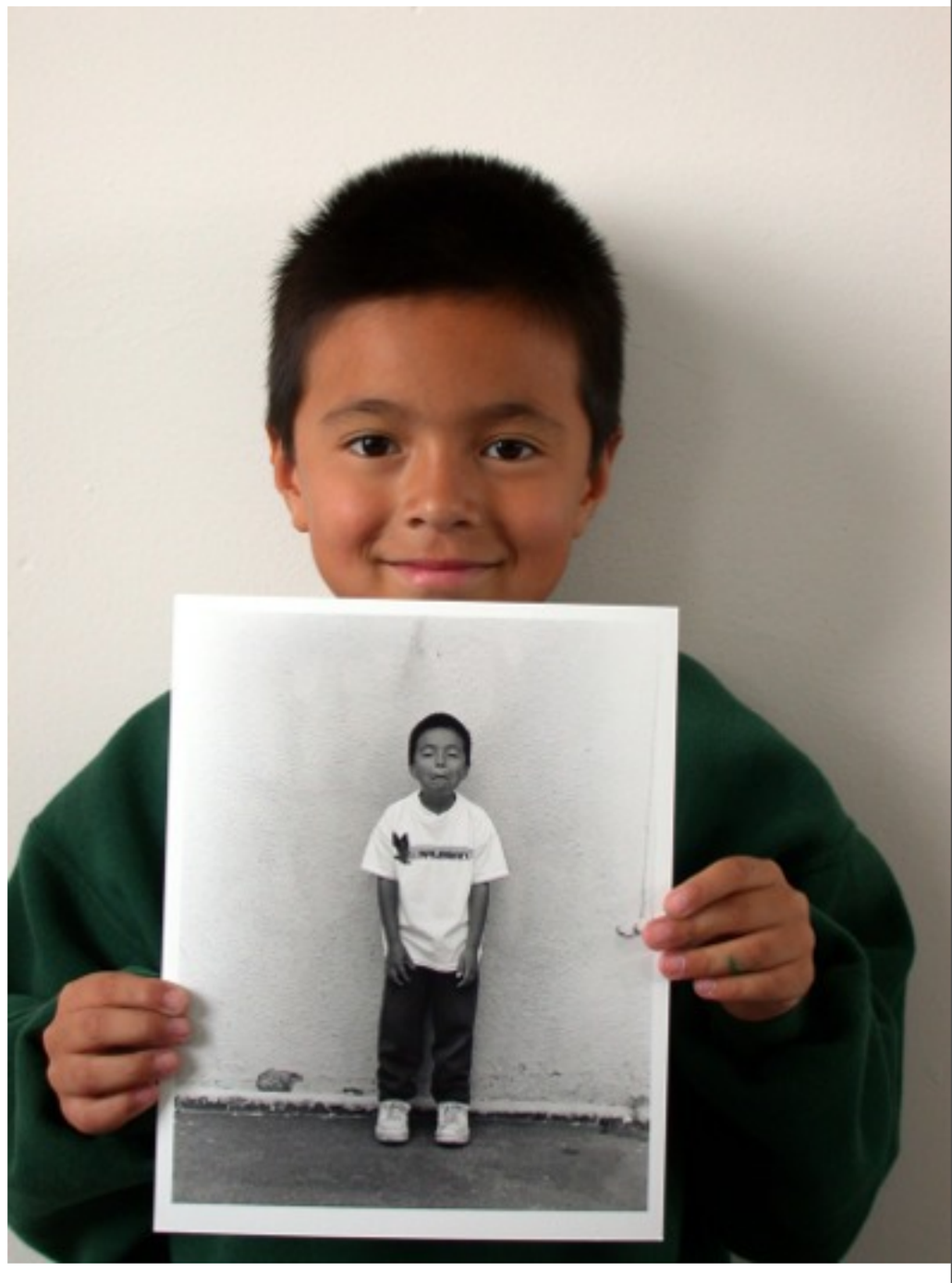
Each child is given an open slide mount with a piece of the filter on the back. They can create their pattern by placing different pieces of materials at different angles, then the mount is closed and placed in the projector. Each child can then rotate the second filter in front of the projector's lens, thus producing a variety of different colors in real time. These colors are very pure and bright because they are made directly from "white" light instead of pigments (paints). The diagram shows how the projections were made:

FRANCESCO TROGU



and an ever-changing
RAINBOW.

.
.



Kids
take pictures
of Kids.
.

In the darkroom,
.
out of nothing,
.

an image
gently appears
on the white
paper.


OCCUPANT

.
.
.
.

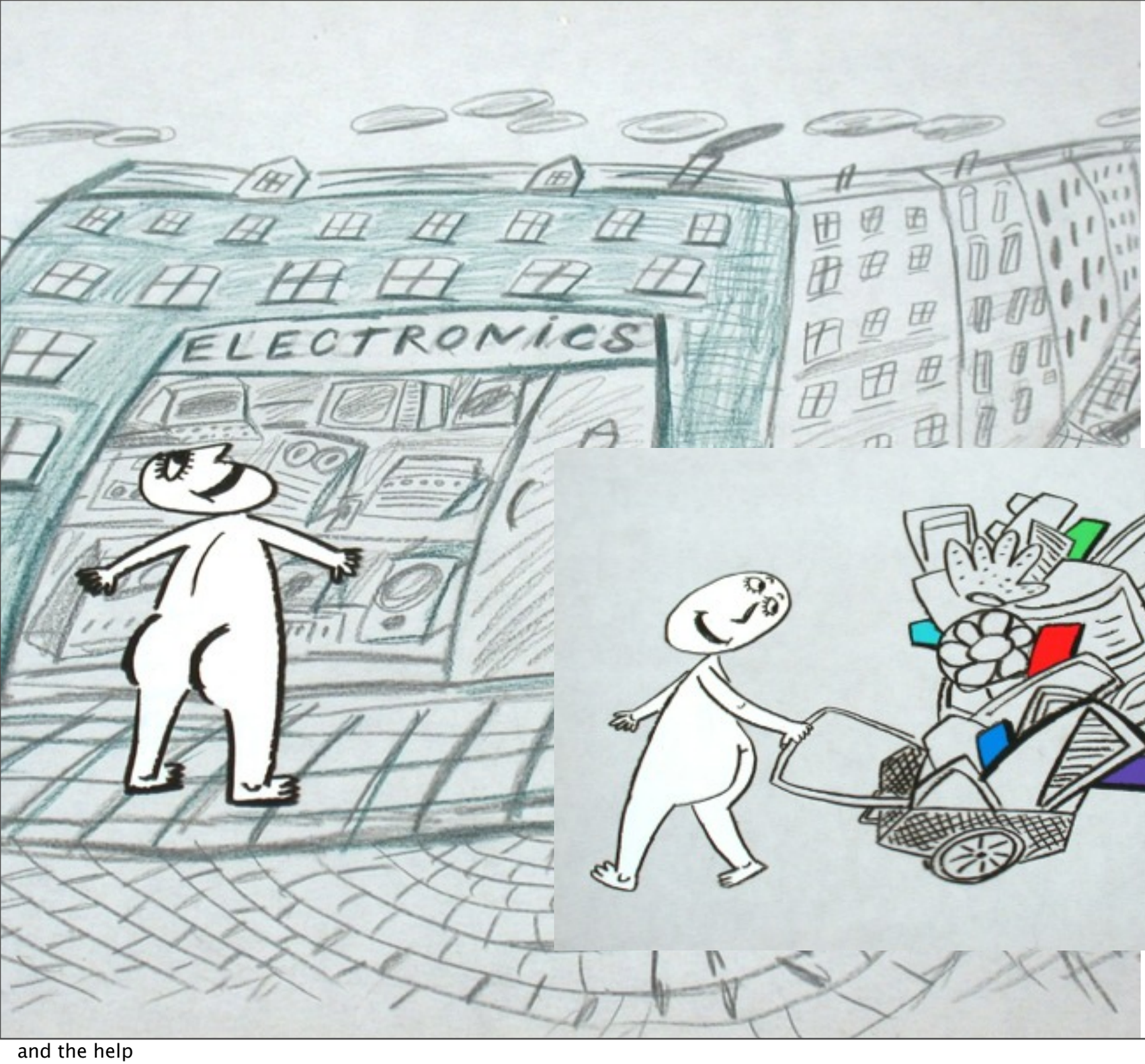

OFFICIAL DOG

.
.
.
.


FILM

.
A boy
looking for the perfect coat.
.

.
the senses
.
.



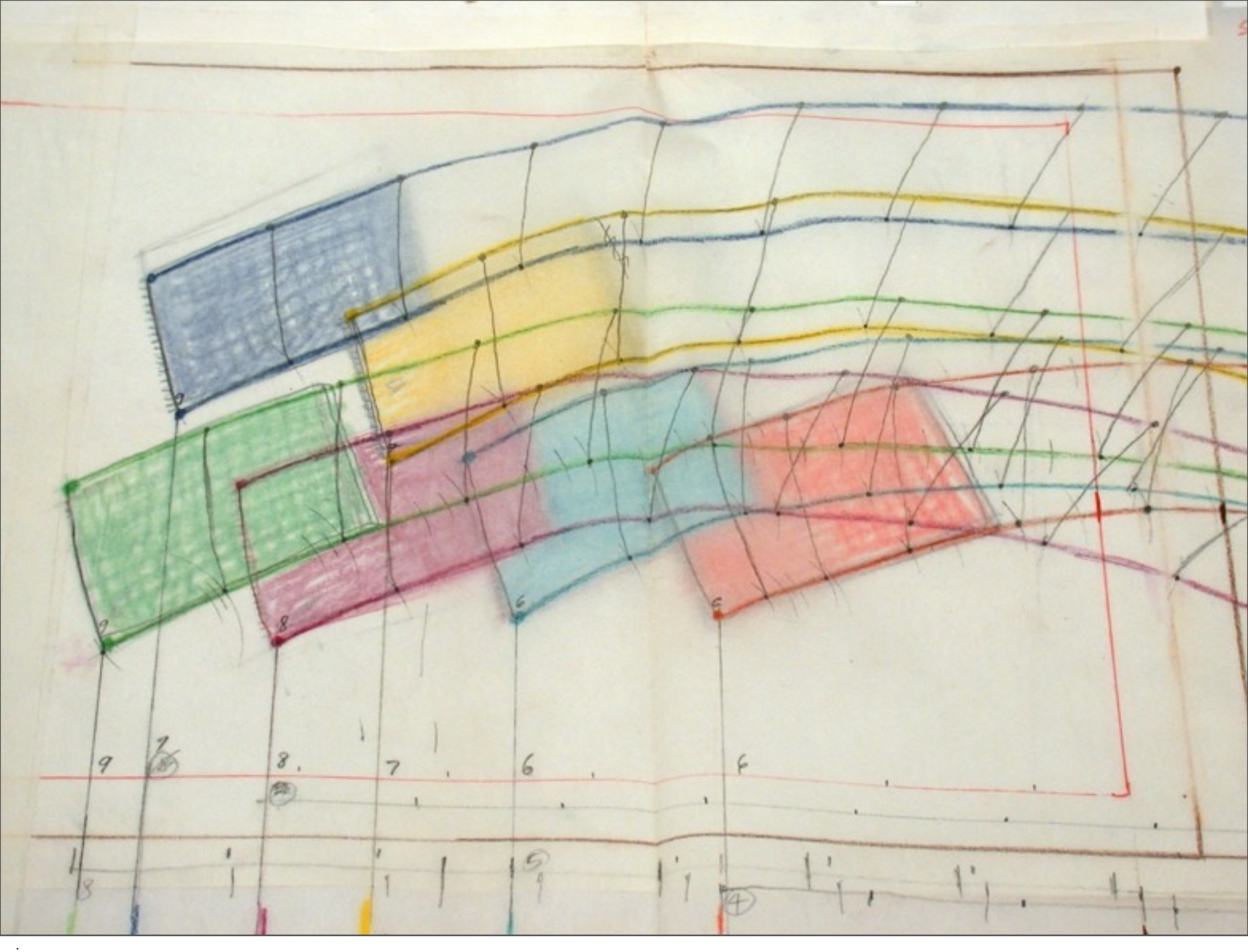
and the help
of computers.
.
.

The building blocks

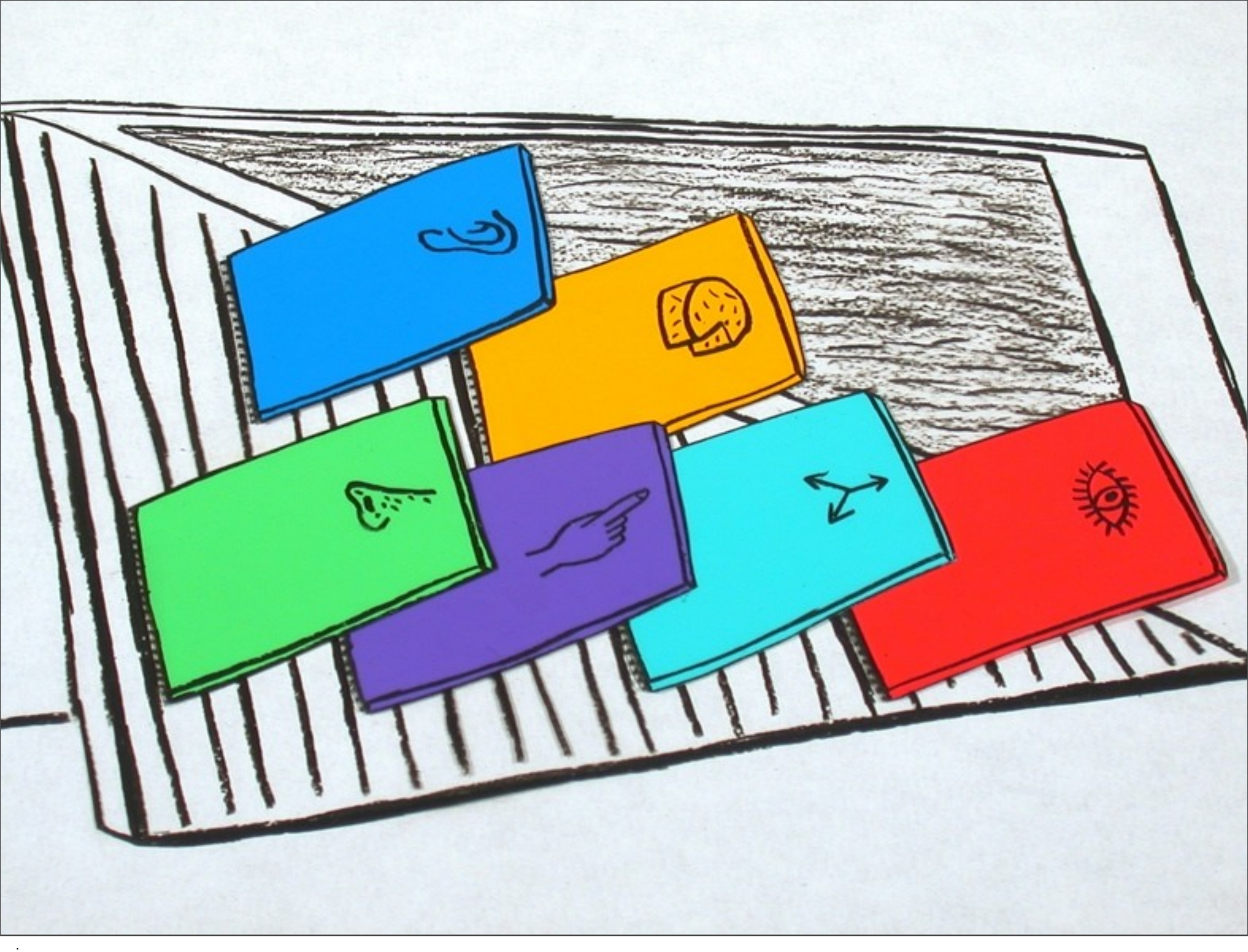
.

The simulation cards.

.



.
.
Can this provide
the perfect design?



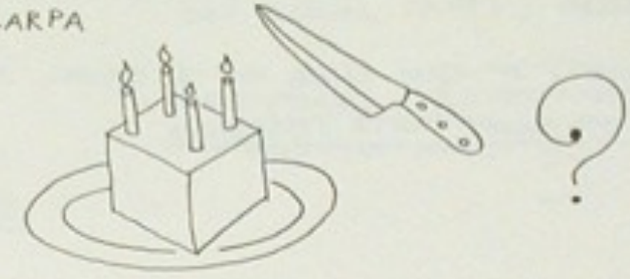
.
.
.
.


SCHOOL

(PART 3) SECTIONS OF CUBE

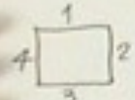
REFERENCE :

KLEE
VIEIRA
SCARPA

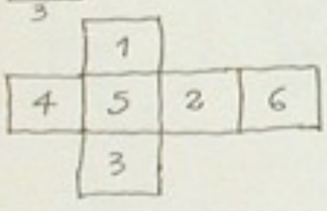


PROBLEM :
SLICING A CUBIC CAKE INTO 3 EQUAL PARTS

BREAK DOWN THE PROBLEM



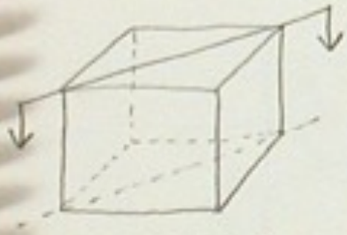
4 SIDES (NOT DIVISIBLE BY 3)



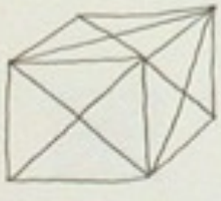
INCLUDES TOP & BOTTOM

6 SIDES (FACES - THUS DIVISIBLE BY 3)

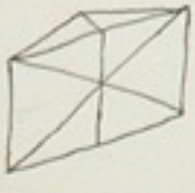
6 : 3 = 2 FACES (EACH SLICE INCLUDES 2 FACES)



- SLICE ALONG DIAGONALS OF FACES
- TWO SECTIONS FOR EACH FACE = 6 SECTIONS (OPPOSITE FACES ARE SLICED SIMULTANEOUSLY)

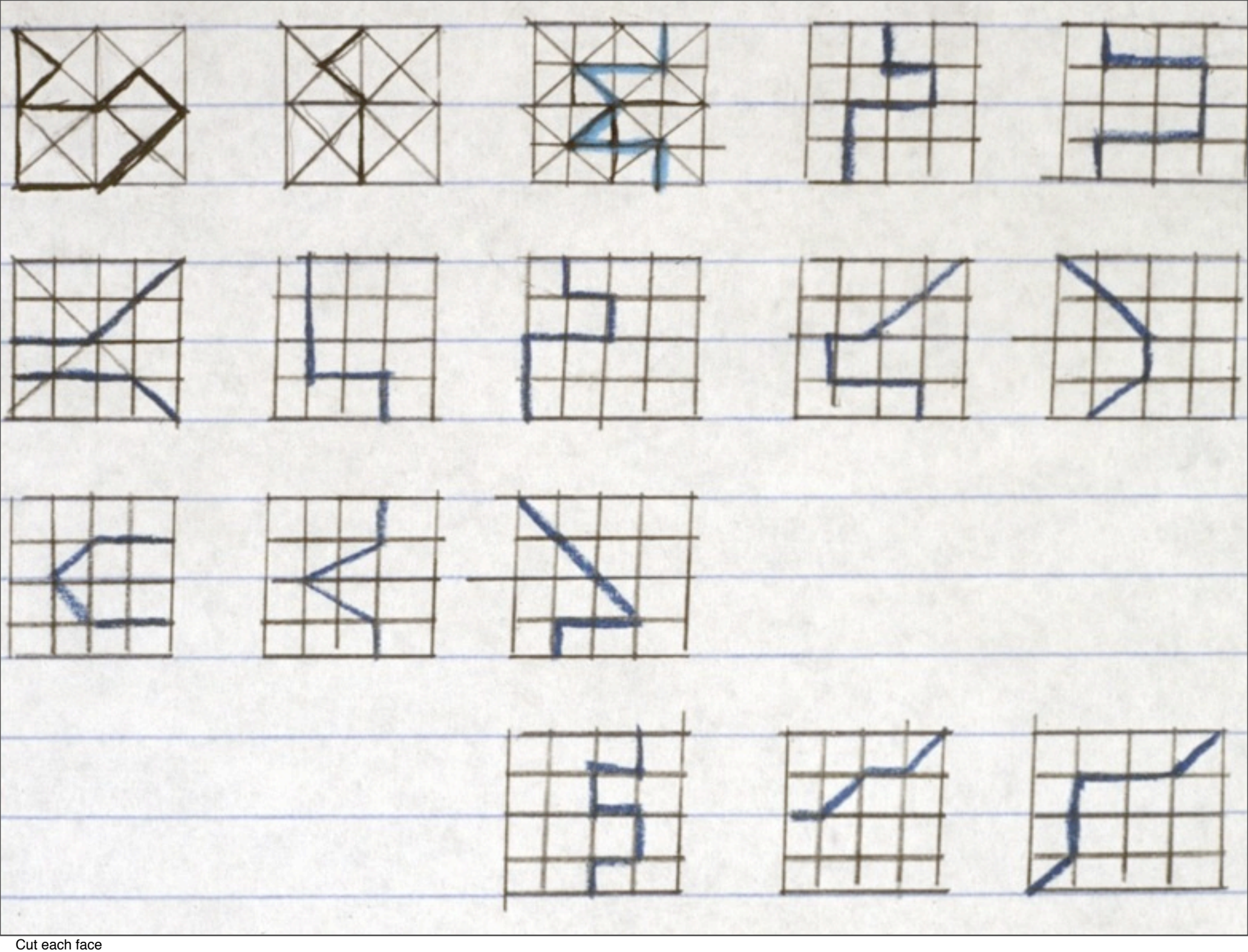


- EXTERNAL STRUCTURE (BASED ON SQUARE)

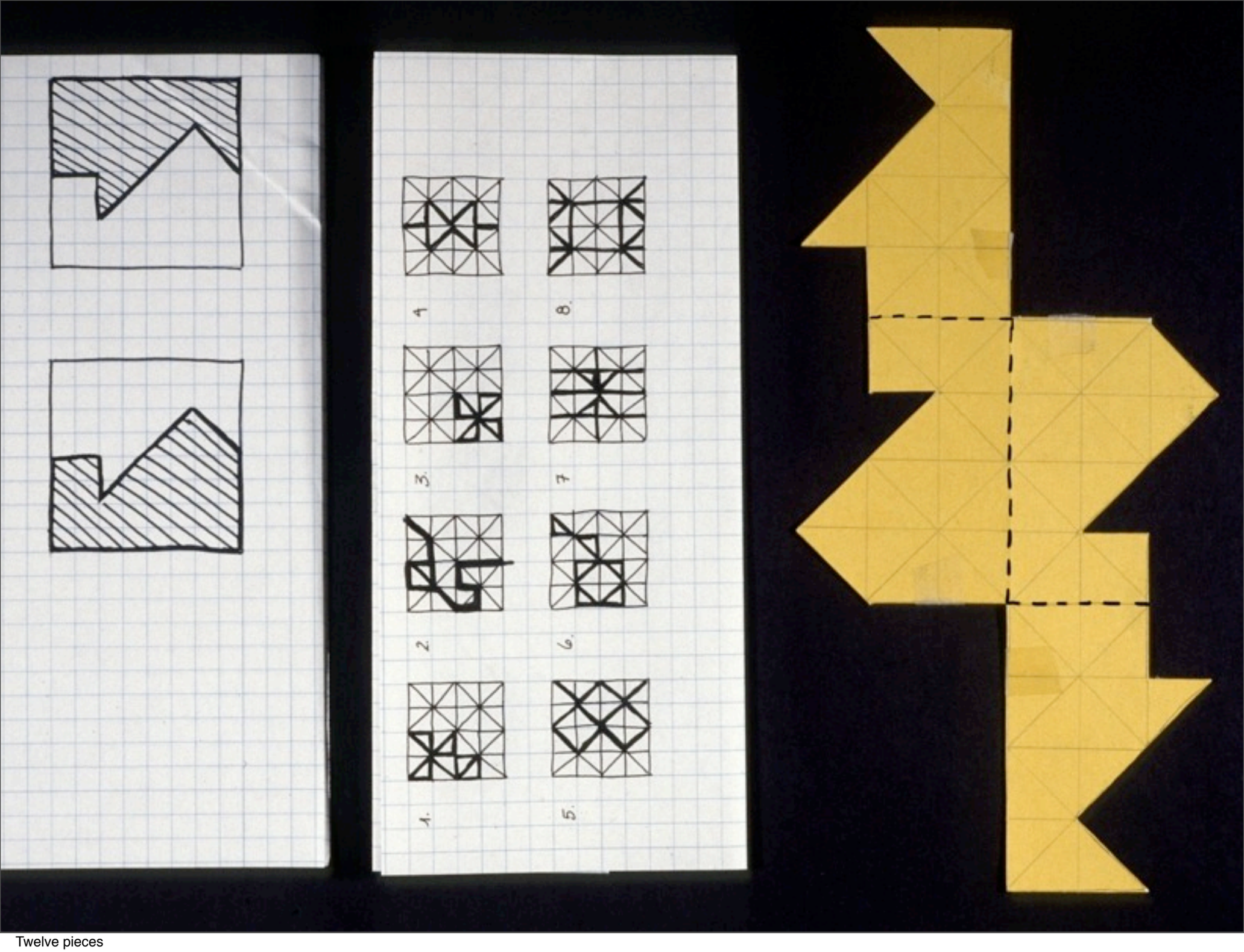


- INTERNAL STRUCTURE (BASED ON $\sqrt{2}$ RECTANGLE)

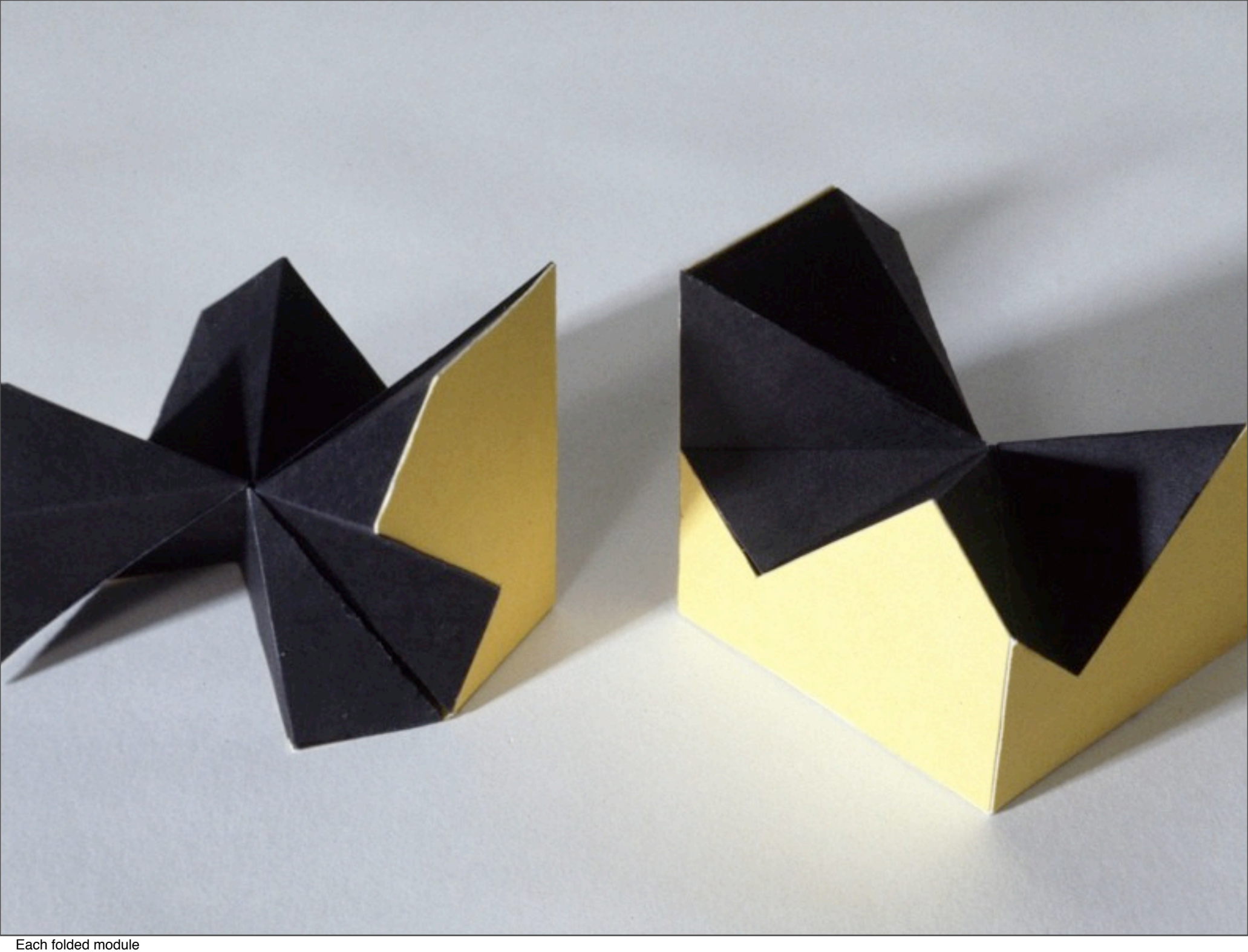
How to divide
a cube
in three parts?
.



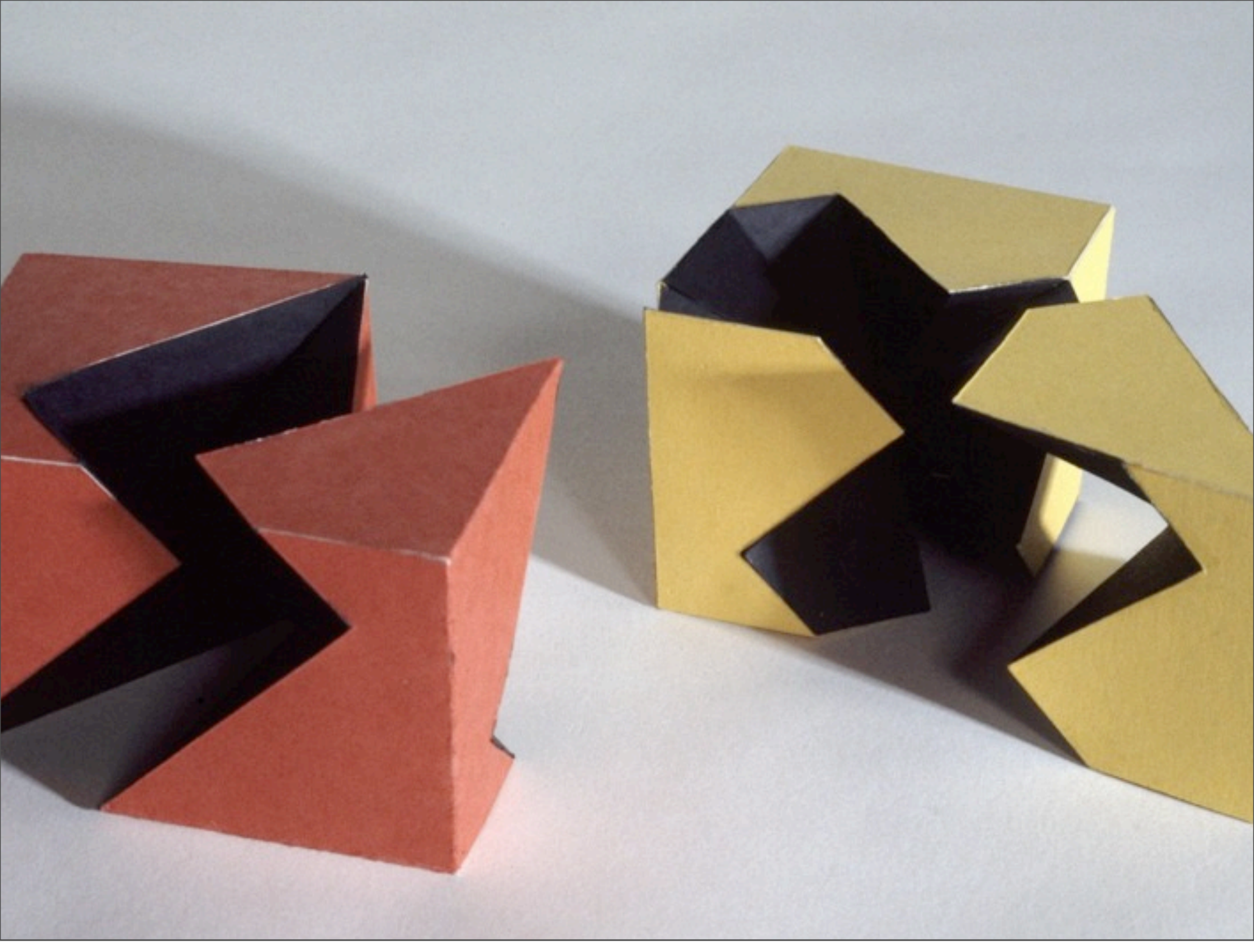
Cut each face
in two.
.
.



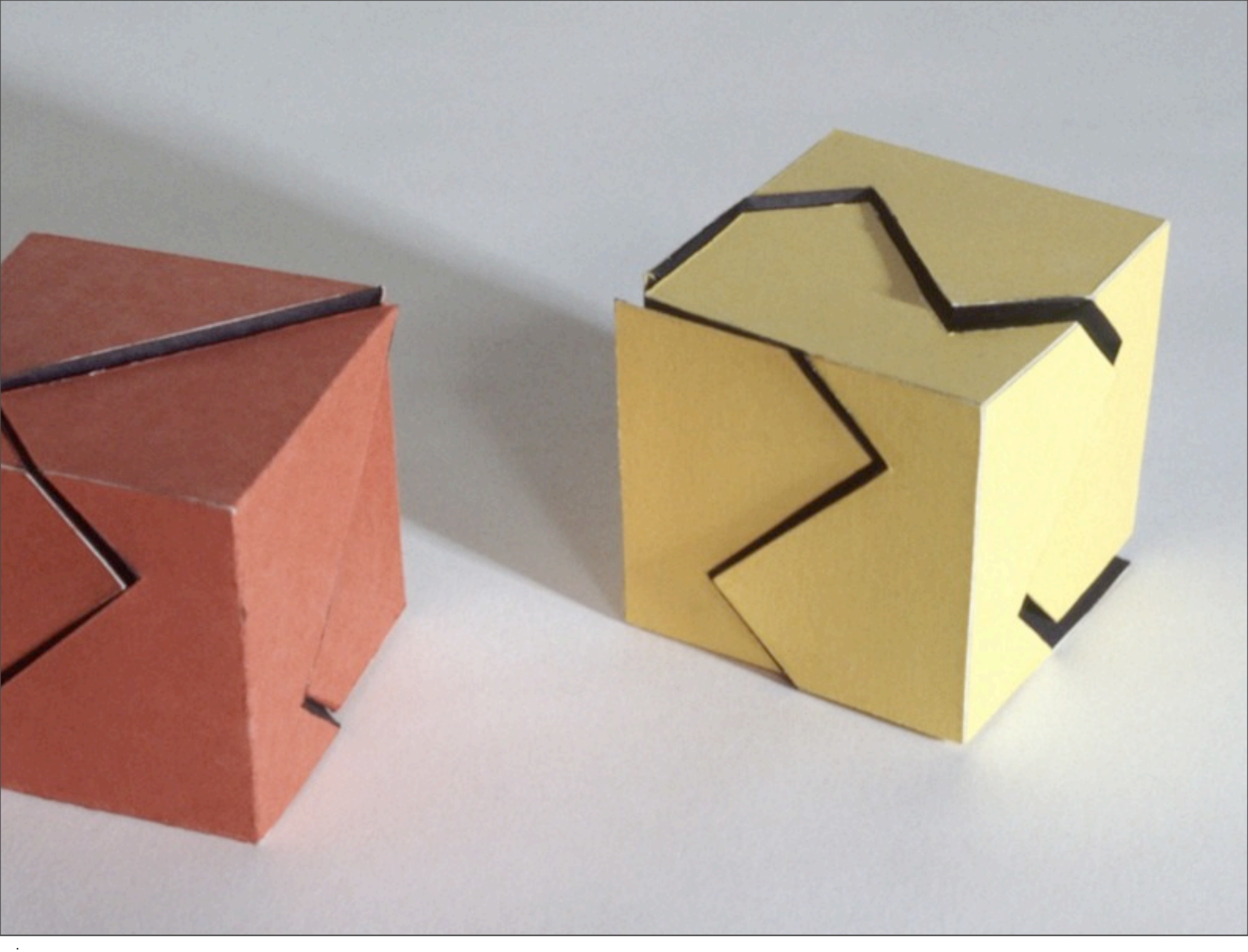
Twelve pieces
in groups
of four.
.



Each folded module
is a third
of the cube.
.

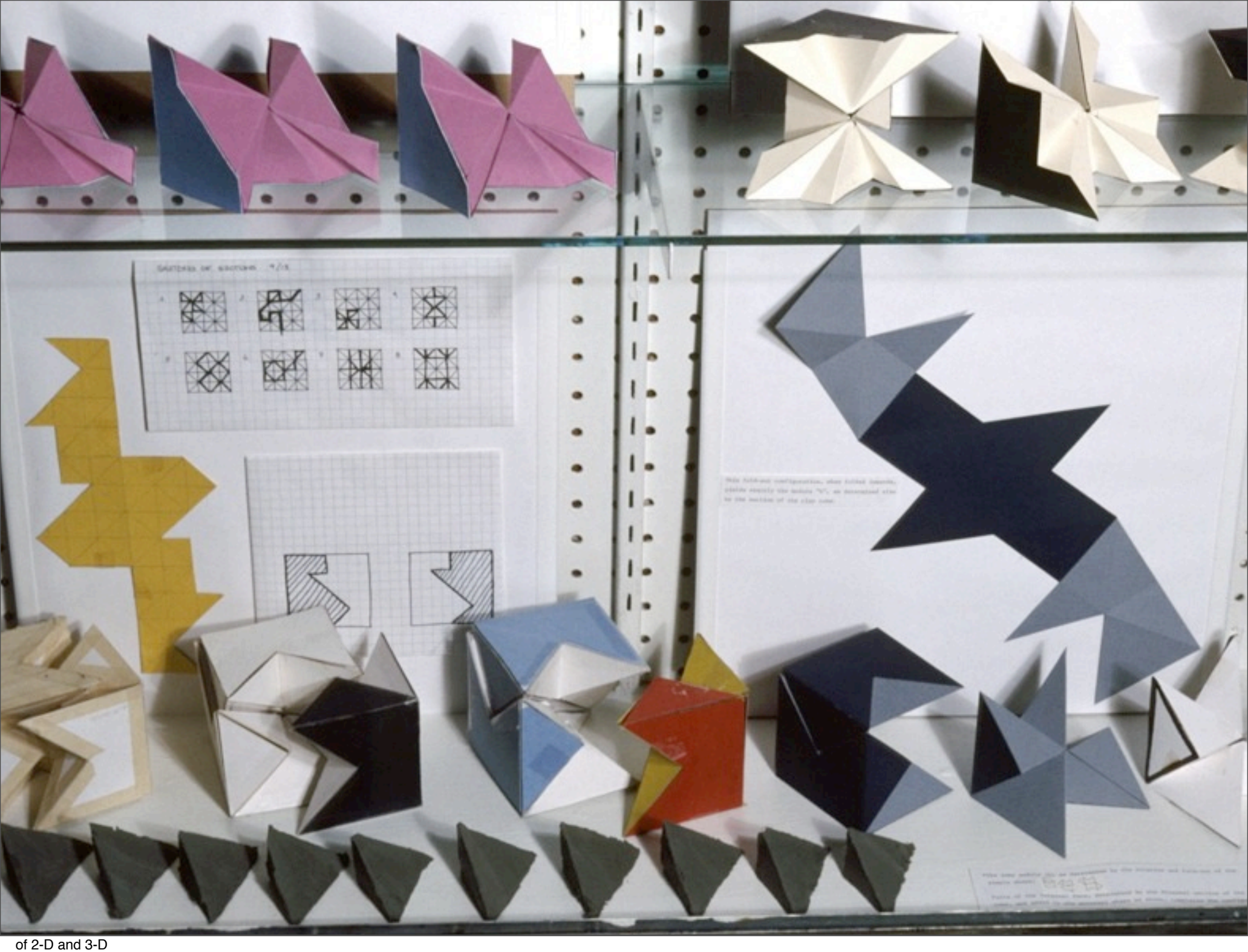


.
.
.
.



.
.
.
.

.
.
Drawing
Is the foundation



of 2-D and 3-D
design.

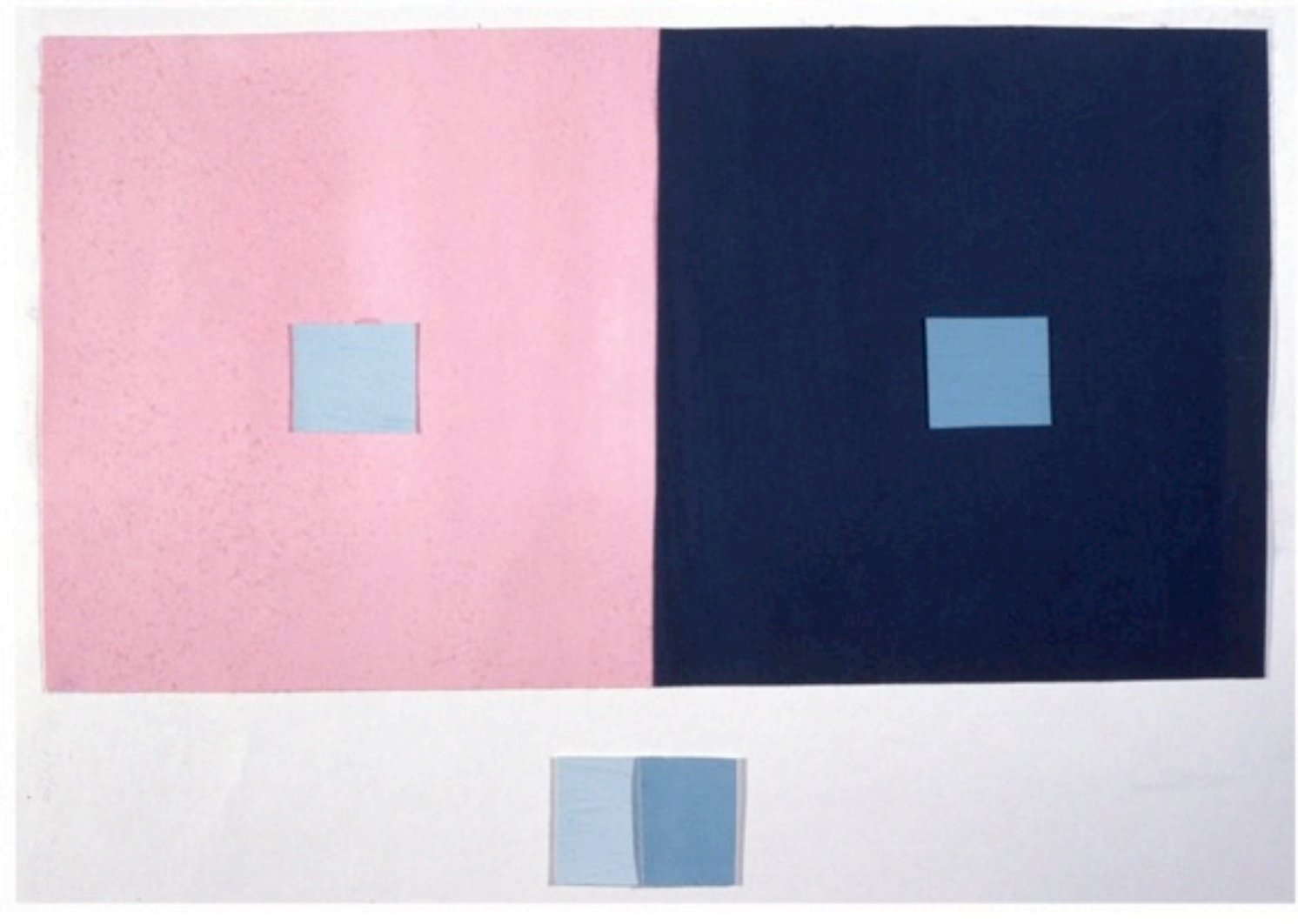
.

.

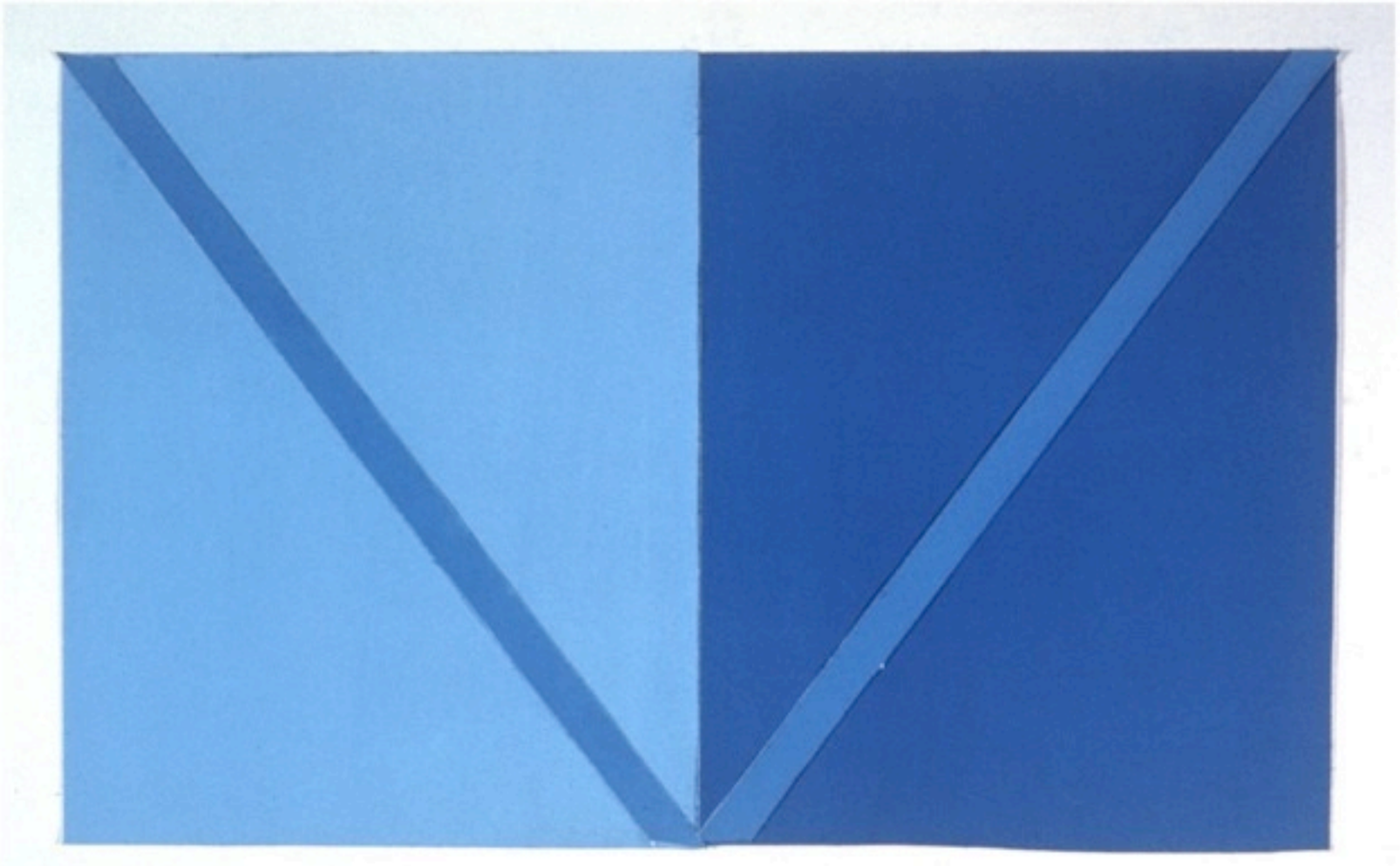
Drawing connects
the hand
to the eye
and the brain.

.
Josef Albers
Interaction of Color
is best experienced

.
by doing it.
.
.

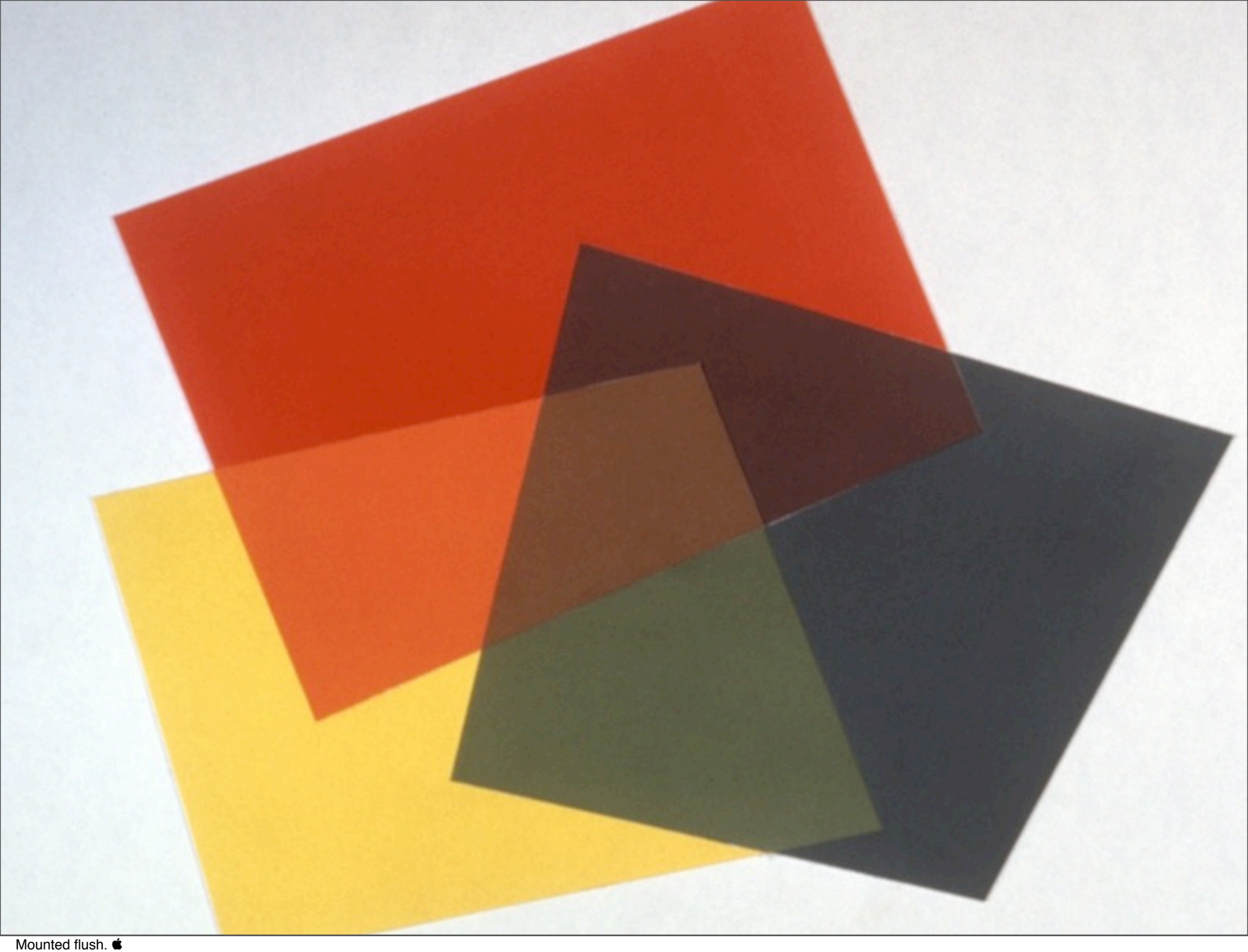


Two colors
look like one. (1)
.
.



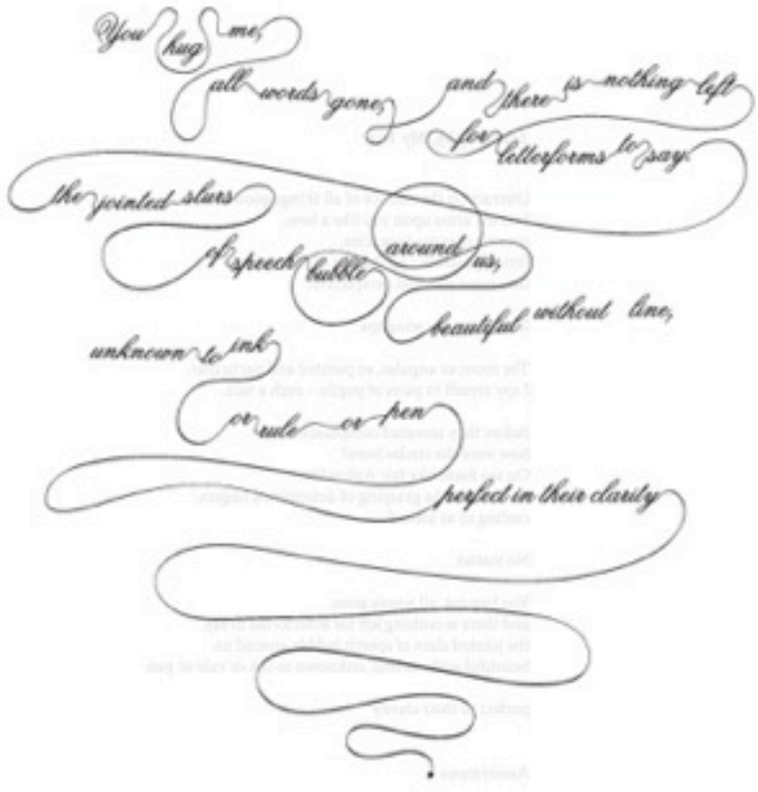
Three colors
look like two. (2)
.
.

Colors
painted by hand.
cut to size.
.



Mounted flush.
.
.
.

.
A poem about typography.
.
.
.



You hug me, all words gone,
and there is nothing left for letterforms to say.
.
.

Colophon

The poem Typography, My Way was written in 1996 by a student of typography at Virginia Commonwealth University, Richmond, VA. Transcribed by the teacher Peter Truger and rediscovered in 2005 in San Francisco. It was first published by Jack W. Stauffacher of The Greenwood Press, as part of a limited edition boxed set of poetry entitled Verse into TYPE, the APHA Poetry Portfolio. American Printing History Association, 2006.

This 4-page broadside was designed and produced by Mayssa Hawila, as part of DMGD 661, Digital Application Methodologies, a graphic design class taught in the fall of 2006. School of Art and Design, San Jose State University, California, USA. According to Hawila's interpretation, the poem describes typography through two human senses, seeing and hearing. And she visualizes the three significant scenes of the poem with the two human senses: the angular letters through the writer's eyes, the circular forms of the nature through the antiquity's eye, and the letters merging into the air and becoming the invisible sounds.

Additional text: Mayssa Hawila
Typefaces: Ramon Antique
Illustrations: Anatomy of the eye and orbit
An Atlas of Anatomy for Artists
Mayssa Hawila
Broadside is: 14 of 26

The jointed slurs of speech bubble around us,
.
.
.

Typography, My Way

Distraction the essence of all things good.
I tie my arms upon you like a bow,
musing over inadequacies,
fitting parallels and the tips of ruling pens
into some shocked perspective.

It is vast at my wingtips.

The room so angular, so pointed and particular,
I spy myself in pairs of pupils — such a face.

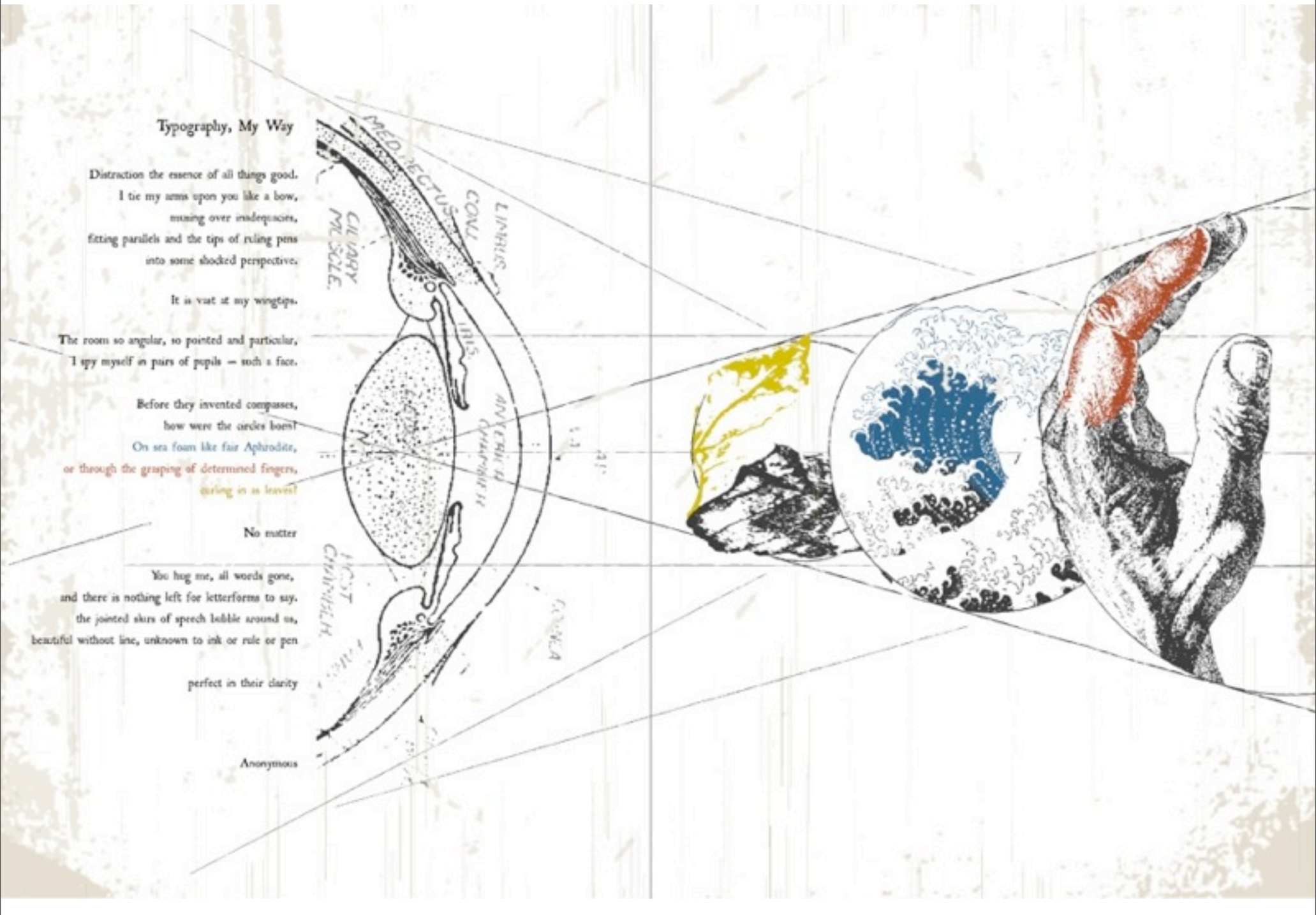
Before they invented compasses,
how were the circles born?
On sea foam like fair Aphrodite,
or through the grasping of determined fingers,
curling in as leaves?

No matter

You hug me, all words gone,
and there is nothing left for letterforms to say.
the jointed slurs of speech bubble around us,
beautiful without line, unknown to ink or rule or pen

perfect in their clarity

Anonymous



Beautiful without line,
Unknown to ink or rule or pen
.
.

Colophon:

The poem *Typography, My Way* was written in 1991 by a student of typography at Virginia Commonwealth University, Richmond, VA. Transcribed by the teacher Pino Trogu and rediscovered in 2005 in San Francisco. It was first published by Jack W. Stauffacher of The Greenwood Press, as part of a limited edition boxed set of poetry entitled *Verse into TYPE, the APHA Poetry Portfolio*. American Printing History Association, 2006.

This 4-page broadside was designed and produced by Brittany Dennler, as part of DSGD 186, Digital Applications Methodology, a graphic design class taught in the fall of 2006. School of Art and Design, San Jose State University, California, USA.

Typefaces: Franklin Gothic Book, Helvetica

Broadside n. 1 of 26

Typography, My Way

before they invented compasses,

how were circles born?

.
perfect in their clarity
.
.

the jointed slurs of speech bubble around us

beautiful without line, unknown to ink or rule or pen

perfect in their clarity

Typography, My Way

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I tie my arms upon you like a bow,
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No matter

You hug me, all words gone,
and there is nothing left for letterforms to say.
the jointed slurs of speech bubble around us,
beautiful without line, unknown to ink or rule or pen
perfect in their clarity

Anonymous

.
.
Natural systems
and design systems.

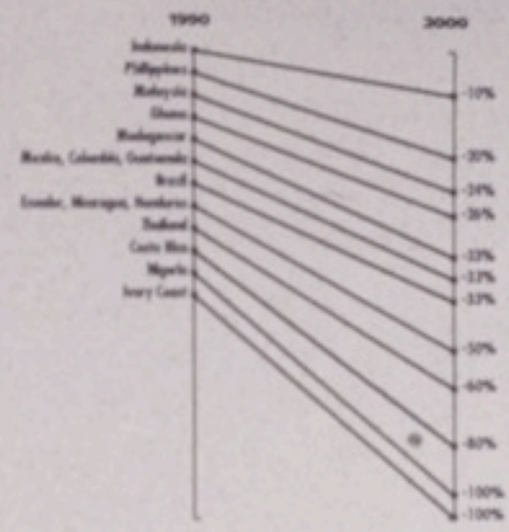
Future Forests

Though trees are being planted to help replenish the loss of forests, these efforts are of little significance and rarely survive due to poor soil and slow growth rate.

What will the forests of the future be like, and what will they be used for? In endeavoring to answer this question certain background facts are very pertinent. First, world timber consumption will increase, possibly by as much as eighty percent by the end of the twentieth century. Second, the tropical forests have to date contributed very little to global timber supplies, perhaps only about ten percent, but this situation is likely to change. It has been estimated that by the year 2000 demand for tropical hardwoods and timber will reach more than 40,000 million board feet annually.

It seems clear that silviculture will have to be much more widely and intensively practiced than is the case at present, but this can take place only within the constraints imposed by ecology, economics and politics. The Food and Agriculture Organization of the United Nations classes some 10,000 million acres of the world's land area as a forest, of which around sixty percent is productive in the commercial sense, and the total area increases each year. Harvesting of the tropical forests will depend on the desired objectives. These are likely to be increasing the quantity and quality of resources demanded by human populations and trade and industry, and they may be achieved by modification or even by complete transformations of these ecosystems, as has already taken place in various parts of the world.

Forest management of the future will have to accord increasing consideration to aspects other than exploitation for pulpwood or timber alone. The role of the forest for wildlife management is one aspect that comes to mind. Then there is the question of the contribution that the forests could make to the energy situation, for they have considerable potential for producing energy. The real future of the forests is in the hands of the human species. We are the rise or downfall of one of our earth's most precious resources.



The graph above shows the gradual decline of the rain forests in selected countries where the forests are most valuable to those areas survival as well as world conservation.

The decline of these rain forests are based on existing scientific data applied in a consistent context with recent deforestation programmes. This chart stands on the assumption that the rate of deforestation remains a constant. The margin of error for increase or decrease is plus or minus 15%.

Everyday several thousands of pounds of wood and timber are cut from the rainforests. The amount of average timber that is removed from each percussive forest daily is enough to construct a neighborhood of approximately 100 two-story houses.

Digital–Analog Design Punch Cards 20

Tape Recorder and Magnetic tape

A tape recorder is an analog device that uses magnetic tape to record audio for playback and data for storage. The tape itself is a thin plastic strip coated by a layer of ferric oxide powder. Ferric oxide is a natural element existing in hematite ore and rust, it's often use for metal polishing as well as on magnetic tapes.

Originally, recording was done by using steel wire, invented by Valdemar Poulsen in 1900. It wasn't until 1928 that magnetic tape was first invented for recording sound by Fritz Pfleumer. Early tape recordings were done by using reel-to-reel recorders, reel-to-reel tape was common until the invention of the compact cassette tape in 1964.

Analog to Digital

From audio to data, information storage and recording has progressed from analog to digital. Here's a look at some past and current storage devices: (A) reel-to-reel tape, (B) compact cassette, (C) Sony's first Walkman, (D) compact disk and (E) mp3 player; the ipod.

A reel-to-reel tape recorder.

The Magnetic Recording System

There are two parts to any magnetic recording system: the recorder itself and the tape it uses as the storage medium. Reel-to-reel recording refers to the form of magnetic tape audio recording in which the recording medium is held on a reel, rather than being securely contained within a cassette.

The reel-to-reel format was used in the very earliest tape recorders, including the pioneering German Magnetophons of the 1930s.

In 1964, the compact cassette was introduced and quickly it went into mass production. Compact cassette achieved a period of popularity in the1990s until CDs and mp3 players took over.

analog digital

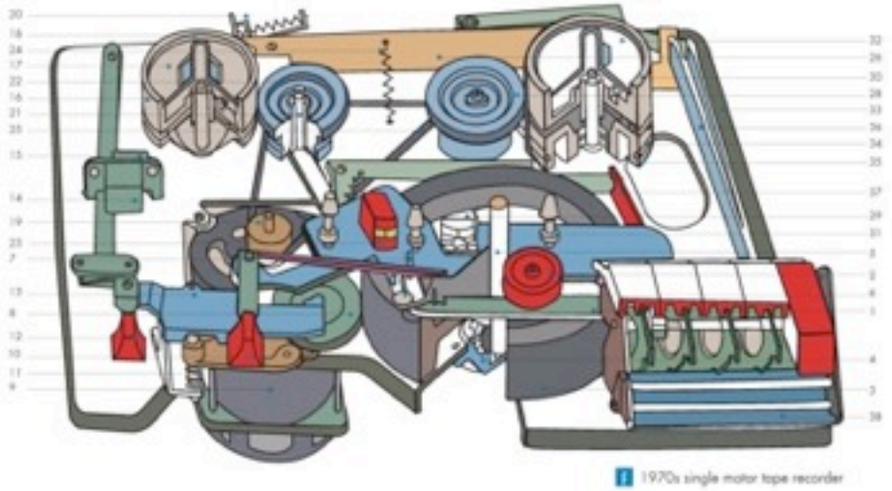
B compact cassette tape.

C Sony's first Walkman

D compact disc (CD)

E mp3 player: the iPod

Description of Operation: Tape Recorder



F 1970s single motor tape recorder

Electrical

Current flowing in the coils of the electromagnet causes the magnetic material on the tape to align in a manner proportional to the original signal. The signal can be reproduced by running the tape back across the tape head, where the reverse process occurs; the magnetic imprint on the tape induces a small current in the read head which approximates the original signal. This is then amplified for playback.

Mechanical

Professional recorders usually use a simple three-motor scheme. One motor with a constant rotation speed provides traction for the leading wheel. The leading wheel is usually combined with a flywheel to ensure that the tape speed does not fluctuate. The other two motors apply constant torque to maintain the tape's tension or wind the tape quickly.

1	-	lever, moving the pressing wheel
2	-	rubber covered wheel, to press the tape to the
3	-	flywheel (stabilizes the tape traction speed)
4	-	lever axis holder
5	-	leading wheel (determines the tape traction speed)
6	-	spring
7	-	detail, pressing the tape to the magnetic heads
8	-	intermediate wheel
9	-	electric motor
10	-	rewind activation control
11 - 15	-	tape traction speed selector
16, 34	-	cloth-covered surface to create the friction force
17, 30	-	bottom of tape holder, rotates with constant speed
18, 32	-	top side of the tape holder
19 - 22, 25, 28, 35	-	belt gear to rotate tape holders at reduced speed
23	-	erasing magnetic head
24	-	spring
26	-	brake
21, 27, 31	-	tape directors
29	-	universal magnetic head, for playing & recording
33	-	pusher to apply the brakes
36, 37	-	additional levers
38	-	operating controls.

Sources
en.wikipedia.org/wiki/Tape_recorder
electronics.howstuffworks.com/cassette.htm

Digital-Analog Design Punch Cards is a set of research cards designed and produced by the students of DSGD 186, Digital Applications Methodology, a third-year graphic design course at San Jose State University, Fall 2006. The set, composed of 1+26 cards, is by no means complete. Each topic was chosen and researched by the students, based on a theme presented by the instructor Pino Trogu, with help from Mauro Panzeri. This is card number 20 and it was designed by **Nha Tran**.

DSGD 186
Digital Applications
Methodology
School of Art and Design
San Jose State University
California - USA October 2006
Digital-Analog Card No. 20
Printed by psPrint.com

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Digital-Analog
reference cards.
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Digital–Analog Design Punch Cards **14**

typewriter

mechanical to electronic

A typewriter is a mechanical, electromechanical, or electronic device that prints letters on paper. Typewriters have changed significantly in the modern era. The most remarkable development was the transition from mechanical to electronic typewriters.

history

The first typewriter that enabled operators to write significantly faster than a person could write by hand was invented by Christopher L. Sholes and Carlos Glidden. Then E. Remington & Sons purchased the rights and manufacture began in 1874. To avoid jamming typebars with adjacent and commonly used pairs of letters, Sholes and Glidden intentionally arranged the keyboard layout in a way that made typists slow down. The name of the system "QWERTY" comes from the first six letters in the top alphabet row. "QWERTY" system is still the standard for many keyboards. George Blickensderfer produced the first electric typewriter in 1902, but practical electric typewriters were used extensively after 1925. Compared to non-electric typewriters, electric ones respond to the light touch, and apply identical pressure leading to even depth and uniform color. The first electronic typewriter was invented by Olivetti in 1978 and came with a small memory chip that displayed what was being typed before it was actually transferred to paper, allowing the operator to go back and correct mistakes before they ruined the whole page.

1904 The woman typing the typewriter

1878 Typewriter Patent Drawing, featuring the QWERTY Keyboard

analog

1874
The first practical typewriter
Produced by Christopher L. Sholes and Carlos Glidden
Introduced by E. Remington & Sons

1902
The first electric typewriter
Produced and introduced by George Blickensderfer

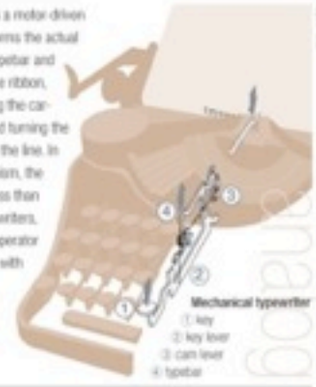
1961
The revolutionary typewriter
SELECTRIC TYPEWRITER
Produced and introduced by IBM
Characterized by **spherical type ball** for eliminating of jams and allowing multiple fonts

1978
The first electronic typewriter
ET 101
Produced and introduced by Olivetti

digital

mechanical tech

A manual typewriter is a mechanical device that contains a system of levers. It converts the small movement of a fingertip on a key into a long movement — in this case the movement of the raised type on the end of the typebar. As the typewriter is always played strongly, a simple system of levers suffices to mechanically connect the key to the type. Most manual typewriters use at least five levers between key and typebar. Pressing a key causes mechanical force that transmits to each lever. By this mechanics, the typebar is lifted and strikes on the ink ribbon. For moving the paper between letters and between lines, most typewriters use a cylindrical platen, against which the paper is held firmly. Each typebar bears both upper-and lower-case letters. Pressing the shift key lowers the typebar so that the upper-case letter strikes the ribbon. The platen moves horizontally to produce the spacing between lines. An electric typewriter is an electromechanical device that contains a motor-driven mechanism. It performs the actual work of lifting the typebar and striking it against the ribbon, and also of returning the carriage to the right and turning the platen at the end of the line. In the electric mechanism, the pressure is much less than on mechanical typewriters, and as a result an operator can type faster and with less fatigue.



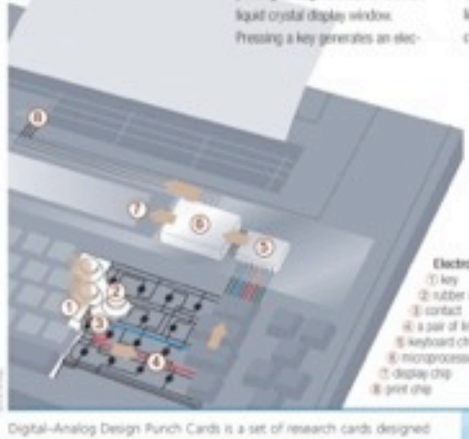
Mechanical typewriter
① key
② key lever
③ cam lever
④ typebar

analog

electronic tech

A hybrid between electric typewriters and computers, electronic typewriters—which contain a microprocessor and microchips, can automatically center headings, align decimal points in numerical tables, and flag words that are not found in its spell-check memory. Most electronic typewriters also permit rudimentary editing of text before printing through the use of a small liquid crystal display window. Pressing a key generates an electric signal forming a code number that identifies the key. The code number is in the form of bits made up of on-off electric pulses. This digital signal of the code number goes through the pair of lines, the keyboard chip, the microprocessor, and the display chip or the print chip. For example, a metal contact in a rubber dome under key B touches two contacts at the end of a pair of lines. As the contact meet, a scanning signal goes along the lines to the keyboard chip. The chip converts the signal into the code number 00110000 (base ten 48), and sends it out to the microprocessor. The code number is converted again to 01100010 (98) in the microprocessor, and travels to the display chip or the print chip that display the code number as the character.

digital



Electronic typewriter
① key
② rubber dome
③ contact
④ a pair of lines
⑤ keyboard chip
⑥ microprocessor
⑦ display chip
⑧ print chip

The laptop computer
MAC PRO
Produced by Apple

today

Typewriters are now very rare in the Western World because personal computers have become very popular. Today, computers replace typewriters almost completely. Unlike typewriters that manage only one simple task, General-purpose personal computers with word processing software largely deal with complicated multiple tasks.

The History Channel
www.history.com
How Products Are Made
www.madehow.com
The Nuts Way Things Work
by David Macaulay
Houghton Mifflin, Boston, 1988

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DSGD 186
Digital Applications Methodology
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San Jose State University
California, USA - October 2006
Digital–Analog Card No. 14
Printed by psPrint.com

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The evolution
of objects

and their transformation.

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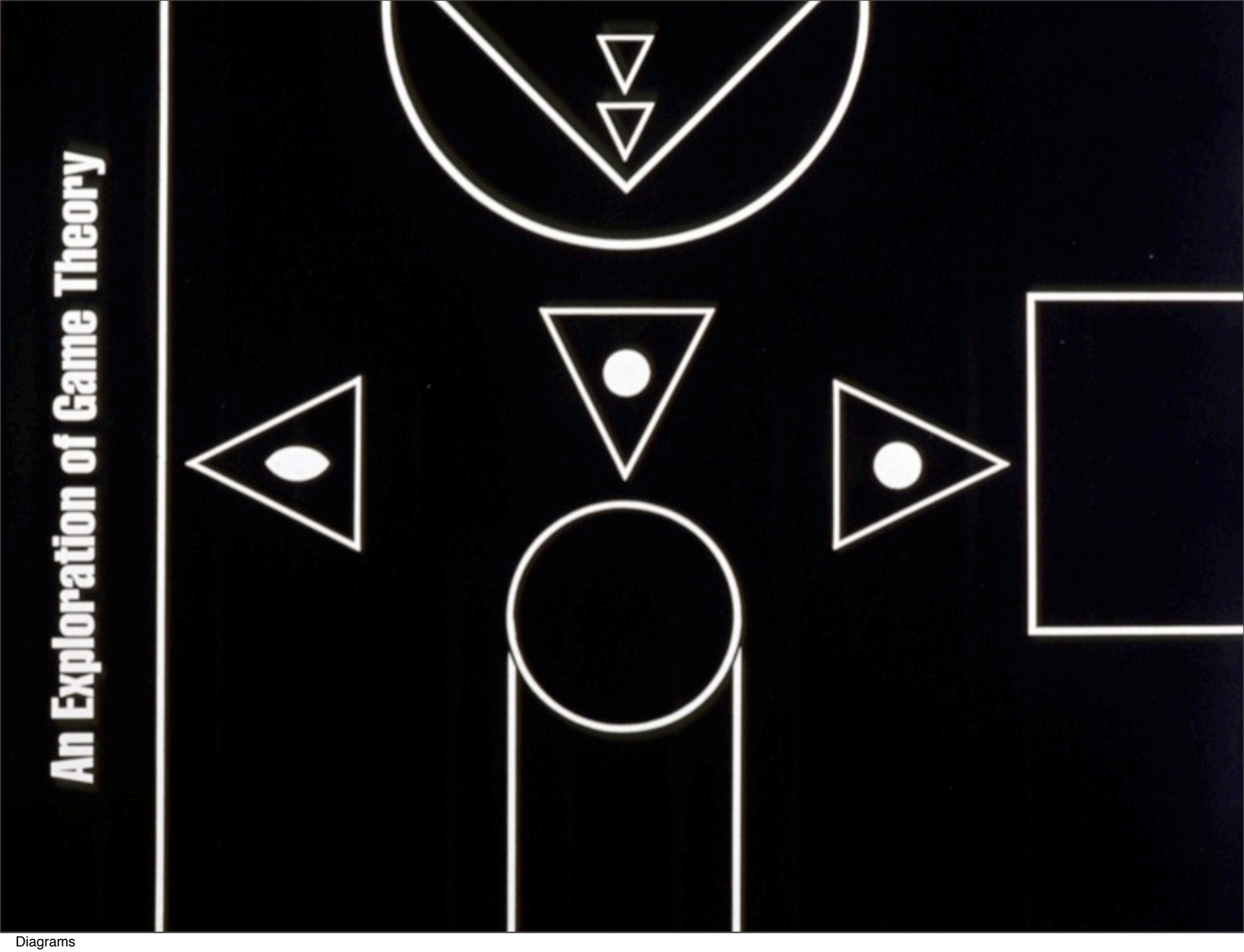

Diagrams

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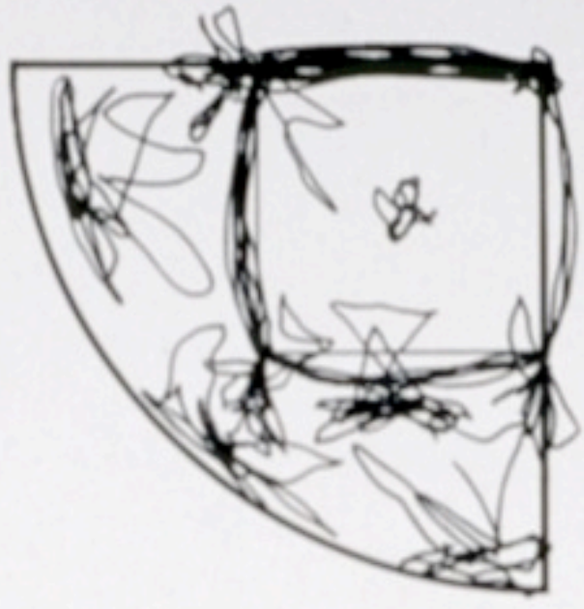
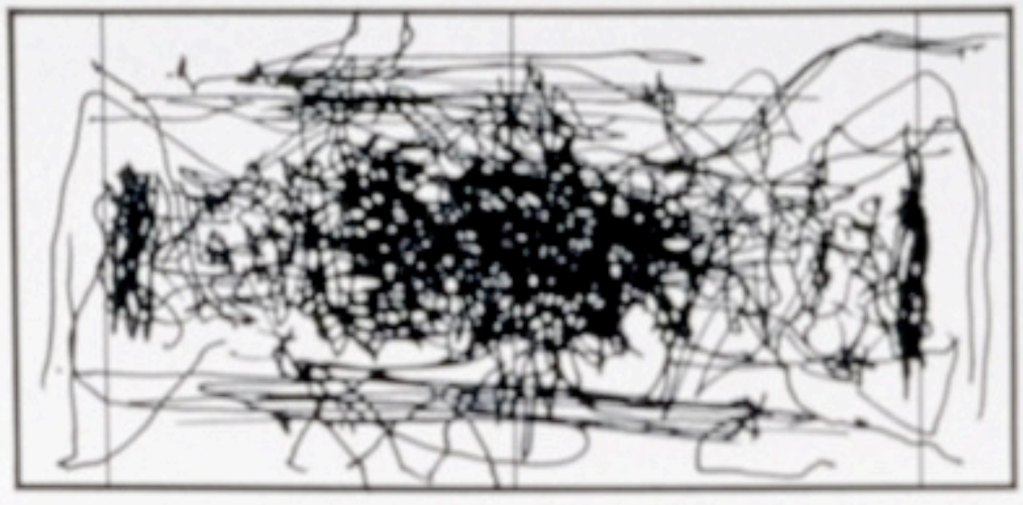
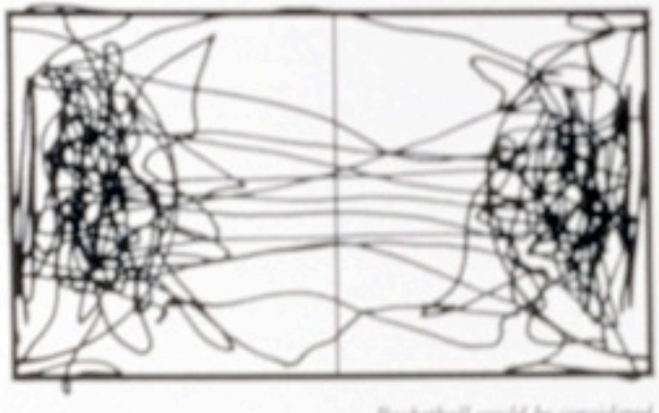
Cooperation and competition
in team sports.

Much of the activity in Baseball occurs in the strict baseline path that the runner must follow, or occasionally in each fielders zone of coverage.

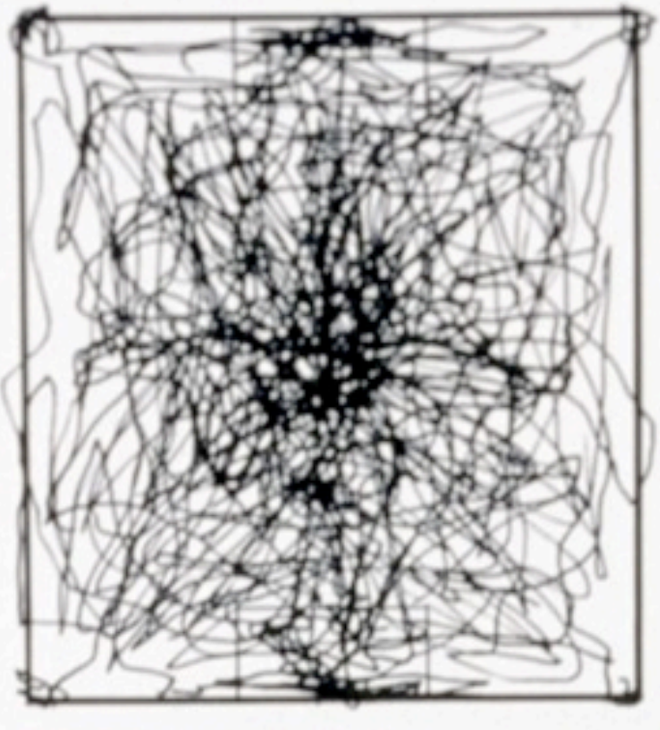


Teams in Football generally move as a unit, aside from a few peripheral players. The majority of the activity runs the field, but, is more concentrated in the center.





Basketball could be considered two connected, half-court games. Most activity is around the two goals, with the middle of the court simply used to quickly get from end to end.



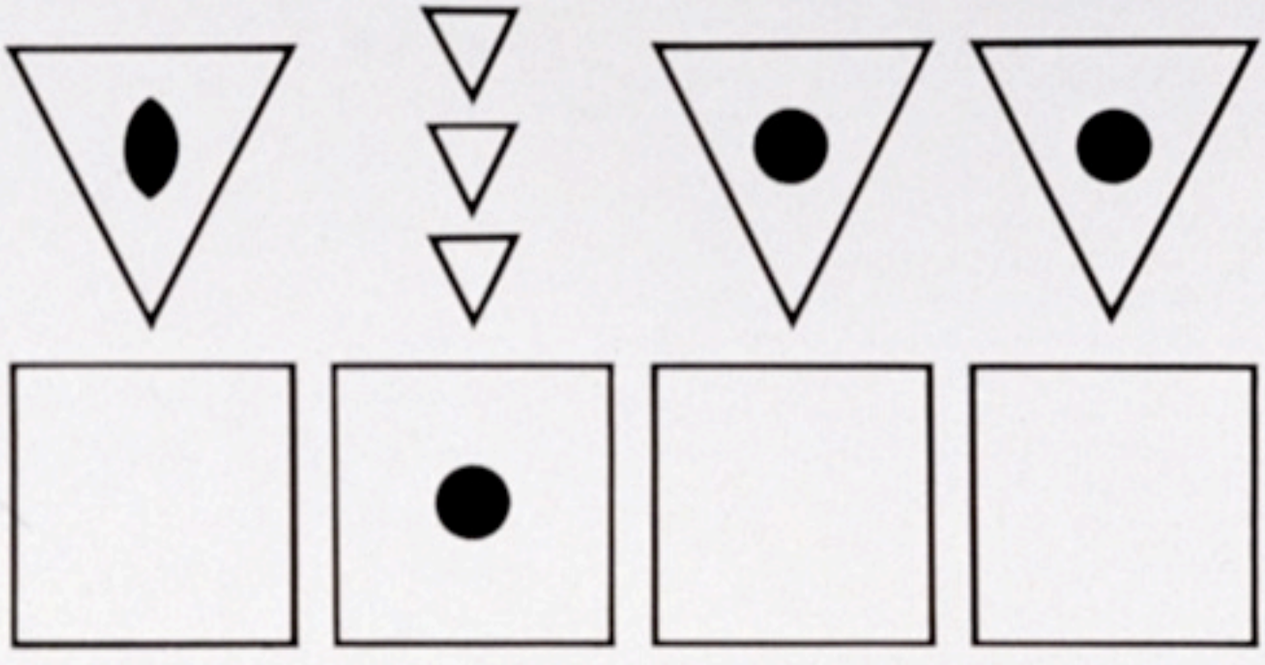
A Soccer players movement seems most random because the game is the most spread out, and wide open. Players play more individually, and may run the length of the field.

A look at changes
during a ball game.
.
.

The experiment

Football, baseball, basketball and soccer are the four most popular team sports in the world. Each enjoys immense popularity in various parts of the world. The common reasons for their popularity may be a sense of teamwork, team loyalty, spirit of competition or the exciting action of the game. Aside from these basic characteristics, however, the games are very different, with each game's fans and players claiming it superior or more exciting.

How exciting a game is, discounting loyalties, familiarities or other prejudices, may be based on the amount of change that occurs in the average contest as provided for by the rules. In other words, the most exciting game would be the one that is potentially least monotonous. With this premise in mind, this exploration will attempt to categorize and analyze the different opportunities for change in these four games and conclude which is empirically the most exciting.



Football

Football is played by two teams, each with 11 men. There are never any less or more than 22 men on the field and all players are engaged at all times. The offense controls the ball in order to score by relaying it to relaying it to avoid defenders and reach a team goal.

Baseball

Baseball consists of a 9 man defensive team that faces an offensive team that plays one by one in succession. The defense relays the ball in order to catch the offensive man before he scores. The offense only contacts the ball initially to stifle the defense's control.

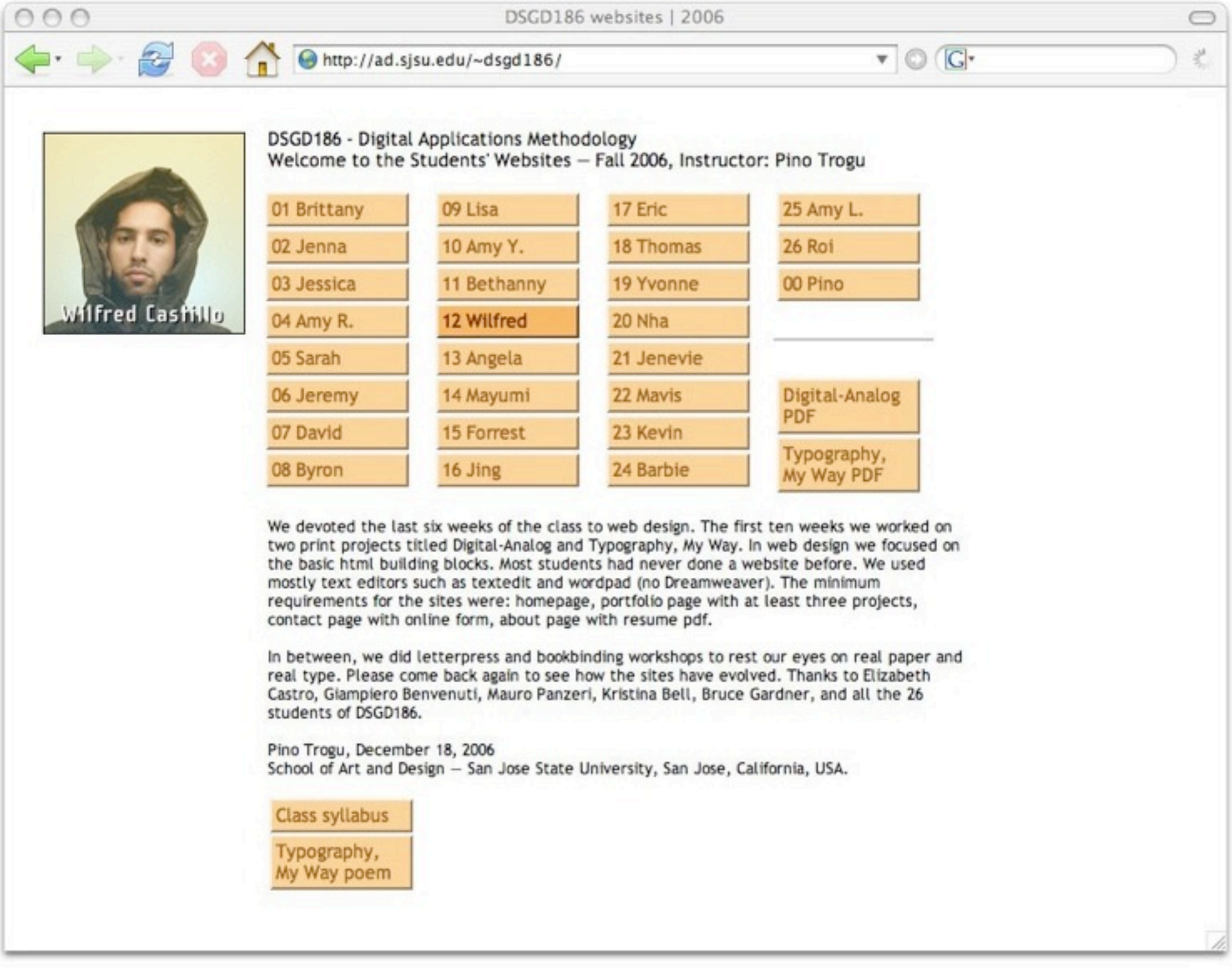
Basketball

Basketball is played by two teams, each with 5 players. The players are always on the field. In penalty circumtances, a player may play virtually unmolested. The ball is relayed by the offense for the purpose of isolating the ball carrier long enough for him to shoot the ball through a goal.

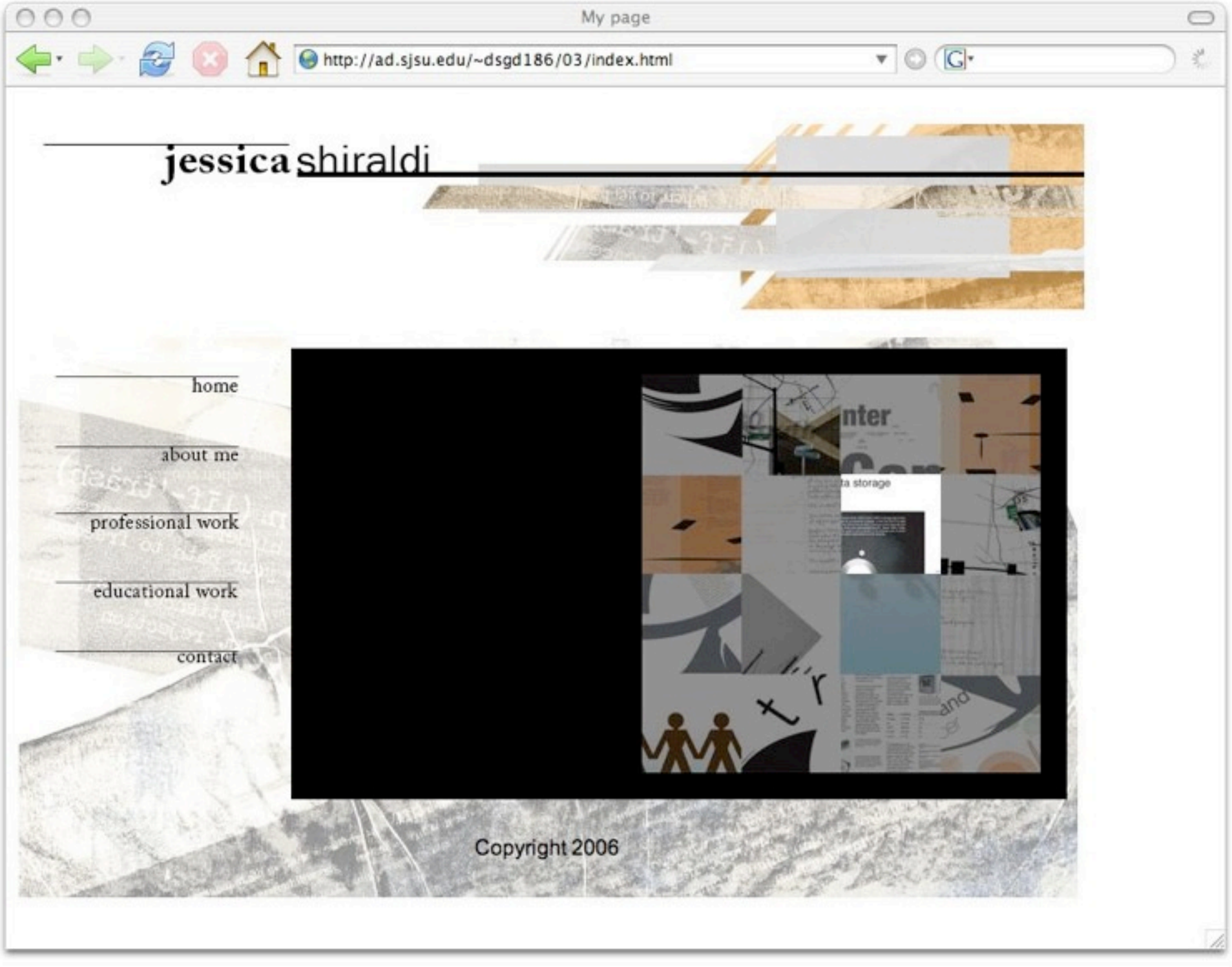
Soccer

Soccer is played by two teams with 11 players each. All 22 are players on the field and engaged at all times. One player on each team may guard the goal. The relay of the ball is handled by the offense for the purpose of isolating the ball handler or opening a shot on the opposing team's goal.

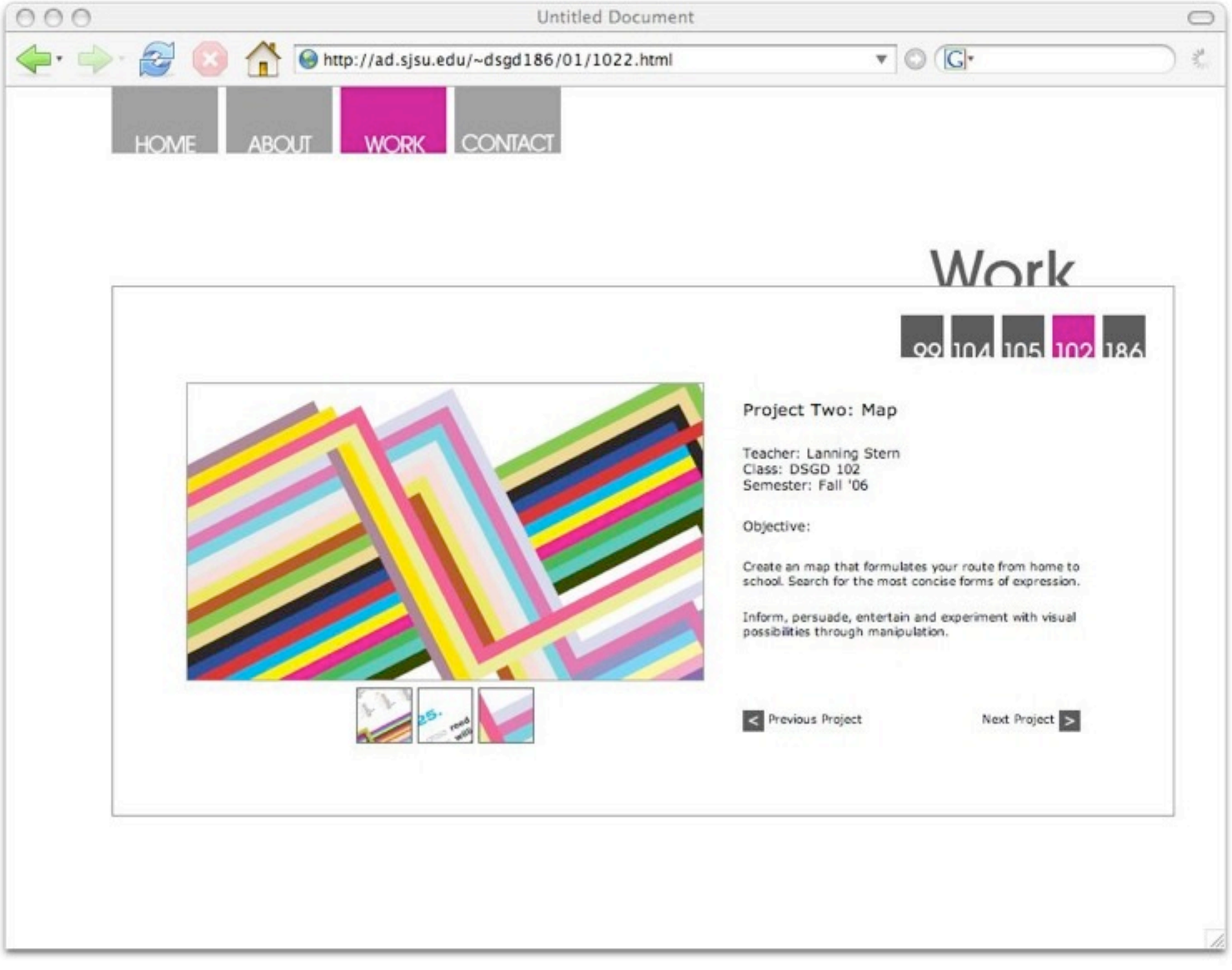
Football
baseball
basketball
and soccer.



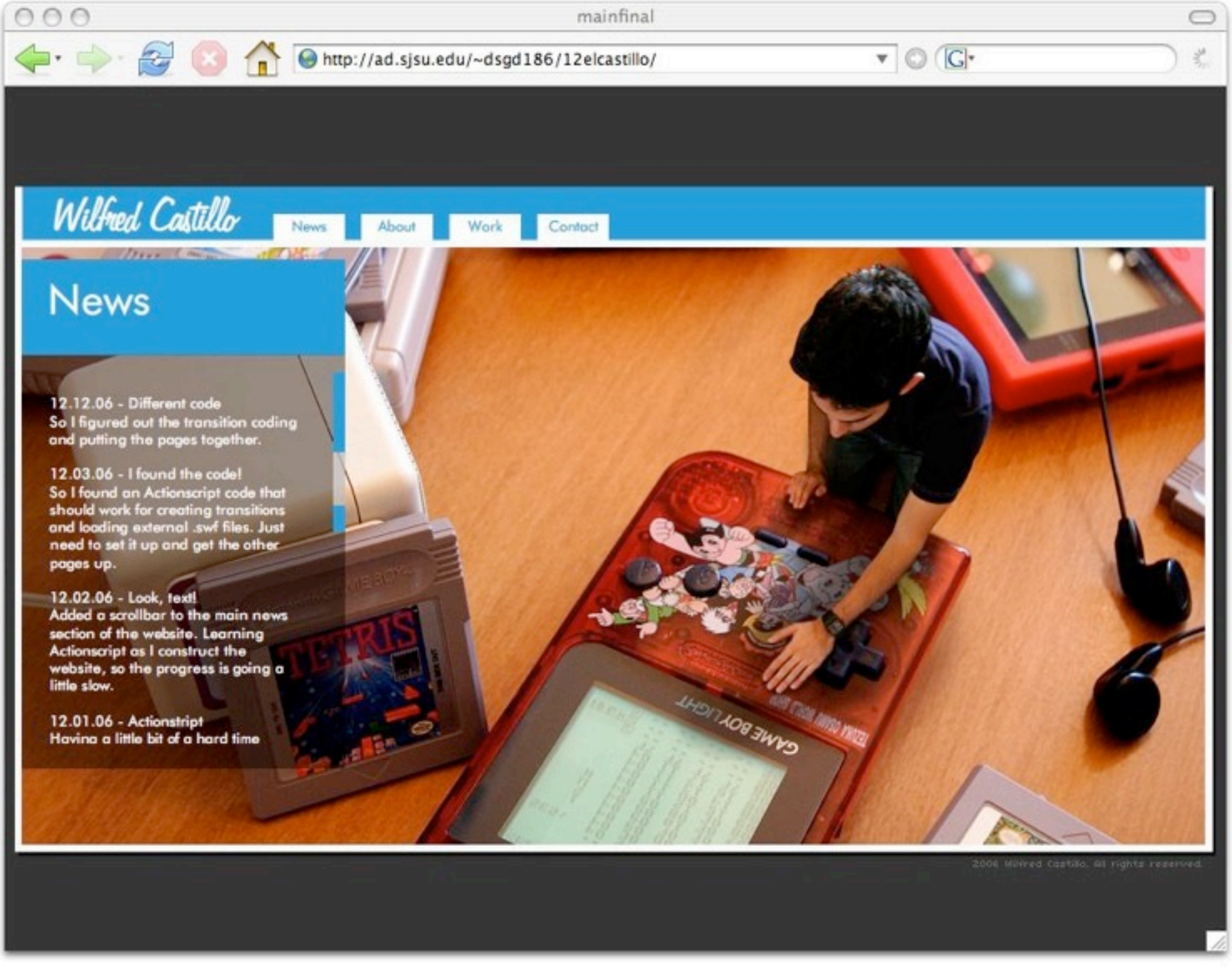
Web Design
HTML and style sheets.
26 students
26 websites



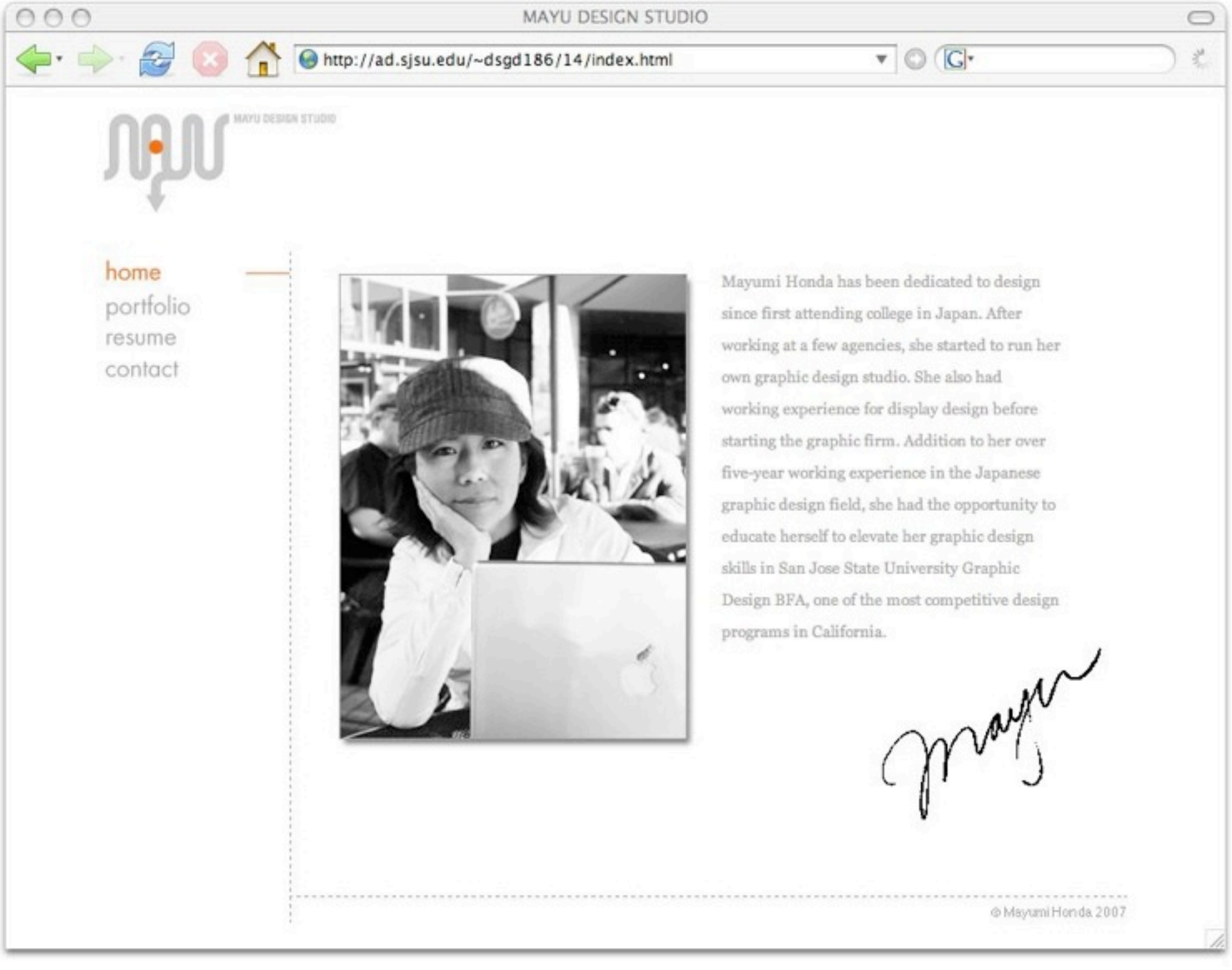
First time for many.
The focus is on learning.
We use wordpad
and textedit.



We type the code
by hand.
Slowly at first.
.



Every student knows
where the parts are
and can fix them
if needed.



Simply a bio,
a portfolio,
a contact page.

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One last book.
Music and the Golden Section
.
A musical score

by Bela Bartok

.

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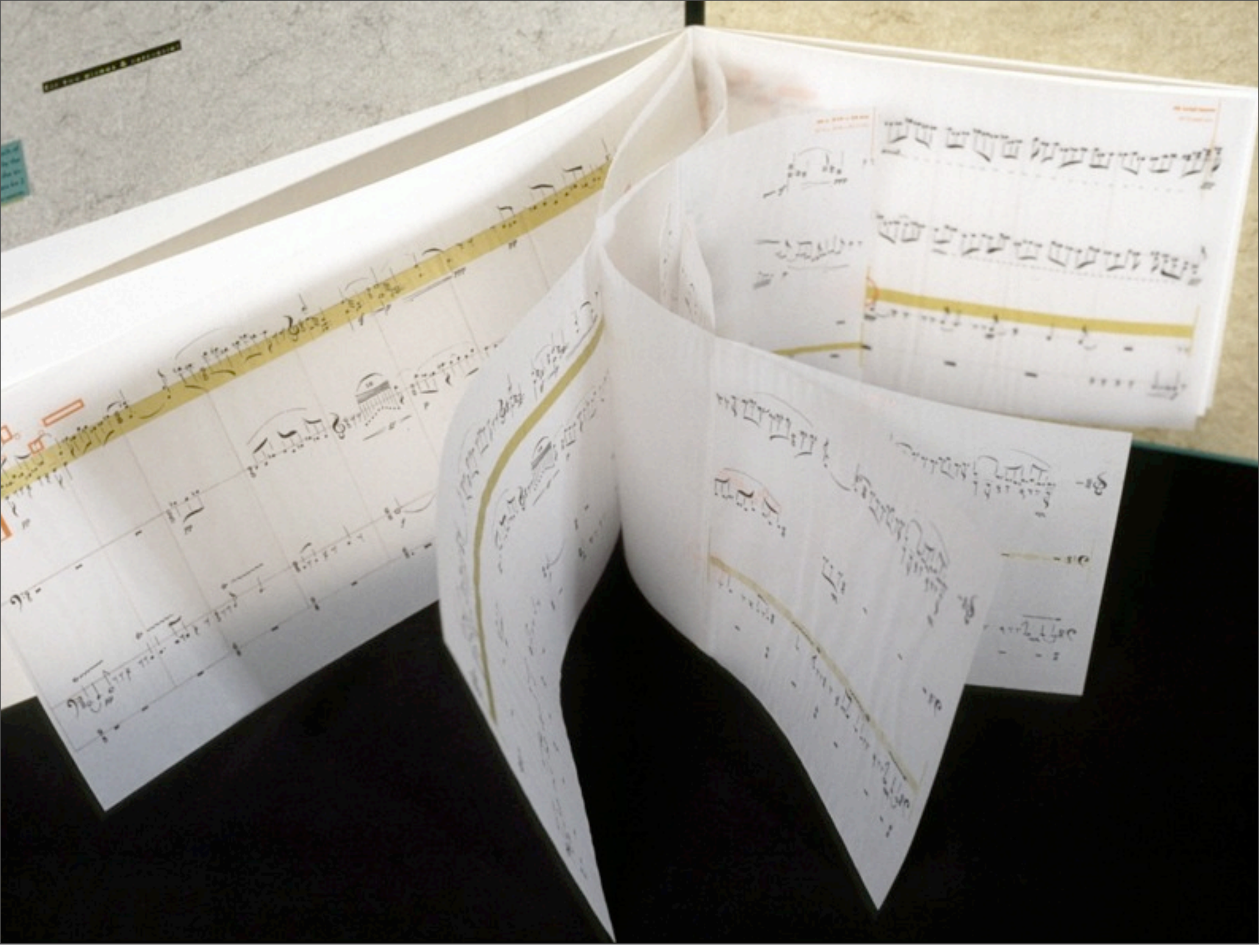

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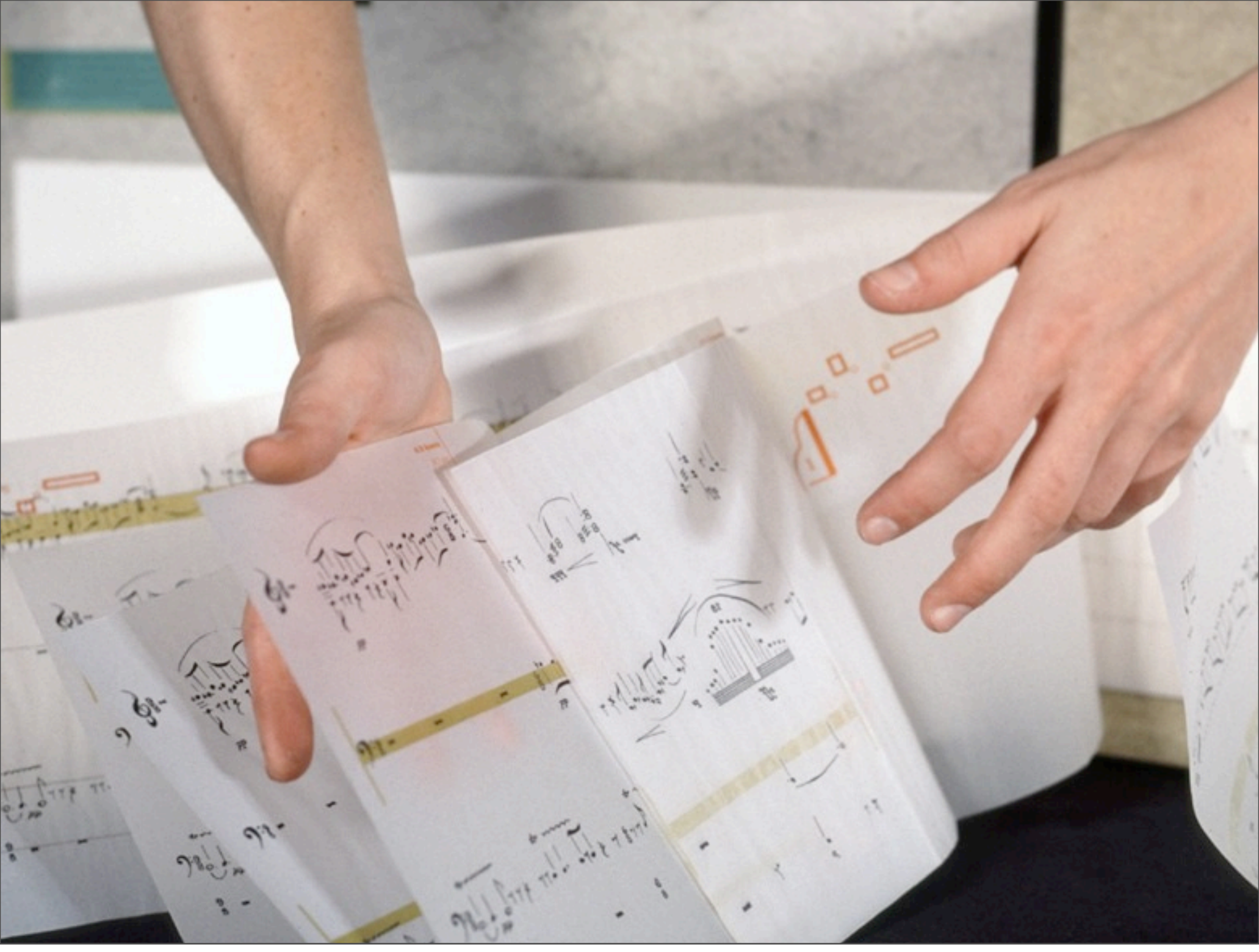
The vellum pages
are hinged together
at different points.



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The student
and the composer.
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