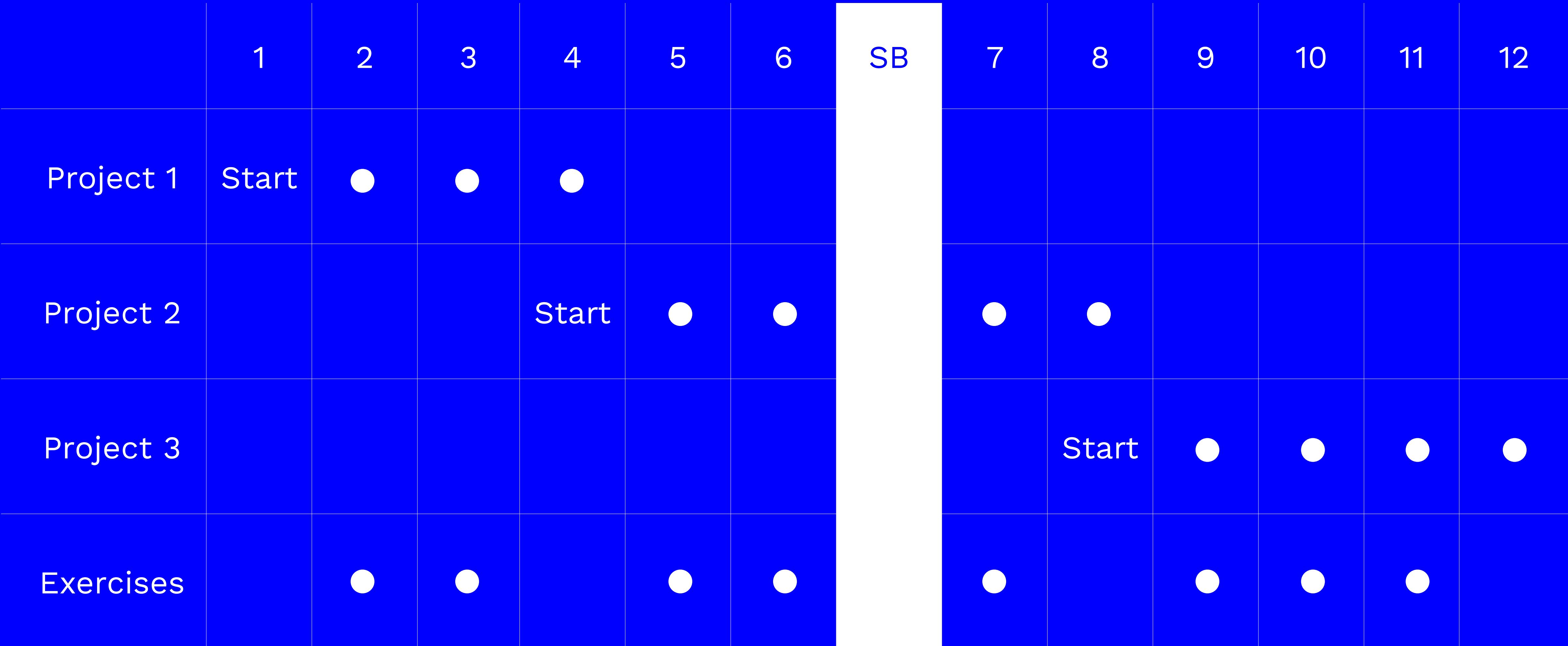


Project 2

Semester Timeline

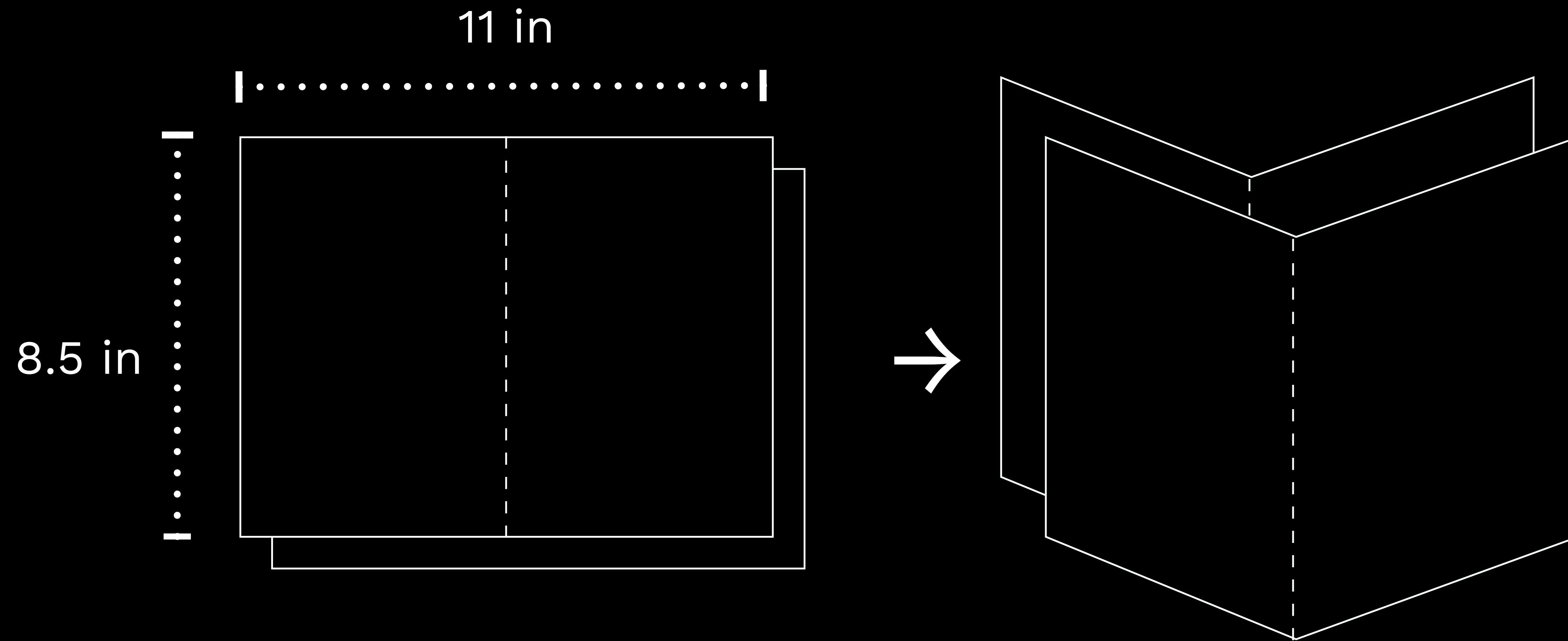


Expressive Type

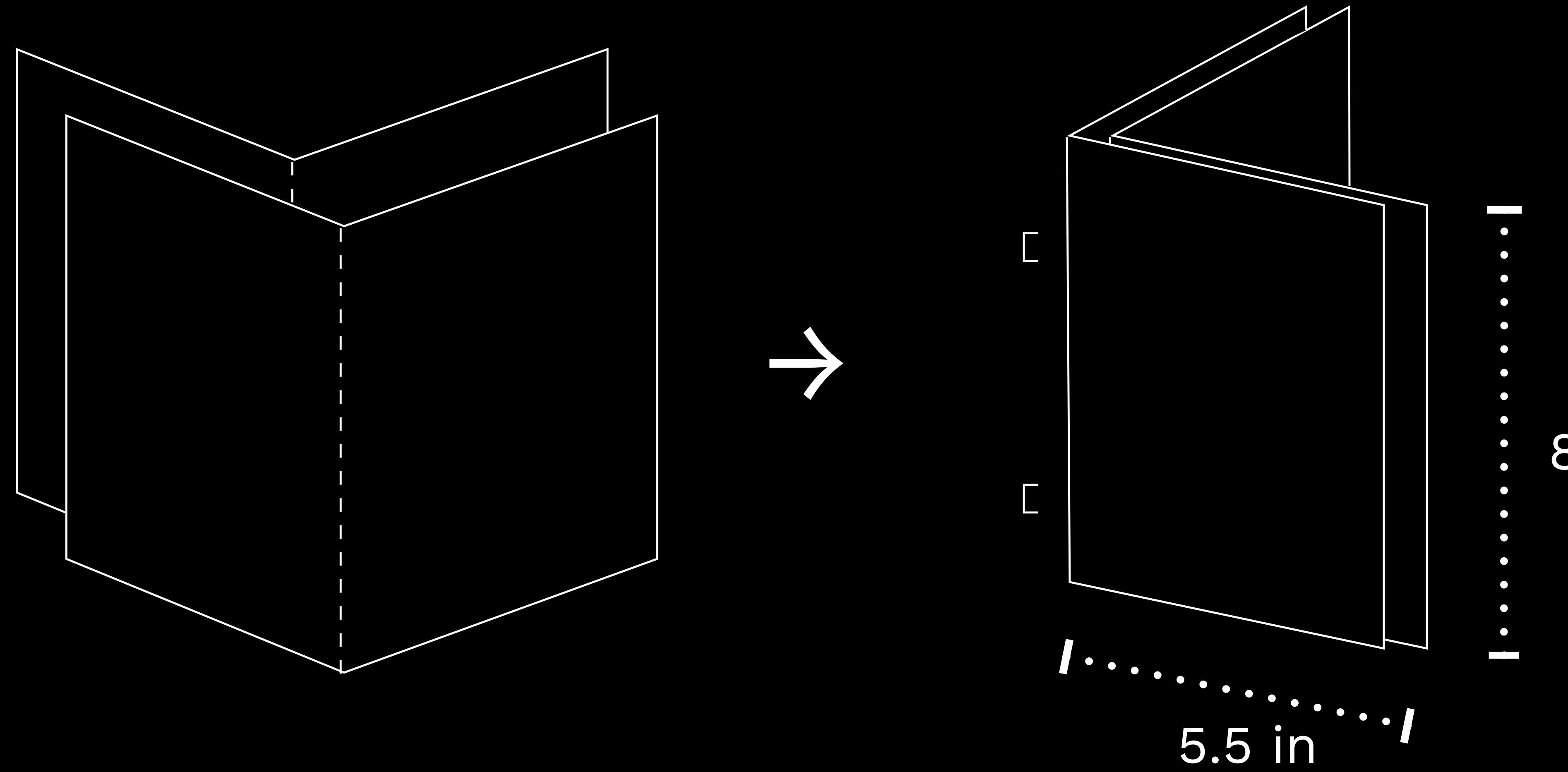
Instrumental Type

Digital Type

Zine



Zine



PERIODIC TABLE OF THE ELEMENTS

Lanthanide Series

57 La 138.90547 Lanthanum	58 Ce 140.116 Cerium	59 Pr 140.90766 Praseodymium	60 Nd 144.242 Neodymium	61 Pm 145 Promethium	62 Sm 150.36 Samarium	63 Eu 151.964 Europium	64 Gd 157.25 Gadolinium	65 Tb 158.92535 Terbium	66 Dy 162.500 Dysprosium	67 Ho 164.93033 Holmium	68 Er 167.259 Erbium	69 Tm 168.93422 Thulium	70 Yb 173.054 Ytterbium	71 Lu 174.9668 Lutetium
89 Ac 227 Actinium	90 Th 232.0377 Thorium	91 Pa 231.03588 Protactinium	92 U 238.02891 Uranium	93 Np 237 Neptunium	94 Pu 244 Plutonium	95 Am 243 Americium	96 Cm 247 Curium	97 Bk 247 Berkelium	98 Cf 251 Californium	99 Es 252 Einsteinium	100 Fm 257 Fermium	101 Md 258 Mendelevium	102 No 259 Nobelium	103 Lr 266 Lawrencium

Actinide Series



What.

What is the project about?

The OpenStructures project explores the possibility of a modular construction model where everyone designs for everyone on the basis of one shared geometrical grid or a so-called MECGANDP® to which everybody can contribute parts, components and structures. It thereby enables a new standard for sustainable design that increases the reuse of parts and components and allows users to build together.

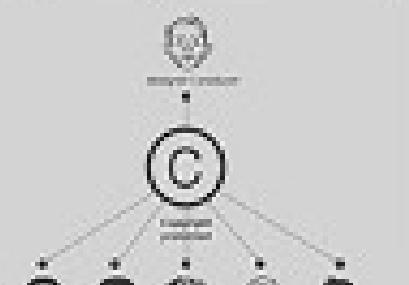
The OS (OpenStructures) project is built up according the strategy model, where different people have different focus areas. Rather than just building their own thing with the intention that in the long term people start contributing parts, but modular parts.

The basic concept

The OS (OpenStructures) project explores the possibility of a modular construction model where everyone designs for everyone on the basis of one shared geometrical grid. It initiates a kind of collaborative MECGANDP® to which everybody can contribute parts and objects.

The classical design model

Hierarchical / vertical / centralized / top down / copyrigtated.



- One entity designs a complete system for all
- The end-user is passive
- He / she mainly consumes
- The product is static
- The end-user can't really change or improve the design of system because the copyright protects it

The OpenStructures design model

Network based / horizontal / decentralized / bottom up / partly copyrighted.



- All design is a small part of a common system
- The end-user is active
- He can participate in the design and production process by adding or removing parts and structures
- The product is dynamic
- The end-user can adapt or improve parts or structures

Why.

What is its purpose and goal?

What is the purpose of this project?
The purpose of this experiment is to investigate what the opportunities and limitations of an open modular system are and under which conditions it will be able to benefit others and facilitate.

What is the goal of this project?
The ultimate goal is to initiate a universal, collaborative model that allows the broadest range of people from customers to end-users to co-design, build and exchange the broadest range of modular structures resulting in a more flexible and sustainable environment for all consumers.

What is the potential of this project?
The potential of this project is to initiate a new way of producing, trading and consuming objects that has no scope for a sustainable design. It's time, money, resources, energy, materials and therefore environmental costs that allow for a more sustainable design that is based on reusing, recycling and thus requires innovation within hardware construction.

Why would I want to participate?
Everyone can contribute to the OS project, writing their own modular parts or structures in the OS parts database.

1. Design and produce parts for the OS grid.

Design your own parts for the OS grid.

How to apply the OS grid?

How to

GET TO KNOW YOUR STREET VENDORS

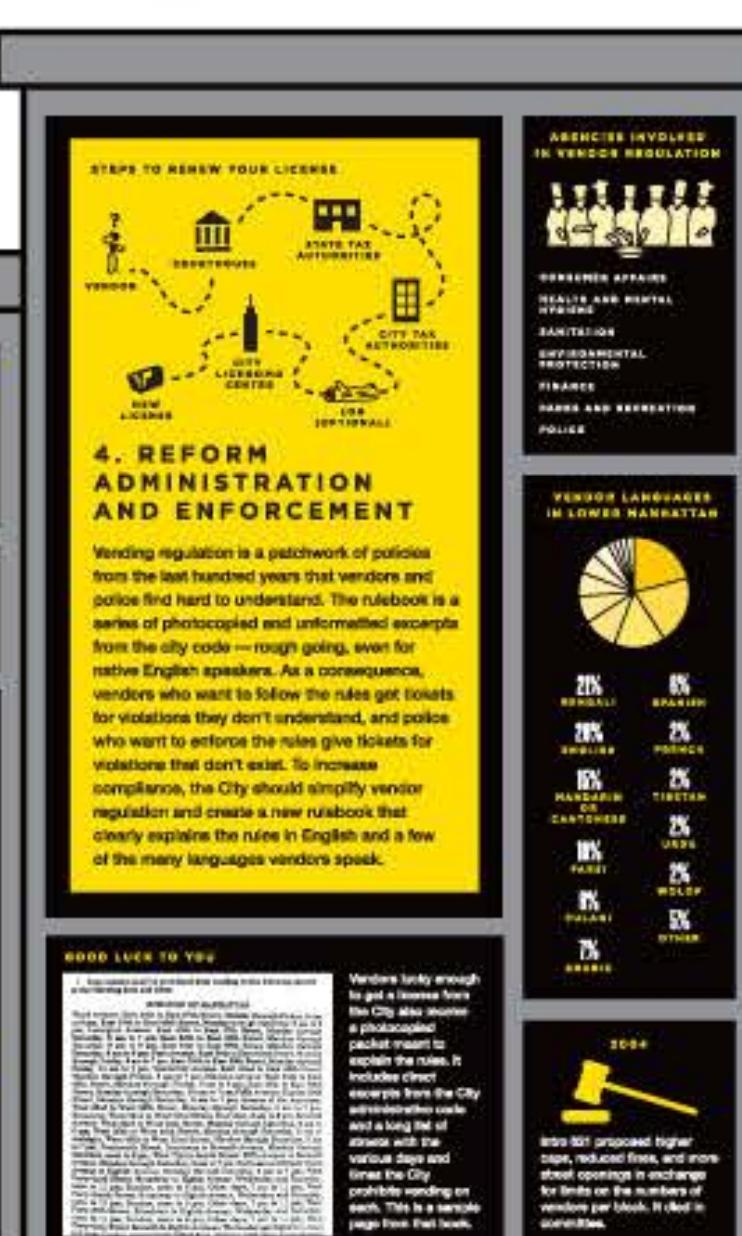
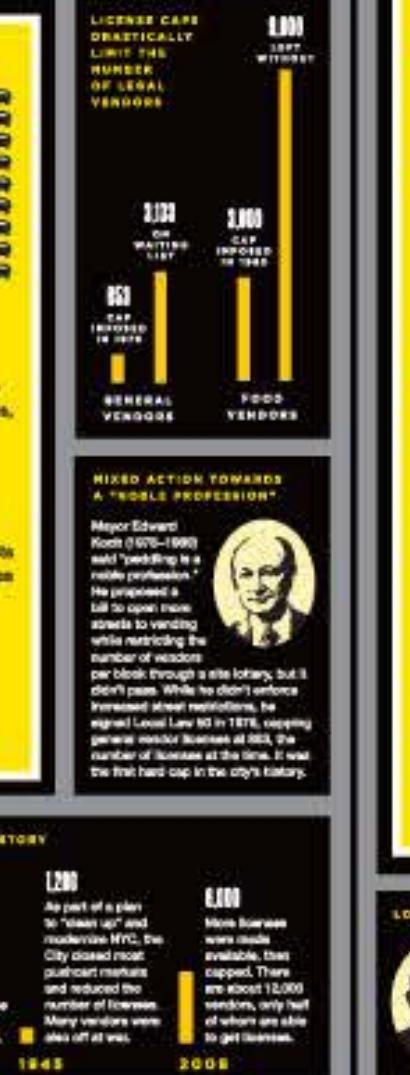


WAYS TO A BETTER VENDOR WORLD

In New York, street vending has always attracted ambitious, hard-working men and women with limited economic options. Successive waves of immigrants — Jewish and Italian in a previous era, now Chinese, Bangladeshi, Afghan, and Senegalese — have used vending to gain a foothold in their new country. Its low start-up costs, independence, and flexibility make vending a traditional first step for small business entrepreneurs.

But vending isn't an easy way to get ahead. Throughout New York City's history, merchants resentful of "unfair" competition have joined forces with city officials concerned with congestion, modernization, and "quality of life" to bar vendors from streets and regulate them excessively. These complex and shifting laws force vendors back and forth across the border between the formal and informal economies, making it difficult for vendors to serve the public and make a decent and honest living.

Here are four basic ways the City can make vending laws work better for vendors, their customers, and everyone else:



THE CITY DEFINES FOUR TYPES OF VENDORS

FOOD VENDORS

COMMON ITEMS SOLD

Hot dogs, coffee, fruit, ice cream, donuts, bagels, burritos, falafel, halal, tomatoes, soups, dressings, roasted nuts, pretzels.

NUMBER OF VENDORS

Only 3,000 2-year food vending permits are available. The average wait time to receive one is 8-10 years.

GENERAL VENDORS

COMMON ITEMS SOLD

T-shirts, handbags, wallets, scarves, gloves, hats, needles, perfume, umbrella, cell phone accessories.

NUMBER OF VENDORS

New York City has capped the number of general vending licenses at 893 (excluding veteran vendors). The waiting list for licenses has been closed since 1992.

FIRST AMENDMENT VENDORS

COMMON ITEMS SOLD

Books, newspapers, CDs, DVDs, paintings, photographs, handmade crafts and jewelry, items with political message.

NUMBER OF VENDORS

Since 1982, vendors who sell expressive material have been protected by the First Amendment and do not need a license. There are around 1,000 First Amendment vendors.

VETERAN VENDORS

COMMON ITEMS SOLD

Anything from the General Vendor category: gloves, necklaces, cell phone accessories, scarves, t-shirts, handbags, watches, fans, perfume, umbrellas.

NUMBER OF VENDORS

Under New York state law, honorably discharged U.S. military veterans may receive a general vending license despite the 893-vendor cap. There were 1,011 veteran vendors on record in 2005.

UNLICENSED VENDORS

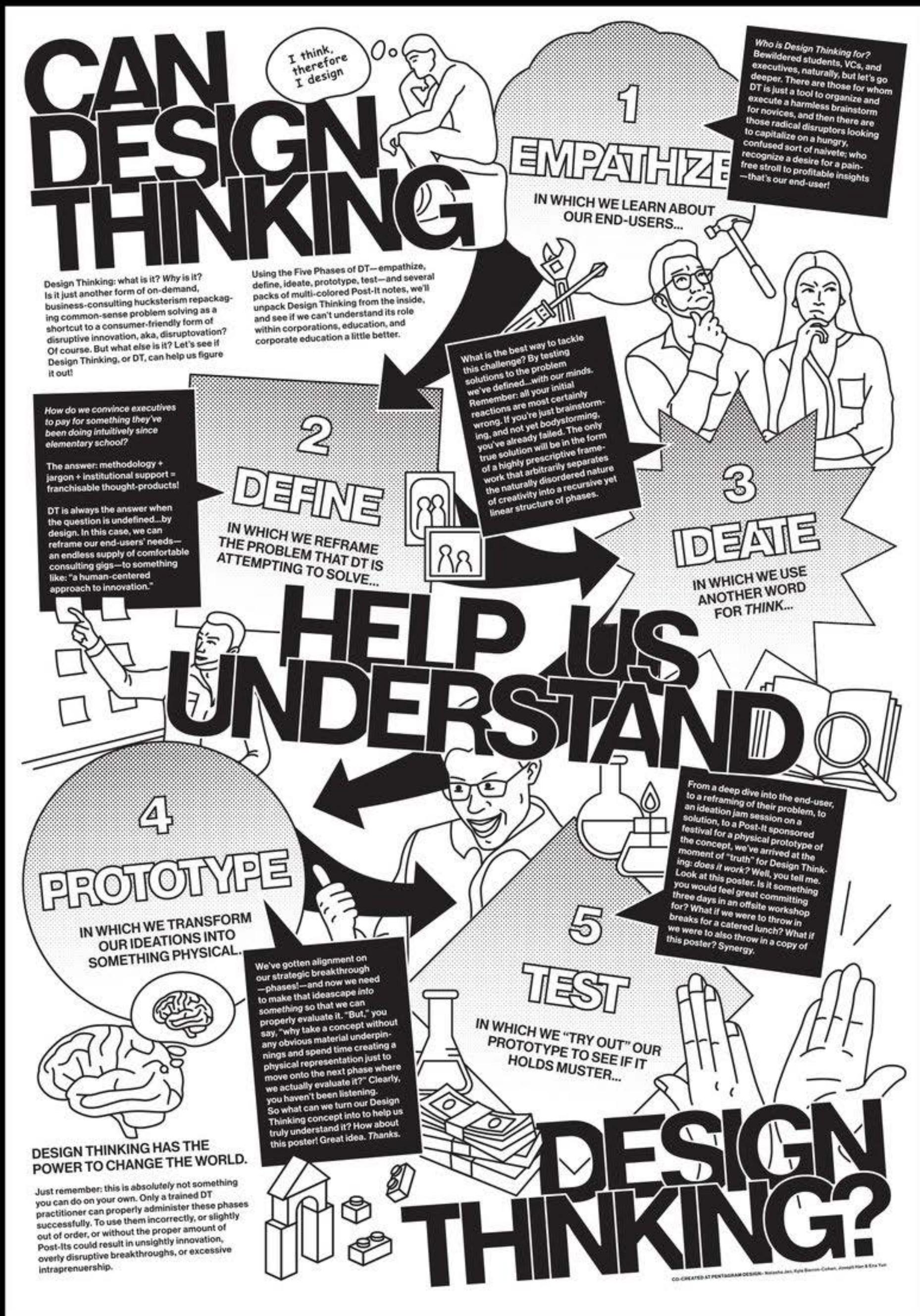
COMMON ITEMS SOLD

Anything from the previous categories: umbrellas, fans, ties, ice cream, handbags, scarves, wallets, perfume, CDs.

NUMBER OF VENDORS

There are perhaps 6,000 unlicensed vendors (nobody really knows). Only half of vendors are licensed due to license caps.

BUT WAIT! THERE'S ALSO...



Yale School of Architecture. Fall 2016.

Lectures—
Emery, Stanek,
Williams, Weisz,
Scarry, Rancière,
Easterling, Altman,
McKenna, Muñoz
Sarmiento.

Exhibition—
Oskar Hansen:
Open Form.

Symposia—
Transit Point:
Mitteleuropa;
Aesthetic
Activism.

Paul Rudolph Hall
108 York Street
New Haven, CT

Lectures
Lectures begin at 6:30pm
in Hastings Hall
(basement floor).
Doors open to the general
public at 6:15pm.

Thursday, September 1
Jean-Philippe Emery
Michael J. Fazio
Distinguished Visiting
Architecture Fellow
"Leading Urbanism: Place
and the Future of Cities"

Thursday, September 8
Oskar Hansen: Open Form
2nd Floor Architecture
Gallery
Aleksandra Kudlinska
Museum of Modern Art,
Warsaw

Thursday, September 8
Thomas H. Wark
Keynote Address
Brendan Gill Lecture

Thursday, September 8
"Implicit Social Action"
"Socialist Architecture
Goes Global"

Thursday, September 22
Claire Weisz
"Aesthetics Experiment-MET
Recent Work"

Thursday, October 13
Diane Sorey
"Building and Breath:
Beauty and the Fact
of Aliveness"
Keynote Address of the
symposium "Aesthetic
Activism"

Friday, October 14
Jacques Rancière
in conversation with
Mark Foster Gage
"The Aesthetic Today"
Evening Address of the
symposium "Aesthetic
Activism"

Thursday, November 3
Katerina Easterling
"Things That Don't Happen
and Shouldn't Always Work"

Thursday, November 10
Eero Saarinen Lecture
Andrew Ahonen
"The 2012 Olympic
Legacy: The Power
of Design to Shape a
City's Trajectory"

Thursday, November 17
Marionne McKenna
Norman K. Foster
Visiting Professor,
"Green Good"

Thursday, December 1
Myriam Bellalouz
"Myriam Bellalouz
Sergio Muñoz Sarmiento
Law Ends"

The School of Architecture Fall
lecture series is supported in
part by Eliel Jaffe + Jeffrey
Institute, the Ford Foundation,
Harriet Tubman Fund, the
International Building Research
Fund, the Paul Rudolph Endowment Fund,
Hastings Hall is equipped with
assisted hearing devices for
greatest hearing aids that
have a "T" coil.

Exhibition
Architecture Gallery
Second Floor
Monday through Friday:
9:00am-5:00pm
Saturday:
10:00am-5:00pm

Oskar Hansen: Open Form
September 1-December 17

This exhibition traces
the evolution of Polish
architect Oskar Hansen's
theory of Open Form from
its origin in his own
artistic practice to its
application in film, visual arts,
and other artistic practices.
In his Open Form theory,
Hansen has paired
ways with the model of
the all-knowing expert.
His theory is aimed
at the viewer, situation,
process, and change of
hierarchy between an
artist and viewer and
audience and process,
engaging the viewer,
recipient, and user.

The exhibition of the book is the
third edition of a short history
by Michael deloria, Alessandro
Ferrari, and Gianni Pirovano.
It is organized and produced by
the Yale School of Architecture
in collaboration with Cellino
Art, an arm of the Cellino
Foundation. The Yale School of
Architecture is grateful to
those who have supported
this exhibition in part by the John
Winter Green Fund, the Resnick
Fund, the David M. Schwarz
Family Fund, the Steinhardt
Family Fund, the David M. Schwarz
Capital Grant, the Resnick Fund, the
Paul Rudolph Endowment Fund,
the International Building Research
Fund, and the Rutherford Foundation
Publication Fund.

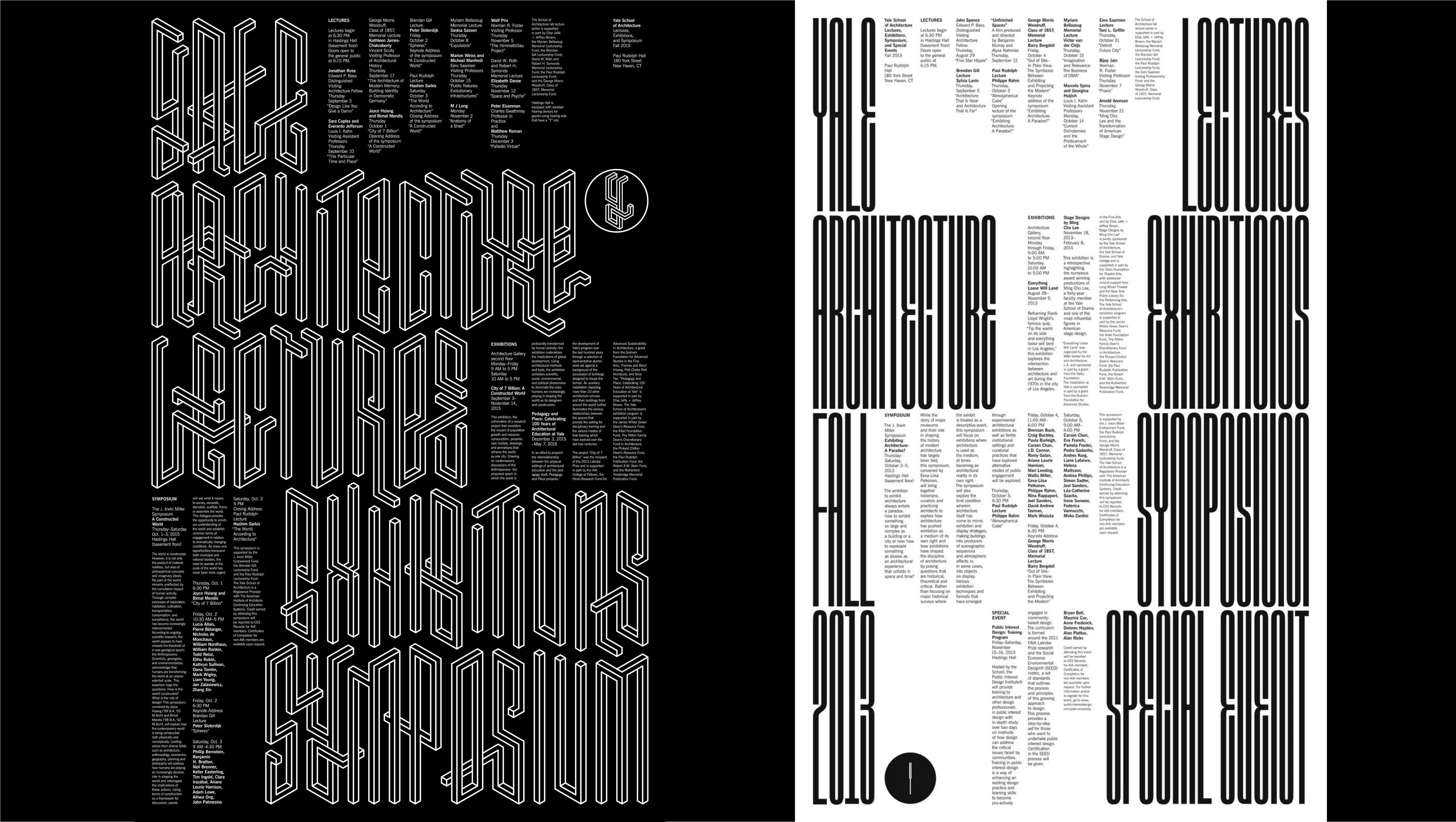
Transit Point: Mitteleuropa
October 15-17, 2016

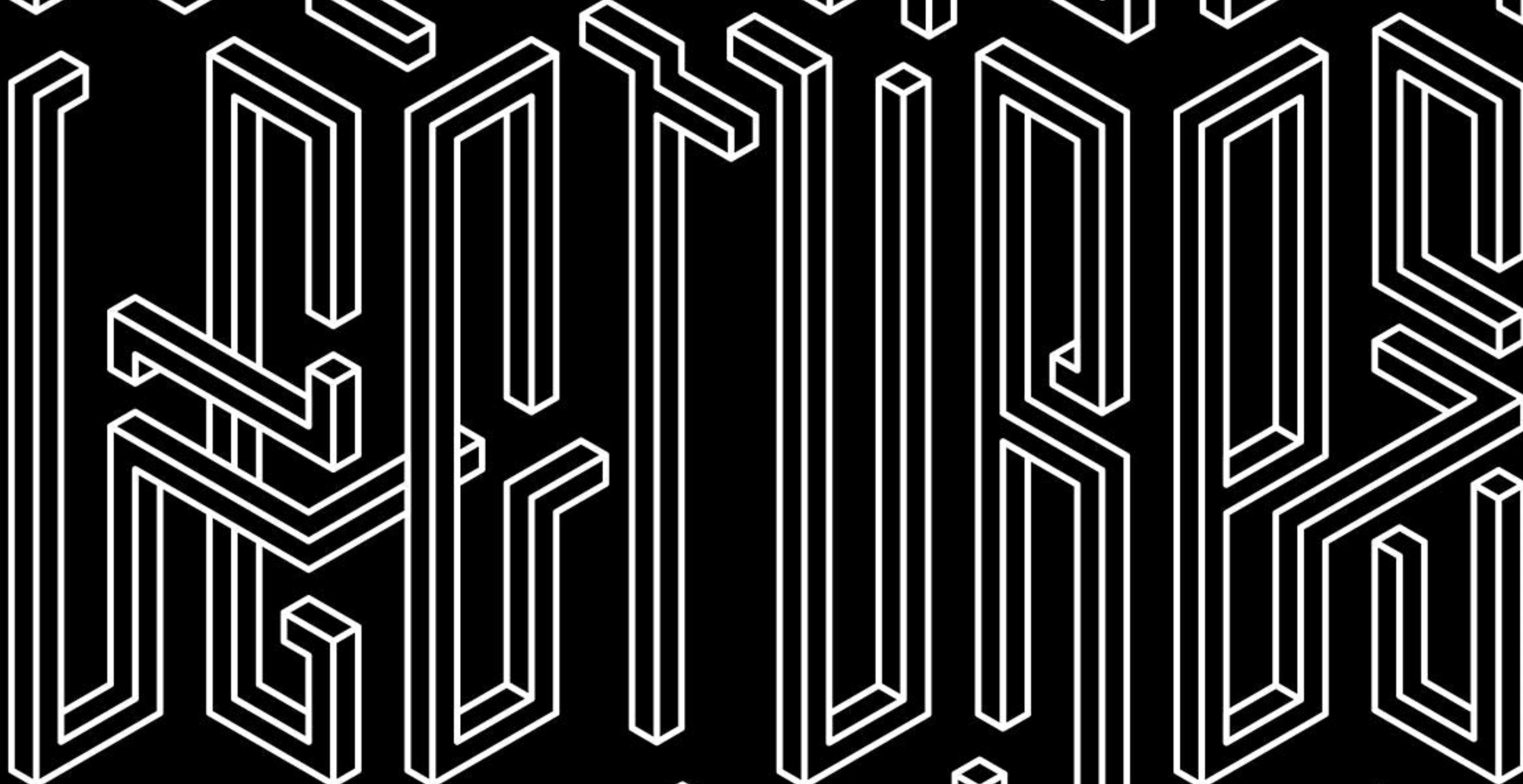
The symposium "Transit Point:
Mitteleuropa" is organized in
collaboration with the Yale
University Art Gallery, the
Yale Institute of Biosciences, and
the Yale Institute of Biosciences.
The symposium is supported
by the J. Irwin Miller Endowment
Fund, the International Building
Research Fund, and the Rock-Hound
Lecturing Fund. The Yale School
of Architecture is a proud
partner with The American
Institute of Architects Continuing
Education System. Credit earned
by attending these symposia will
be reported to the AIA. All
members, certificate of
completion, and non-members are
available upon request.

Hastings Hall is equipped with
assisted hearing devices for
greatest hearing aids that
have a "T" coil.

Transit Point: Mitteleuropa
Thursday, 8-9
Hastings Hall (basement
floor) unless otherwise
noted

This symposium, convened
to celebrate the opening
of the exhibition "Oskar
Hansen: Open Form."





SYMPOIUM

The J. Irwin Miller Symposium
A Constructed World
Thursday–Saturday
Oct. 1–3, 2015
Hastings Hall
(basement floor)

The world is constructed. However, it is not only the product of material realities, but also of philosophical concepts and imaginary ideals. No part of the world remains unaffected by the cumulative impact of human activity. Through complex processes of exploration, habitation, cultivation, transportation, consumption, and surveillance, the world has become increasingly

will ask what it means to survey, excavate, demolish, scaffold, frame or assemble the world. This dialogue provides the opportunity to enrich our understanding of the world and establish common terms of engagement in relation to dramatically changing conditions. As crises and opportunities transcend both municipal and national borders, the need to operate at the scale of the world has never been more urgent.

Thursday, Oct. 1
6:30 PM
Joyce Hsiang and Bimal Mendis
“City of 7 Billion”

Friday, Oct. 2
10:30 AM–6 PM
Lucia Alpis

Saturday, Oct. 3
5 PM
Closing Address
Paul Rudolph Lecture
Hashim Sarkis
“The World According to Architecture”

This symposium is supported by the J. Irwin Miller Endowment Fund, the Brendan Gill Lectureship Fund, and the Paul Rudolph Lectureship Fund.

The Yale School of Architecture is a Registered Provider with The American Institute of Architects Continuing Education Systems. Credit earned by attending this symposium will be reported to CES.

EXHIBITIONS

Architecture Gallery
second floor
Monday–Friday
9 AM to 5 PM
Saturday
10 AM to 5 PM

City of 7 Billion: A Constructed World
September 3–November 14, 2015

This exhibition, the culmination of a research project that considers the impact of population growth and resource consumption, presents new models, drawings, and animations that reframe the world as one city. Drawing on contemporary discussions of the Anthropocene—the proposed epoch in which the world is

Pedagogy and Place: Celebrating 100 Years of Architectural Education at Yale
December 3, 2015–May 7, 2016

In an effort to pinpoint the interrelationship between the physical settings of architectural education and the pedagogy itself, Pedagogy and Place presents

profoundly transformed by human activity—the exhibition materializes the implications of global development. Using architectural methods and tools, the exhibition considers scientific, social, environmental, and political phenomena to illuminate the roles humans are increasingly playing in shaping the world as its designers and constructors.

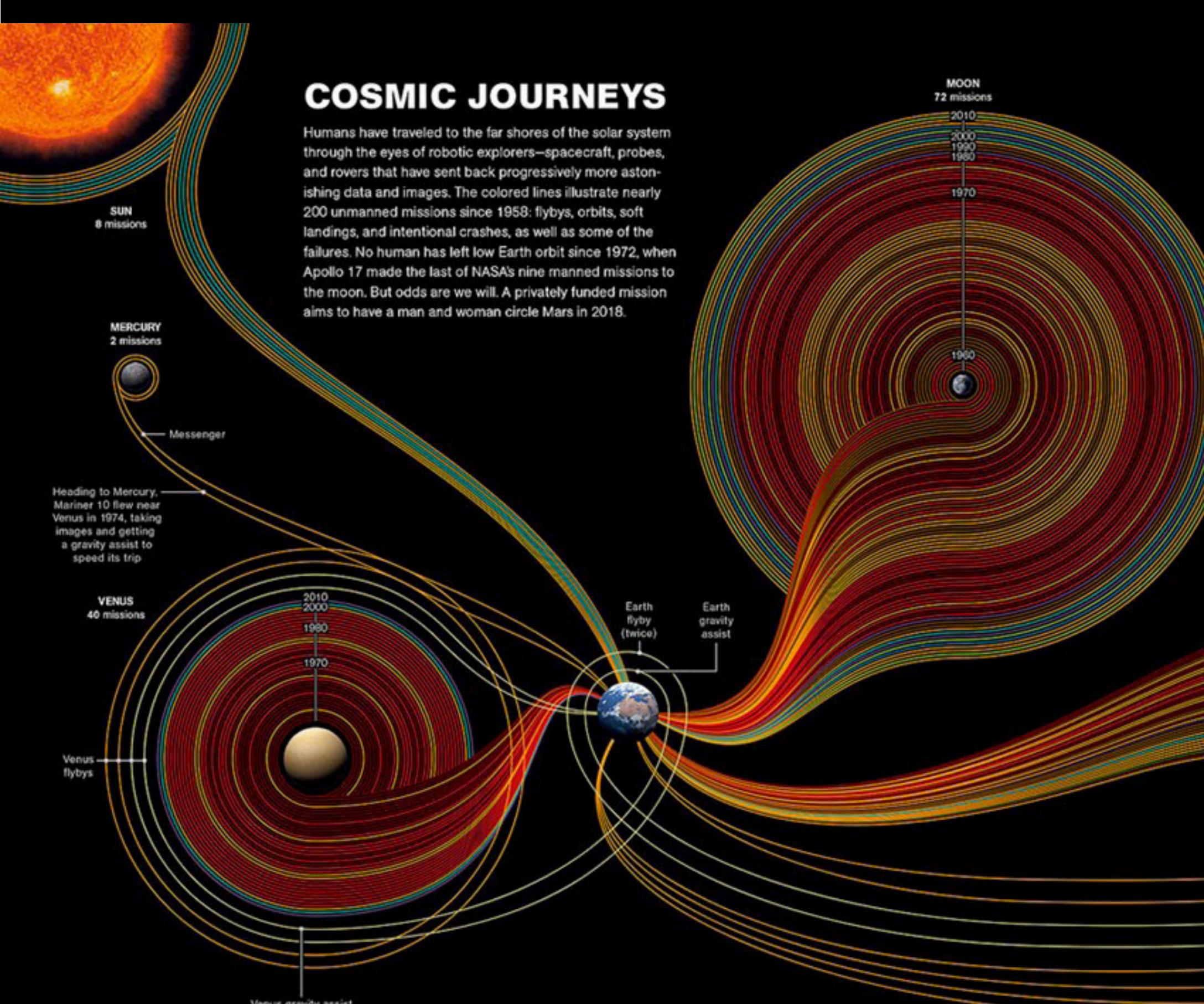
the development of Yale's program over the last hundred years through a selection of representative alumni work set against a background of the succession of buildings designed to house the School. An auxiliary installation depicting more than 20 other architecture schools and their buildings from around the world further illuminates the various relationships between the spaces that provide the setting for disciplinary training and the various modes of that training which have evolved over the last two centuries.

The project “City of 7 Billion” was the recipient of the 2013 Latrobe Prize and is supported in part by the AIA College of Fellows, the Hines Research Fund for

Advanced Sustainability in Architecture, a grant from the Graham Foundation for Advanced Studies in the Fine Arts, Thomas and Beryl Hsiang, Pelli Clarke Pelli Architects, and Gina Tso. “Pedagogy and Place: Celebrating 100 Years of Architectural Education at Yale” is supported in part by Elise Jaffe + Jeffrey Brown. The Yale School of Architecture’s exhibition program is supported in part by the James Wilder Green Dean’s Resource Fund, the Kibel Foundation Fund, The Nitkin Family Dean’s Discretionary Fund in Architecture, the Pickard Chilton Dean’s Resource Fund, the Paul Rudolph Publication Fund, the Robert A.M. Stern Fund, and the Rutherford Trowbridge Memorial Publication Fund.

COSMIC JOURNEYS

Humans have traveled to the far shores of the solar system through the eyes of robotic explorers—spacecraft, probes, and rovers that have sent back progressively more astonishing data and images. The colored lines illustrate nearly 200 unmanned missions since 1958: flybys, orbits, soft landings, and intentional crashes, as well as some of the failures. No human has left low Earth orbit since 1972, when Apollo 17 made the last of NASA's nine manned missions to the moon. But odds are we will. A privately funded mission aims to have a man and woman circle Mars in 2018.

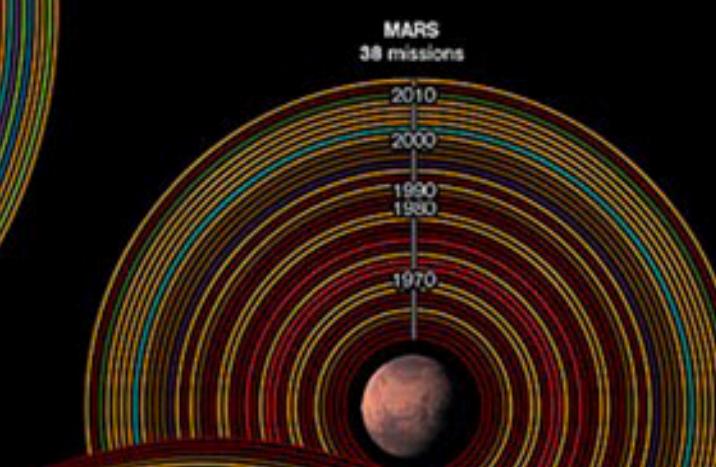


THE INNER SOLAR SYSTEM

Soviets reached the moon first, deliberately crashing Luna 2 into the surface in 1959. NASA made the first successful trip to Venus with the Mariner 2 flyby in 1962; Mariner 4 sent images from Mars in 1965. NASA's current Messenger mission is the first to orbit and map Mercury. A fleet of solar missions monitors the sun's activity—and its impact on Earth.

MISSIONS TO INNER SOLAR SYSTEM

SUCCESS FAILURE

ASTEROIDS AND COMETS

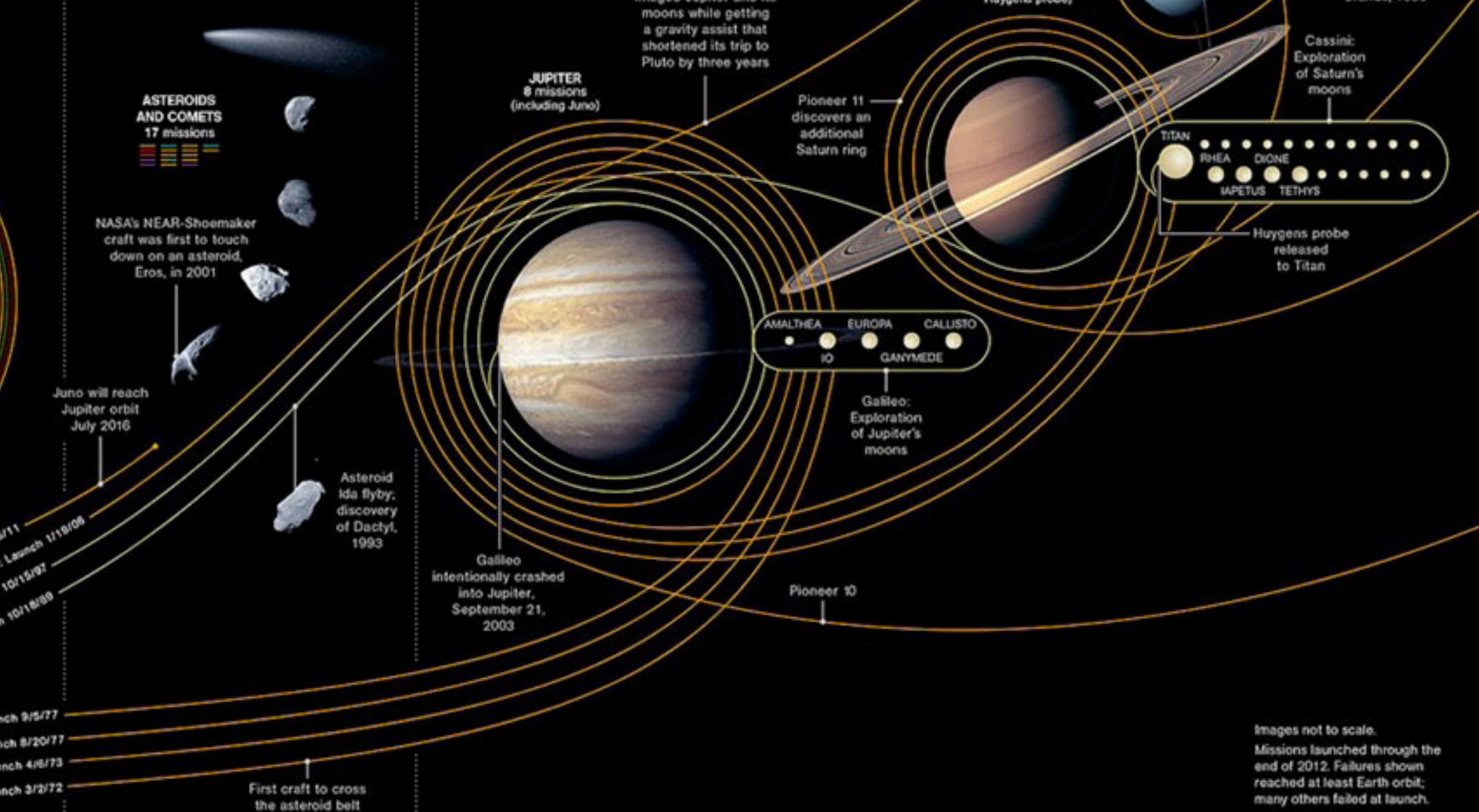
On its way to Jupiter, in 1991, Galileo took the first close-up images of an asteroid (Gaspra) and found the first asteroid satellite (Dactyl, which orbits Ida). NASA's Dawn will reach the asteroid/dwarf planet Ceres in 2015. The European Space Agency's Rosetta probe will try to land on a comet in 2014.

TO JUPITER AND BEYOND

Reaching the gas giant in 1995, Galileo sent images and data from Jupiter and its moons for eight years. The craft Juno arrives there in 2016. Cassini still transmits images of Saturn and its moons; its probe, Huygens, landed on Titan in 2005. In 2015, nine years after launch, New Horizons will study Pluto and the planetary debris of the Kuiper belt.

DEEP SPACE MISSIONS

NASA
NASA AND EUROPEAN SPACE AGENCY



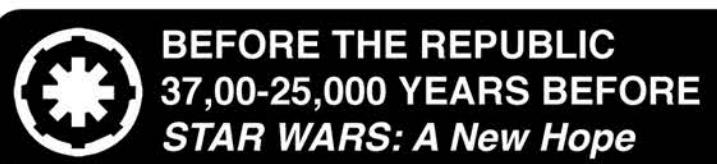
REACHING FOR DEEP SPACE

Pioneers 10 and 11, launched in 1972 and 1973, were first to travel beyond Mars and capture close-up images of Jupiter. Both have shut down but still send data. Voyagers 1 and 2 set out in 1977. Each studied Jupiter and Saturn; Voyager 2 then sent the first close-up images of Uranus and Neptune. Both continue to transmit as they leave the solar system for interstellar space.



ART BY SEAN MCNAUGHTON, SAMUEL VELASCO, SWI INFOGRAPHICS, MATTHEW TWOMEY AND JANE VESSELS, NGM STAFF, AMANDA HOBBS
SOURCES: NASA, CHRIS GAMBLE, THE ASSOCIATED PRESS, COURTESY PHOTOS

THE STAR WARS LEGENDS NOVELS TIMELINE



c. 25,793 **YEARS BEFORE STAR WARS: A New Hope**
Dawn of the Jedi: Into the Void



Lost Tribe of the Sith: The Collected Stories

3954 **YEARS BEFORE STAR WARS: A New Hope**
The Old Republic: Revan

3650 **YEARS BEFORE STAR WARS: A New Hope**
The Old Republic: Deceived
Red Harvest
The Old Republic: Fatal Alliance
The Old Republic: Annihilation

1032 **YEARS BEFORE STAR WARS: A New Hope**
Knight Errant
Darth Bane: Path of Destruction
Darth Bane: Rule of Two
Darth Bane: Dynasty of Evil



67 **YEARS BEFORE STAR WARS: A New Hope**
Darth Plagueis

33 **YEARS BEFORE STAR WARS: A New Hope**
Cloak of Deception
Darth Maul: Shadow Hunter
Maul: Lockdown

32 **YEARS BEFORE STAR WARS: A New Hope**
*STAR WARS: EPISODE I
THE PHANTOM MENACE*

Rogue Planet
Outbound Flight
The Approaching Storm

22 **YEARS BEFORE STAR WARS: A New Hope**
*STAR WARS: EPISODE II
ATTACK OF THE CLONES*

22-19 **YEARS BEFORE STAR WARS: A New Hope**
STAR WARS: THE CLONE WARS

The Clone Wars: Wild Space
The Clone Wars: No Prisoners

Clone Wars Gambit

Stealth
Siege

Republic Commando

Hard Contact
Triple Zero
True Colors
Order 66

Shatterpoint

The Cestus Deception

MedStar I: Battle Surgeons

MedStar II: Jedi Healer

Jedi Trial

Yoda: Dark Rendezvous

Labyrinth of Evil

19 **YEARS BEFORE STAR WARS: A New Hope**
*STAR WARS: EPISODE III
REVENGE OF THE SITH*

Kenobi

Dark Lord: The Rise of Darth Vader
Imperial Commando 501st

Coruscant Nights

Jedi Twilight

Street of Shadows

Patterns of Force

The Last Jedi

10 **YEARS BEFORE STAR WARS: A New Hope**
The Han Solo Trilogy

The Paradise Snare
The Hutt Gambit
Rebel Dawn

The Adventures of Lando Calrissian
The Force Unleashed
The Han Solo Adventures
Death Troopers
The Force Unleashed II

REBELLION
0-5 YEARS AFTER
STAR WARS: A New Hope

Death Star
Shadow Games

0 **YEARS BEFORE STAR WARS: A New Hope**
*STAR WARS: EPISODE IV
A NEW HOPE*

Tales from the Mos Eisley Cantina

Tales from the Empire

Tales from the New Republic

Scoundrels

Allegiance

Choices of One

Honor Among Thieves

Galaxies: The Ruins of Dantooine

Splinter of the Mind's Eye

Razor's Edge

3 **YEARS AFTER STAR WARS: A New Hope**
*STAR WARS: EPISODE V
THE EMPIRE STRIKES BACK*

Tales of the Bounty Hunters
Shadows of the Empire

4 **YEARS AFTER STAR WARS: A New Hope**
*STAR WARS: EPISODE VI
THE RETURN OF THE JEDI*

Tales from Jabba's Palace

The Bounty Hunter Wars

The Mandatorian Armor

Slave Ship

Hard Merchandise

The Truce at Bakura
Luke Skywalker and the Shadows of Mindor

NEW REPUBLIC
5-25 YEARS AFTER
STAR WARS: A New Hope

X-Wing
Rogue Squadron
Wedges' Gamble
The Krytos Trap
The Bacta War
Wraith Squadron
Iron Fist
Solo Command

The Courtship of Princess Leia
Tatooine Ghost

The Thrawn Trilogy
Heir to the Empire
Dark Force Rising
The Last Command

X-Wing: Isard's Revenge

The Jedi Academy Trilogy
Jedi Search
Dark Apprentice
Champions of the Force

I, Jedi
Children of the Jedi
Darksaber
Planet of Twilight
X-Wing: Starfighters of Adumar
The Crystal Star

The Black Fleet Crisis Trilogy
Before the Storm
Shield of Lies
Tyrant's Test

The New Rebellion

The Corellian Trilogy
Ambush at Corellia
Assault at Selonia
Showdown at Centerpoint

The Hand of Thrawn Duology
Specter of the Past
Vision of the Future

Scourge
Survivor's Quest

NEW JEDI ORDER
25-40 YEARS AFTER
STAR WARS: A New Hope

The New Jedi Order
Vector Prime
Dark Tide I: Onslaught
Dark Tide II: Ruin
Agents of Chaos I: Hero's Trial
Agents of Chaos II: Jedi Eclipse
Balance Point
Edge of Victory I: Conquest
Edge of Victory II: Rebirth
Star by Star

Dark Journey
Enemie Lines I: Rebel Dream
Enemie Lines II: Rebel Stand
Traitor
Destiny's Way
Force Heretic I: Remnant
Force Heretic II: Refugee
Force Heretic III: Reunion
The Final Prophecy
The Unifying Force

35 **YEARS AFTER STAR WARS: A New Hope**
The Dark Nest Trilogy
The Joiner King
The Unseen Queen
The Swarm War

43 **YEARS AFTER STAR WARS: A New Hope**
Fate of the Jedi
Outcast
Omen
Abyss
Backlash
Allies
Vortex
Conviction
Ascension
Apocalypse

X-Wing: Mercy Kill

45 **YEARS AFTER STAR WARS: A New Hope**
Crucible

LEGACY
40+ YEARS AFTER
STAR WARS: A New Hope

Legacy of the Force
Betrayal
Bloodlines
Tempest
Exile
Sacrifice
Inferno
Fury
Revelation
Invincible
Crosscurrent
Riptide
Millennium Falcon

43 **YEARS AFTER STAR WARS: A New Hope**
Fate of the Jedi
Outcast
Omen
Abyss
Backlash
Allies
Vortex
Conviction
Ascension
Apocalypse

X-Wing: Mercy Kill

Glacial change of the Quelccaya Ice-Cap, Peru, during the last 2 decades

Maiana N. Hanshaw (mnhanshaw@geog.ucsb.edu)
Department of Geography - University of California, Santa Barbara

ABSTRACT

This study investigates glacial change of the Quelccaya ice-cap region in the Peruvian Andes over the last two decades. Four satellite air photos are used in this study: one Landsat TM image from 1991, two Landsat ETM+ images from 2000, and one ASTER image from 2004. After performing several correction techniques including atmospheric correction, conversion to reflectance and radiance, pan-sharpening, georeferencing and co-registration, mosaicking and clipping, I then proceeded to perform a supervised classification on the images from the three time periods. This classification was then analysed using change detection techniques on the areal extent of the classified units. Results indicate that during the period 1991-2000, glacial extent actually increased in the Quelccaya ice-cap, but then during the period 2000-2004, glacial extent began to decrease. However, this does not reflect the literature, which indicates that glacial extent has been decreasing since monitoring began, particularly since the advent of satellite remote sensing observations in the 1970s. The discrepancy in my study is likely due to the classification technique and base image used (2000 Landsat ETM+), as this image has the smallest number of unclassified pixels and the largest number of snow and glacier pixels, while the remaining two images have larger numbers of unclassified pixels, and smaller numbers of snow and glacier pixels.

1. INTRODUCTION



Fig. 1: Qori Kalis glacier in the Quelccaya ice cap, Peru, showing retreat since 1978. Figure from Thompson et al., 2006

Climate change is occurring globally, and yet nowhere is it more visible than on glaciers. Figure 1 illustrates the retreat of Qori Kalis glacier in the Quelccaya ice cap, Peru, since 1978, and Figure 2 highlights the global trend of the dominance of glacial retreat since 1845. Polar glaciers command widespread attention, while tropical glaciers, such as those found in the Andes of South America, are typically overlooked, with their smaller glacial footprint (compared to polar glaciers), and their difficulty to study, given their remote location in inhospitable terrain. However, since the advent of satellites, remote sensing provides an excellent tool to investigate glacial changes in the Andes. In the central Andes, large populations rely on glacial meltwater and the seasonal buffering provided by the glaciers for their water, food, and power supplies. As yet, the extent to which climate change is affecting these terrestrial water stores and fluxes remains largely unconstrained. In an effort to understand the nature of glacial change in the Andes, this study focuses on one region in the tropical Andes - the Quelccaya ice cap - which at ~44 km² is the largest glaciated extent in the tropics. This study uses four satellite images obtained between 1991 and 2004 in order to gain a better understanding of how climate change is influencing glacial area in this region of the central Andes.

Sources: Kaser et al., 2010; Wikipedia

2. METHODS

Imagery:

1991 (31 May): Landsat 4 TM Image
2000 (23 May & 24 June): Landsat 7 ETM+ Images (Path 3, Row 69-70)
2004 (6 August): ASTER L1A Image
DEM: 2000 SRTM DEM

Methods:

- Atmospheric Correction:** to correct for scattering from aerosols in the atmosphere, I performed a relative radiometric correction - Dark Object Subtraction
- Reflectance/Radiance Calibration:** I converted digital numbers into values of radiance and reflectance, mosaicked the two Landsat ETM+ images from 2000 together, and converted values of radiance into surface temperatures
- Pan-sharpening:** the mosaicked Landsat ETM+ image was pan-sharpened using the panchromatic band
- Georeferencing & co-registering:** after georeferencing the ASTER image, the ASTER and Landsat TM images were automatically co-registered to the "base" mosaicked Landsat ETM+ image
- Classification:** after clipping to the area of interest, I performed a supervised classification using the parallelepiped method - training sites were identified primarily using the base Landsat ETM+ image. A majority filter was applied to remove speckle and the classes were vectorized for change detection purposes

	Landsat TM	Landsat ETM+	ASTER
Operated By:	NASA	NASA	NASA & Japan's METI
Launched:	1982	1999	1999
Orbit:	Sun-synchronous	Sun-synchronous	Sun-synchronous
Altitude:	705 km	705 km	705 km
Temporal Resolution:	16 days	16 days	16 days
Spatial Resolution:	30 x 30 m	30 x 30 m	15 x 15 m

Table 1: Satellite/Sensor information. Source: NASA & USGS

3. STUDY AREA

Glaciers are found along the extent of the Andes in South America, from Ecuador at the equator to the Patagonia icefields of Chile and Argentina. Tropical glaciers are mostly limited to the high elevations of Ecuador, Peru and Bolivia. Peruvian glaciers account for 1780 km² of these tropical glaciers, and the Quelccaya ice cap, 44 km², which, at 5670 m above sea level represents a mid-elevation glacier.

Sources: WGMS, 2008; Thompson et al., 2006

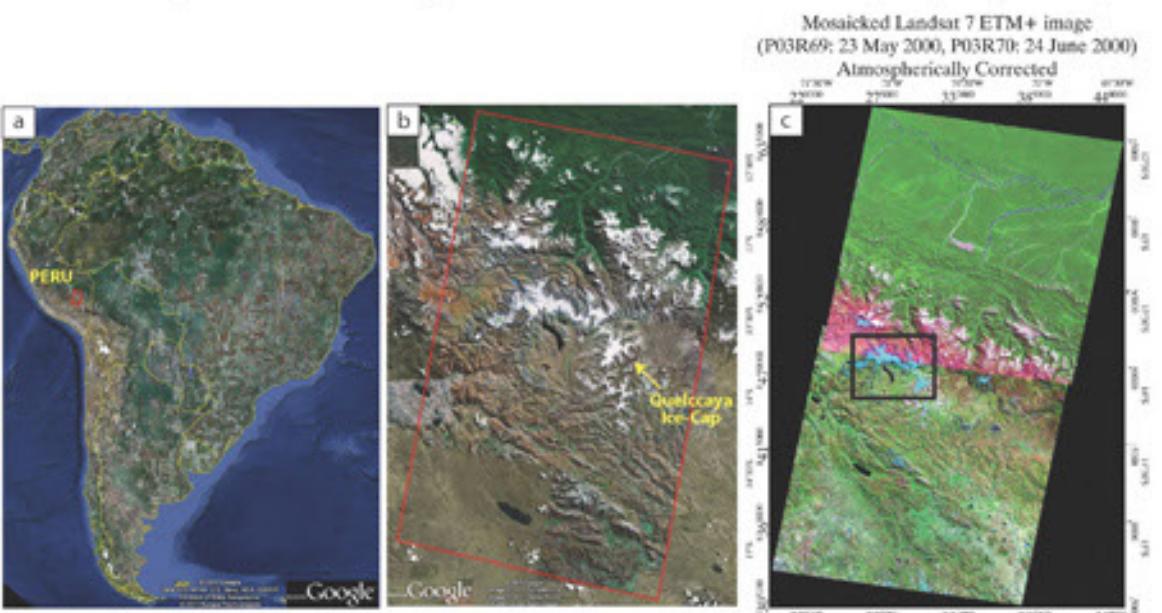
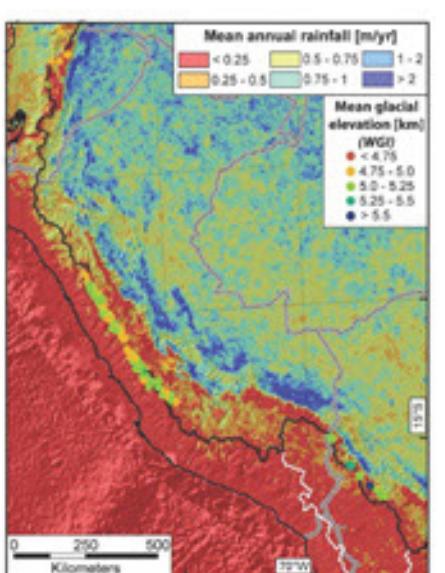


Fig. 3: Study area: (a) overview of the South American continent, with the general area of interest denoted by the small red box in Peru; (b) general region encompassed by the Landsat ETM+ 2000 images; (c) mosaicked and atmospherically corrected Landsat ETM+ 2000 images. Black box in this image indicates the more focused area used in the subsequent classification analysis. Note in (b) and (c) the easily identifiable shape of the Quelccaya ice cap.



Climate:
Rainfall in the central Andes (Figure 4) ranges from 1-2 m/yr on the wetter eastern slopes, to 0.5 m/yr on the drier western slopes.
On interannual timescales, the El Niño/Southern Oscillation (ENSO) is a dominant factor determining rainfall and temperatures in the central Andes. Studies indicate that El Niño years (positive ENSO) tend to be drier and warmer, while La Niña years (negative ENSO) tend to be wetter and cooler.

Sources: Vuille et al., 2007; Bookhagen and Strecker, 2010

Fig. 4 (left): Climatic overview of the central Andes. Rainfall is based on satellite-derived estimates using Tropical Rainfall Measurement Mission (TRMM) product 2831. Included are some tropical glaciers (colored according to mean glacial elevation) from the World Glacier Inventory, the Amazon drainage basin (black line), and the internally drained Altiplano-Puna Plateau (white line).

Modified from Bookhagen and Strecker, 2008.

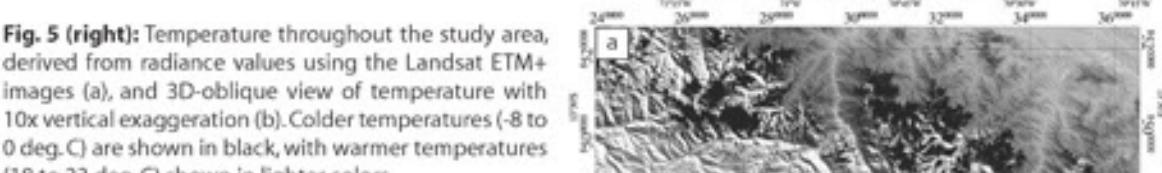


Fig. 5 (right): Temperature throughout the study area, derived from radiance values using the Landsat ETM+ images (a), and 3D-oblique view of temperature with 10x vertical exaggeration (b). Colder temperatures (-8 to 0 deg. C) are shown in black, with warmer temperatures (18 to 23 deg. C) shown in lighter colors.

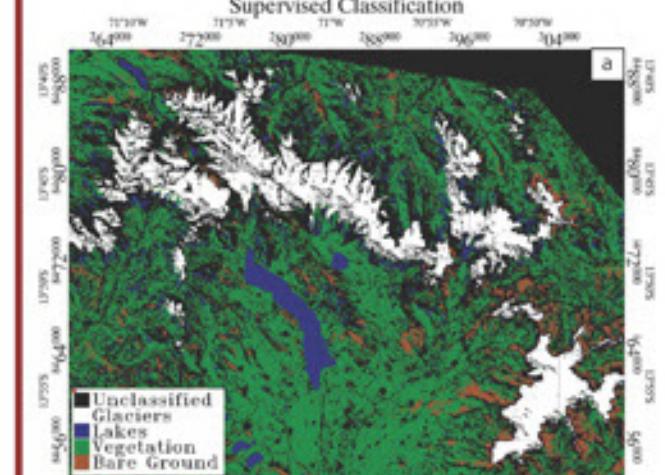


4. RESULTS

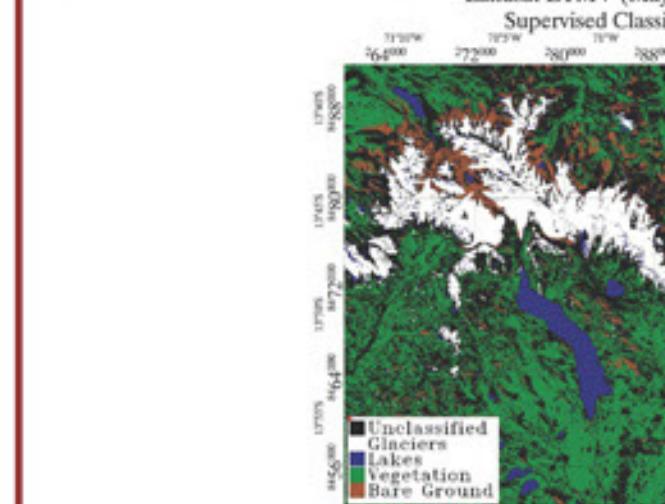
Training sites were identified using the Landsat ETM+ mosaic as the base image, and units were combined to simplify for analysis. Figure 6 shows the initial classification of the Landsat ETM+ image. Subsequent figures (Figures 7+) and analysis show results using the combined classes.

Fig. 7 (below): Final classified images: (a) Landsat TM (May 1991); (b) Landsat ETM+ Mosaic (May/June 2000); (c) ASTER (August 2004). Note the increased number of unclassified pixels (black) in (a) and (c), while fewer pixels are unclassified in (b).

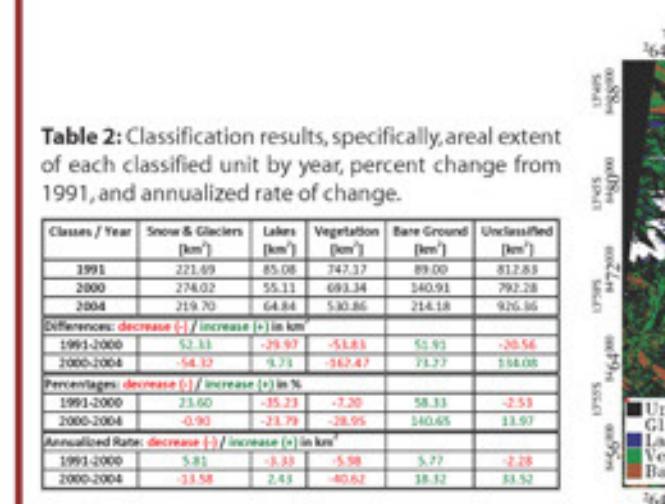
Landsat TM (May 1991)
Supervised Classification



Landsat ETM+ (May/June 2000)
Supervised Classification



ASTER (August 2004)
Supervised Classification



5. DISCUSSION

This study indicates that glacial extent advanced between 1991-2000, and retreated between 2000-2004. These results are summarized in Figures 8 and 9.

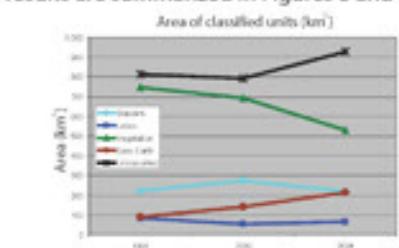
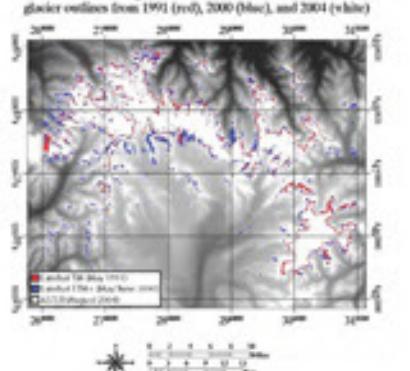


Fig. 8 (above): Graphical summary of areal change of the classified units. Notice how areal extent of lakes decreases as glacier area increases, and vice versa, a result also reflected in the literature.

Fig. 9 (right): Vectorized glacier outlines showing glacial extent for 1991, 2000, and 2004 mapped on top of the 2000 SRTM DEM.



Although the net change between 1991-2004 has been retreat, the magnitude (only 1% areal loss since 1991) does not reflect that in the literature for this region (which reports a 20% areal loss between 1978-2006). Unfortunately, however, comparisons between studies are difficult as other studies report distance measurements, not area, of glacier advance/retreat.

Figure 10 provides a good illustration of retreat in this region, and with this we can see that the results reported in this study do not accurately reflect retreat in this region as reported in other studies. While this study shows advance between 1991-2000, we can see in Figure 10 that this advance did not actually occur. Specifically, glacier toe length of the Qori Kalis glacier retreated ~770 m during this period (a rate of ~6 m/yr, which is reported to be ~10 times faster than the period 1963-1978 (~6 m/yr)).

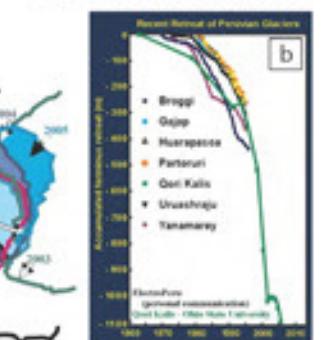
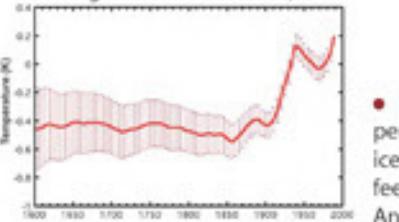


Fig. 10 (right): Glacier retreat in the Peruvian Andes: (a) retreat of Qori Kalis (see Figure 1) from 1963 to 2005; (b) Retreat records for Qori Kalis and six other Andean glaciers. Figure from Thompson et al., 2006.

Fig. 11 (below): Estimate of global mean temperature since 1600 (with standard deviations). Figure from Oerlemans, 2005.



In general, glaciers are retreating globally, a result of increasing global temperatures (Figure 11). This study, and particularly other studies of the Quelccaya ice cap, reflect this general trend of overall glacier retreat. We are only starting to feel the consequences of reduced glacial extent, and populations in the central Andes will be among the first to experience the changes.

6. CONCLUSION

Using remotely sensed satellite imagery from 1991, 2000, and 2004, this study performed a classification to quantify glacial change in the Quelccaya ice-cap region of the Peruvian Andes.

Results indicate that glacial extent increased over the time period 1991-2000, at a rate of 5.8 km² per year, but decreased at a greater rate of 13.6 km² per year during the time period 2000-2004. Over the entire period, 1991-2004, this equates to an annualized rate of retreat of 0.2 km² per year, with a 1% loss of 1991 area.

According to the literature, the Quelccaya ice cap has lost about 20% of its total area since 1978. The results from this study corroborate with the literature that the Quelccaya ice cap is losing mass over time, however, the extent to which it is does not reflect that reported in the literature, likely a result of errors during the classification process.

This trend of glacial retreat as a result of climate change is common in this area of the central Andes, and globally, the consequences of which will soon be felt by the downstream populations that depend on thewaning glacial meltwaters.

References & Acknowledgments

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VOL. LXVIII...NO. 22,275. . .

NEW YORK, SUNDAY, JANUARY 19, 1919.—104 PAGES, in Nine Parts, Including Pictures and Magazine Sections
(Illustrated) and Back Numbers.FIVE CENTS U.S. POSTAGE PAID NEW YORK CITY

ALLIED UNITY MARKS OPENING OF THE PEACE CONGRESS; CLEMENCEAU MADE CHAIRMAN; POINCARE PRAISES AMERICA; LEAGUE OF NATIONS TO BE FIRST BUSINESS CONSIDERED

TROOPS MASSED TO GUARD VOTING IN BERLIN TODAY

Full Protection Believed to be
Assured as New Forces
Enter the City.

CALL ASSEMBLY FOR FEB. 16

Police Precautions Taken by
Richter, the New Head of
the Berlin Force.

PARTIES CONFUSE VOTERS

Women Electors Largely Outnumber
the Men—Socialists Fear
Drift to Moderates.

LONDON, Jan. 18. (Associated Press).—A Berlin dispatch states that full protection for Sunday's election of delegates to the German National Assembly seems to be assured in that city and its suburbs.

A German Government wireless message says that Philipp Scheidemann, the Foreign Secretary, announced today that the Government had decided to convene the National Assembly on Feb. 16.

Troops are being massed in the capital in overwhelming force. The

1,000,000 Russians Died in German Prison Camps

LONDON, Jan. 18.—Of the 2,000,000 Russian prisoners scattered throughout the Central Empires, 1,000,000 died in captivity, according to The Morning Post. Repatriated British prisoners of war have brought reports of the inhuman treatment of Russian prisoners in the concentration camps of Germany and Austria, and these stories have been borne out by a report recently received by the International Red Cross from some of its delegates who have just returned from Germany.

According to these reports, the Russians were subjected to terrible brutalities and were forced to do heavy and degrading work, whether sick or well. They were always half starved and were under the constant stimulus of the lash. Some 800,000 of the Russians still remain in Germany.

But American Correspondents

Draft a Formal Demand for
Five Seats at Meetings.

Pay to Include 70,000 Tons of
Pork and 200,000 of Cereals,
New Armistice Provides.

New Armistice Provides.

TO BE RIGIDLY ENFORCED

Foch Prepared to Break Off Ar-
mistice If Violated—German
Officials Protest Terms.

By EDWIN L. JAMES,
Copyright, 1919, by The New York Times Company.
Special Cable to THE NEW YORK TIMES.

CONFERENCE OPEN TO PRESS

Newspaper Men of All
Nations Allowed to
Attend Session.

FUTURE COURSE IN DOUBT

But American Correspondents
Draft a Formal Demand for
Five Seats at Meetings.

ASK ACCESS TO DELEGATES

Also Want Reports on Secret
Sessions That May Be
Held by Envoys.

PARIS, Jan. 18.—The first formal session of the Peace Conference was opened freely to the press of all nations today. At how many of the succeeding sessions the decisions of the conference will be reached in camera has not been indicated, but the American newspaper men, and probably also the British and Italian, are preparing to reopen the question of publicity if they should decide that the flow of news is impeded by rules of secrecy.

The representatives of the American newspaper men, in acknowledging the receipt of the Supreme Council's decision regarding publicity, requested that in case secret sessions were held the names of the delegates presenting motions for secrecy and the agreements

Arrest Bolsheviks Reported On the Way to Attack Wilson

GENEVA, Sunday, Jan. 19.—Several German and Russian Bolsheviks have been arrested by the Lausanne police. It is said that the men in custody were bearing false passports and were on their way to Paris. The Gazette of Lausanne says:

"The Bolsheviks under arrest plotted against the lives of Premier Clemenceau, President Wilson, and Premier Lloyd George. The plot was backed by German gold."

PERMANENT PEACE IS BRITAIN'S AIM

Terms Regarded as Coinciding
in Almost Every Detail with
Those of America.

ALL SEAS OPEN TO TRADE

Indemnity Claimed to Include
Air Raid Damage and
Shipping Losses.

PARIS, Jan. 17.—Careful investigation here has made it possible to give more concretely than previously an outline of the war claims of Great Britain, and her general decree regarding the making of peace.

The British aims, the unofficial representation of them shows, are regarded

BRILLIANT OPENING SCENE

Troops Pay Military
Honors as Plenipo-
tentaries Arrive.

SERIOUS MIEN OP CROWDS

"Let's Hope They Make Peace
Soon," the Keynote of
Their Comments.

CLEMENCEAU THE FAVORITE

Wilson Received with Doffing of
Hats—Many American Sol-
diers as Spectators.

By WALTER DURANTY.
Copyright, 1919, by The New York Times Company.
Special Cable to THE NEW YORK TIMES.

PARIS, Jan. 18.—Imagine that you are standing in front of the French Foreign Office on the Quai d'Orsay, beside the Seine, at 2:30 this afternoon. Before you stretches a long, low building with the Tricolor on its summit waving in the bright Winter sun. The courtyard is thronged with soldiers and officers in picturesque uniforms.

There are sentries at the gates around which the crowd presses eagerly, and on the railings of the garden running along to the Chamber of Deputies

Wilson Praises Clemenceau, Moving Election; Premier, Accepting, Pleads for a Closer Union

PARIS, Jan. 18.—In his speech at the opening of the Peace Conference today, proposing Premier Clemenceau for the permanent Chairmanship, President Wilson said:

"Mr. Chairman—it gives no great pleasure to propose as permanent Chairman of the conference Mr. Clemenceau, the President of the council.

I would do this as a matter of custom. I would do this as a tribute to the French Republic. But I wish to do it as something more than that. I wish to do it as a tribute to the man.

France deserves the precedence not only because we are meeting at her capital, and because she has undergone some of the most tragic suffering of the war, but also because her capital, her ancient and beautiful capital, has so often been the centre of conferences of this sort on which the fortunes of large parts of the world turned.

It is a very delightful thought that the history of the world, which has so often centred here, will now be crowned by the achievements of this conference—because there is a sense in which this is the supreme conference of the history of mankind.

More nations are represented here than were ever represented in such a conference before. The fortunes of all peoples are involved. A great war is ended, which seemed about to bring a universal cataclysm. The danger is passed. A victory has been won for mankind, and it is delightful that we should be able to record these great results in this place.

But it is more delightful to honor France because we can honor her in the person of so distinguished a servant. We have all felt in our participation in the struggles of this war the fine straightforwardness which characterized the leadership of the French in the hands of Mr. Clemenceau. We have learned to admire him, and those of us who have been associated with him have acquired a genuine affection for him.

Moreover, those of us who have been, in these recent days in constant consultation with him know how warmly his purpose is set toward the goal of achievement to which all our faces are turned. He feels as we feel, as I have no doubt everybody in this room feels, that we are trusted to do a great thing, to do it in the highest spirit of friendship and accommodation, and to do it as promptly as possible in order that the hearts of men may have fear lifted from them, and that they may return to those purposes of life which will bring them happiness and contentment and prosperity.

Knowing his brotherhood of heart in these great matters, it affords me a personal pleasure to propose that Mr. Clemenceau shall be the permanent Chairman of this conference.

Clemenceau's Speech of Acceptance

Premier Clemenceau responded as follows:

You would not expect me to keep silence after what the two eminent statesmen, who have just spoken, have said. I cannot help expressing my great, my profound gratitude to the illustrious President of the United States, to the Prime Minister of Great Britain, and to Baron Béonno for the words I have just heard from their lips.

Long ago, when I was young, as Mr. Lloyd George has recalled to you, when I was travelling in America and in England, I always heard the French reproached for an excess of courtesy, which sometimes went beyond the truth. As I listened to the American statesmen and to the

BUGLES GREET DELEGATES

Wilson's Arrival the Sig-
nal for a Popular
Demonstration.

OUTLINES CONGRESS WORK

Clemenceau Says It Will Fix
War Responsibility—Has Opin-
ions on the Kaiser's Guilt.

NOMINATED BY WILSON

Glowing Tributes to the French
Premier by the President
and Lloyd George.

PARIS, Jan. 18. (Associated Press.)—The Peace Congress, on which the eyes of the world are now centred, was opened this afternoon in the great Salle de la Paix of the Ministry of Foreign Affairs. The proceedings, which were confined to the election of Georges Clemenceau, the French Premier, as permanent Chairman of the conference, an address of welcome by the President of the French Republic, Raymond Poincaré, and speeches by President Wilson, Premier Lloyd George, and Baron Béonno, were characterized by expressions of lasting friendship and the apparent deter-



2017-2018 TAX & CHARITABLE REFERENCE GUIDE

Retirement Plans		
	2018	2017
Maximum elective deferral to retirement plan [401(k), 403(b)]	\$18,500	\$18,000
Catch-Up Contribution Limit [401(k), 403(b)]	\$6,000	\$6,000
Maximum elective deferral to SIMPLE IRAs	\$12,500	\$12,500
Catch-Up Contribution Limit: SIMPLE Retirement Plan	\$3,000	\$3,000
IRA Contribution Limit	\$5,500	\$5,500
Catch-Up Contribution Limit: IRA	\$1,000	\$1,000
Annual limit on additions to defined contribution plans	\$55,000	\$54,000
Defined Benefit Plan Annual Benefit Limit	\$220,000	\$215,000
Annual Compensation Limit	\$275,000	\$270,000
Maximum elective deferral to 457 plans of exempt employers	\$18,500	\$18,000
Threshold amount to determine if someone is a key employee in top-heavy plans	\$175,000	\$175,000
Threshold amount to determine if someone is a highly compensated employee	\$120,000	\$120,000
Social Security Wage Base	\$128,400	\$127,200
Medicare Wage Base	None	None

Health Savings Accounts (HSAs)		
Annual Contribution Limits		
	2018	2017
Individual	\$3,450	\$3,400
Family	\$6,900	\$6,750
Age 55 or older	\$1,000 additional	\$1,000 additional

Standard Mileage Rates		
	2018	2017
Business	54.5 cents per mile	53.5 cents per mile
Moving	18 cents per mile	17 cents per mile
Medical	18 cents per mile	17 cents per mile
Charitable	14 cents per mile	14 cents per mile

Standard Deduction and Personal Exemption						
Filing Status	Standard Deduction		Personal & Dependency Exemption		Phase Out	
	2018	2017	2018	2017	2018	2017
Single	\$12,000	\$6,350	\$0	\$4,050	N/A	\$261,500
Married Filing Jointly (MFJ)	\$24,000	\$12,700	\$0	\$4,050	N/A	\$313,800
Married Filing Separately (MFS)	\$12,000	\$6,350	\$0	\$4,050	N/A	\$156,900
Head of Household (HOH)	\$18,000	\$9,350	\$0	\$4,050	N/A	\$287,650

Capital Gains (2017-2018)			
Holding Period		Top Capital Gains Rate	
		2018	2017
12 months or less		37% ¹	39.6% ¹
More than 12 months ²		0% ² , 15% or 20% ³	0% ² , 15% or 20% ³
Depreciation recapture on real estate		25%	25%
Collectibles and certain small business stock		28%	28%

¹ Capital gain may be subject to an additional 3.8% Medicare tax

² Zero if in 10-15% bracket. Otherwise, 15%

³ Rate for taxpayers in the top income tax bracket

Long-Term Care Insurance		
If you are:	You may deduct this much of your annual premiums:	
	2018	2017
Over 70	\$5,200	\$5,110
61 to 70	\$4,160	\$4,090
51 to 60	\$1,560	\$1,530
41 to 50	\$780	\$770
40 and under	\$420	\$410

Estate Taxes / Gift Taxes		
	2018	2017
Estate Tax Exemption - Individual	\$11,180,000	\$5,490,000
Top Estate Tax Rate	40%	40%
Annual Gift Tax Exclusion - Gifts per person	\$15,000	\$14,000
Annual Gift Tax Exclusion - Joint gifts by spouse	\$30,000	\$28,000

Individual Tax Brackets (2018)					
Single		Married Filing Jointly		Head of Household	
Taxable Income	Amount You Owe	Taxable Income	Amount You Owe	Taxable Income	Amount You Owe
\$0- \$9,525	10% of taxable income	\$0- \$19,050	10% of taxable income	\$0- \$13,600	10% of taxable income
\$9,526- \$38,700	\$952.50 + 12% of the amount over \$9,525	\$19,051- \$77,400	\$1,905 + 12% of the amount over \$19,050	\$13,601- \$51,800	\$1,360 + 12% of the amount over \$13,600
\$38,701- \$82,500	\$4,453.50 + 22% of the amount over \$38,700	\$77,401- \$165,000	\$8,907 + 22% of the amount over \$77,400	\$51,801- \$82,500	\$5,944 + 22% of the amount over \$51,800
\$82,501- \$157,500	\$14,089.50 + 24% of the amount over \$82,500	\$165,001- \$315,000	\$28,179 + 24% of the amount over \$165,000	\$82,501- \$157,500	\$12,698 + 24% of the amount over \$82,500
\$157,501- \$200,000	\$32,089.50 + 32% of the amount over \$157,500	\$315,001- \$400,000	\$64,179 + 32% of the amount over \$315,000	\$157,501- \$200,000	\$30,698 + 32% of the amount over \$157,500
\$200,001- \$500,000	\$45,689.50 + 35% of the amount over \$200,000	\$400,001- \$600,000	\$91,379 + 35% of the amount over \$400,000	\$200,001- \$500,000	\$44,298 + 35% of the amount over \$200,000
Over \$500,000	\$150,689.50 + 37% of the amount over \$500,000	Over \$600,000	\$161,379 + 37% of the amount over \$600,000	Over \$500,000	\$149,298 + 37% of the amount over \$500,000

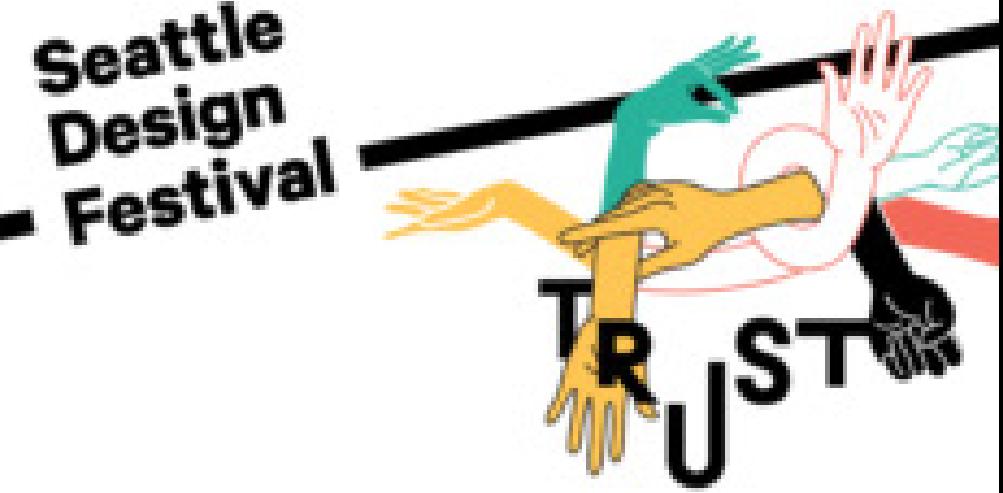
Required Minimum Distributions

The Uniform Lifetime Table can be used by all IRA owners at age 70½ years, unless their sole beneficiary for the entire year is a spouse who is more than 10 years younger. Then the regular Joint Life Expectancy Table is used (see IRS Pub. 590), which could reduce the required minimum distribution even further.



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Seattle Design Festival

PARK(ing) Day

FRI 9/21
9AM - 7PM
CITYWIDE
Visit [bit.ly/PARKingDay2018](#)
for individual installations

PARKING DAY AWARDS CEREMONY
Thurs. 9/20, 6PM - 7:30PM
Center for Architecture & Design / 1010 Western Ave.
PRESENTATION
By SDOT + American Society of Landscape Architects Washington Chapter

THE DRIVERLESS DATA CONUNDRUM
Thurs. 9/20, 6PM - 8PM
TEAGUE Design Studio / 110 Union, Ste 500
PRESENTATION
By TEAGUE

ASK AN ARCHITECT: NAVIGATING YOUR BUILDING PROJECT
Sat. 9/22, 9AM - 11AM
Center for Architecture & Design / 1010 Western Ave.
PRESENTATION
By AIA Seattle Small Practice and Residential Committee (SPARC)

SEPT 6 - 21

ALL OVER SEATTLE

Most programs are free, open to the public, and do not require RSVP unless otherwise specified (\$). For the most current program information and schedule visit [designinpublic.org](#).



Opening Party

THURS 9/6
7PM - 10PM
THE COLLECTIVE
400 DEXTER AVE N

Block Party

SAT 9/8, 10AM - 7PM
SUN 9/9, 10AM - 5PM
OCCIDENTAL PARK
117 S WASHINGTON ST

"TO HOUSE"
AIA Seattle Committee on Homelessness + Real Change

BUILDING TRUST
AIA Seattle Women in Design + Diversity Roundtable Committees

NAVIGATING TRUST
Bassetti Architects

BLIND TRUST
BCRA Design + Andersen Construction

MAPPING TRUST
Bill & Melinda Gates Foundation Discovery Center

TRANSPARENT TRUST
CJF Edmonds

THE TRUST MAZE
CLARK | BARNES

LEAVE YOUR MARK ON SEATTLE
Cone Architecture

IDENTITY BRIDGE
Design for America, University of WA

SPHERICALLY ENLIGHTENED
Freiheit Architecture

BLIND TRUST
Gensler Seattle

TOUCH
GGLO Design

MATERIAL TRANSPARENCY IS TRUST
Healthy Materials Collaborative

PUBLIC REFLECTIONS
Hornall Anderson

SEEING IS BELIEVING
Johnston Architects + The Global Innovation Exchange + Schuchart

BLOX
KATERRA

LOVE SEAT IN RED
Khadja Ann Tarver

SECRET SOUNDS

LMN Architects + Arup

SPACEBOX

Madeline Jo

PERCEIVED EDGES

Mithun

STICKS AND STRINGS

Mithun

OPENHOUSE

NAC Architecture

BUILDING TRUST WITH BUILDING BLOCKS

DLR Group

Pacific Science Center's Tinker Tank

GAME CHANGER

Rollude Architects

SEA+CDMX

Sea+CDMX

WE MEEOGRAPH

Seattle Design Nerds

POWER OF TRUST

Signal A+R + Dovetail

+ Electric Coffin + Jill Drilevich

TALK TO A STRANGER

Site Workshop
Landscape Architecture

SPPIRES

Spelbee Space

TRUST THE MOVEMENT

Studio Meng Strazzera

DO YOU SEE WHAT I SEE?

The Department of Social Affairs

I TRUST YOU

The Evergreen SAT. ONLY

SHARED

STRUCTURE: A BENCH & INTERACTIVE CANOPY

UW Department of Architecture

TEAGUE HANGOVER

BRUNCH

Fri. 9/7, 8AM - 12PM

TEAGUE Design Studio

110 Union, Ste 500

WORKSHOP

By TEAGUE / 21+ / RSVP
bit.ly/TEAGUE0907

SEISMIC CULTURES: IMAGINING ALTERNATIVES
UW School and Dept. of Human Centered Design & Engineering

SEA-SAW

VIA Architecture + Creeworks

LOVE SEAT IN RED

Khadja Ann Tarver

SECRET SOUNDS

LMN Architects + Arup

SPACEBOX

Madeline Jo

PERCEIVED EDGES

Mithun

Design Discussions

TUES 9/11 + THURS 9/13

WALKING TOUR: PLACES FOR PEOPLE IN OTHELLO
Sat. 9/8, 10AM - 11AM + 2PM - 3PM
Othello Light Rail Station
MLK Jr Way S. & S. Othello St.

TOUR

By Healthy Othello Safer

Through Environmental

Design

ARTIFACT: A GAME OF TRUST AND BALANCE

Center for Architecture &

Design / 1010 Western Ave

PRESENTATION

By Shift Zero, a zero net

carbon building alliance

SECRET SOUNDS

Center for Architecture &

Design / 1010 Western Ave

PRESENTATION

By Microsoft, Margaret

Price Director | Design

Strategy

PERCEIVED EDGES

Mithun

AN ALLIANCE OF TRUST: SHIFT ZERO AND THE COLLECTIVE PUSH FOR REAL CLIMATE ACTION IN ARCHITECTURE
Sat. 9/8, 10AM - 11AM + 2PM - 3PM
Center for Architecture & Design / 1010 Western Ave.

TOUR

By Healthy Othello Safer

Through Environmental

Design

PRESENTATION

By Shift Zero, a zero net

carbon building alliance

SECRET SOUNDS

Center for Architecture &

Design / 1010 Western Ave

PRESENTATION

By Microsoft, Margaret

Price Director | Design

Strategy

PERCEIVED EDGES

Mithun

DYNAMICS OF TRUST: SHIFT ZERO AND THE COLLECTIVE PUSH FOR REAL CLIMATE ACTION IN ARCHITECTURE
Tues. 9/11, 4PM - 6PM
Freeway Park - Seneca Plaza / 600 Seneca St.

ACTIVITY

By Freeway Park

Association

PRESENTATION

By Microsoft, Margaret

Price Director | Design

Strategy

SECRET SOUNDS

Center for Architecture &

Design / 1010 Western Ave

PRESENTATION

By Microsoft, Margaret

Price Director | Design

Strategy

PERCEIVED EDGES

Mithun

DESIGNING EQUITY AND TRUST
Wed. 9/12, 5:30PM - 6:30PM
Center for Architecture & Design / 1010 Western Ave.

PRESENTATION

By Microsoft, Margaret

Price Director | Design

Strategy

PRESENTATION

By Microsoft, Margaret

Price Director | Design

Strategy

SECRET SOUNDS

Center for Architecture &

Design / 1010 Western Ave

PRESENTATION

By Microsoft, Margaret

Price Director | Design

Strategy

PERCEIVED EDGES

Mithun

URBAN+: ADDING DENSITY WHILE RETAINING CHARACTER
Thurs. 9/13, 6PM - 8PM
bill architects / 610 2nd Ave.

PRESENTATION

By bill architects

610 2nd Ave.

WORKSHOP

By Velocity + DesignArt

and Technology Studio

SECRET SOUNDS

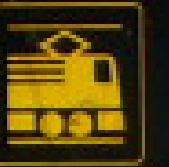
Velocity Dance Center / 1621 12th Ave #100

WORKSHOP

By Velocity + DesignArt

and Technology Studio

SECRET SOUNDS



Abfahrt

© Départ-Partenza-Departure

Bahnhof Zürich Tiefenbrunnen

11 Dezember 2005–9 Dezember 2006

5 00

Stell. Sektion

511 516	Melten-Uetikon	2 8
537 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz-Baden	1 8
540 517	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	2 8
531 518	Herrliberg-Feldmeilen	2 8
532 518	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz-Baden	1 8

6 00

Stell. Sektion

608 516	Melten-Uetikon	2 8
608 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz-Baden	1 8
612 517	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	2 8
627 518	Herrliberg-Feldmeilen	2 8
629 518	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz-Baden	1 8
634 518	Melten-Uetikon	2 8
635 518	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon (Schaffhausen)	1 8
637 518	Herrliberg-Feldmeilen	2 8
639 518	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz-Baden	1 8

7 00

Stell. Sektion

708 516	Melten-Uetikon	2 8
708 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz-Baden	1 8
721 516	Herrliberg-Feldmeilen	2 8
723 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz-Baden	1 8
728 516	Melten-Uetikon	2 8
728 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon (Schaffhausen)	1 8
731 516	Herrliberg-Feldmeilen	2 8
733 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz-Baden	1 8

8 00

Stell. Sektion

808 516	Melten-Uetikon	2 8
808 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
821 516	Herrliberg-Feldmeilen	2 8
823 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz	1 8
828 516	Melten-Uetikon	2 8
828 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon (Schaffhausen)	1 8

9 00

Stell. Sektion

908 516	Melten-Uetikon	2 8
908 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
921 516	Herrliberg-Feldmeilen	2 8
923 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz	1 8
928 516	Melten-Uetikon	2 8

10 00

Stell. Sektion

1008 516	Melten-Uetikon	2 8
1008 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
1021 516	Herrliberg-Feldmeilen	2 8
1023 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz	1 8
1028 516	Melten-Uetikon	2 8

11 00

Stell. Sektion

1108 516	Melten-Uetikon	2 8
1108 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
1121 516	Herrliberg-Feldmeilen	2 8
1123 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz	1 8
1128 516	Melten-Uetikon	2 8

12 00

Stell. Sektion

1208 516	Melten-Uetikon	2 8
1208 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
1221 516	Herrliberg-Feldmeilen	2 8
1223 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz	1 8
1228 516	Melten-Uetikon	2 8

13 00

Stell. Sektion

1321 516	Melten-Uetikon	2 8
1323 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
1328 516	Melten-Uetikon	2 8
1329 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz (Schaffhausen)	1 8
1329 516	Herrliberg-Feldmeilen	2 8

14 00

Stell. Sektion

1420 516	Melten-Uetikon	2 8
1422 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
1421 516	Herrliberg-Feldmeilen	2 8
1423 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz	1 8
1428 516	Melten-Uetikon	2 8

15 00

Stell. Sektion

1520 516	Melten-Uetikon	2 8
1522 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
1521 516	Herrliberg-Feldmeilen	2 8
1523 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz	1 8
1528 516	Melten-Uetikon	2 8

16 00

Stell. Sektion

1621 516	Melten-Uetikon	2 8
1623 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
1628 516	Melten-Uetikon	2 8
1629 516	Herrliberg-Feldmeilen	2 8
1630 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz	1 8

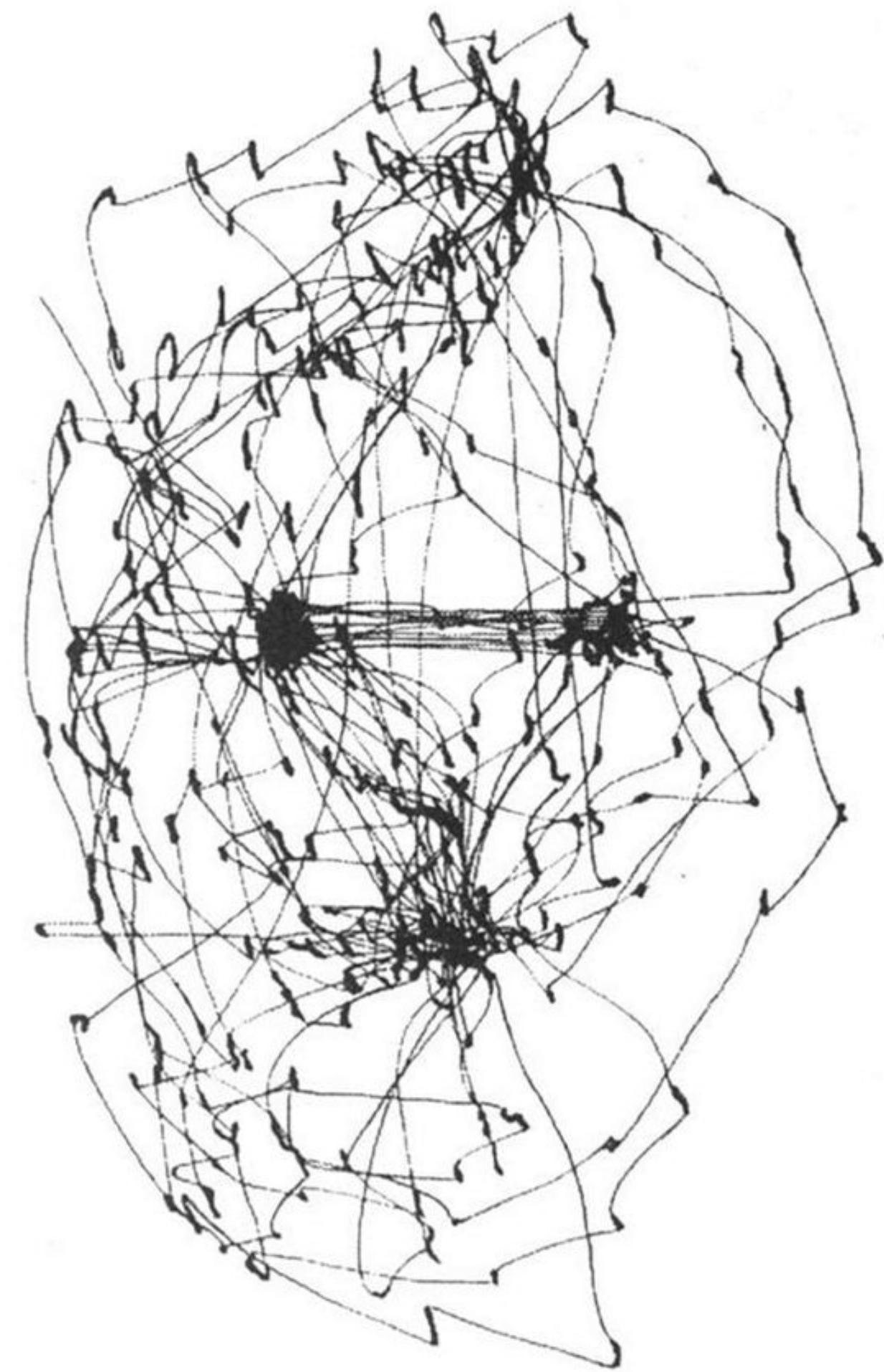
17 00

Stell. Sektion

1720 516	Melten-Uetikon	2 8
1722 516	Stadelhafen-Zürich HB-Denklee-Kölliken-Wetzikon	1 8
1723 516	Melten-Uetikon	2 8
1728 516	Stadelhafen-Zürich HB-Denklee-Regensdorf-Wetz	1 8
1729 516	Herrliberg-Feldmeilen	2 8

18 00

Reading



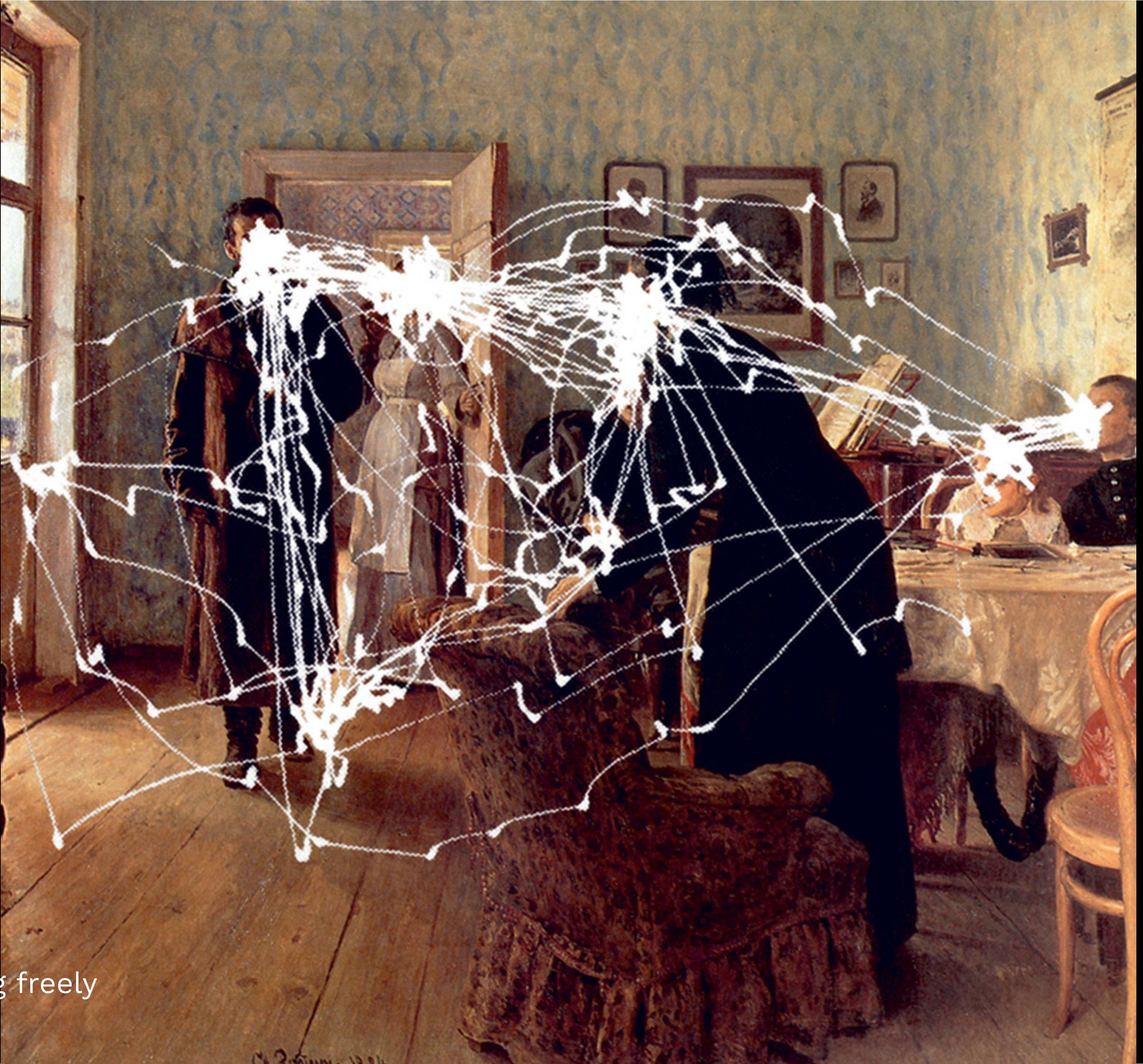
Alfred Lukyanovich Yarbus

Pioneered the study of saccadic exploration of complex images, by recording the eye movements performed by observers while viewing natural objects and scenes.

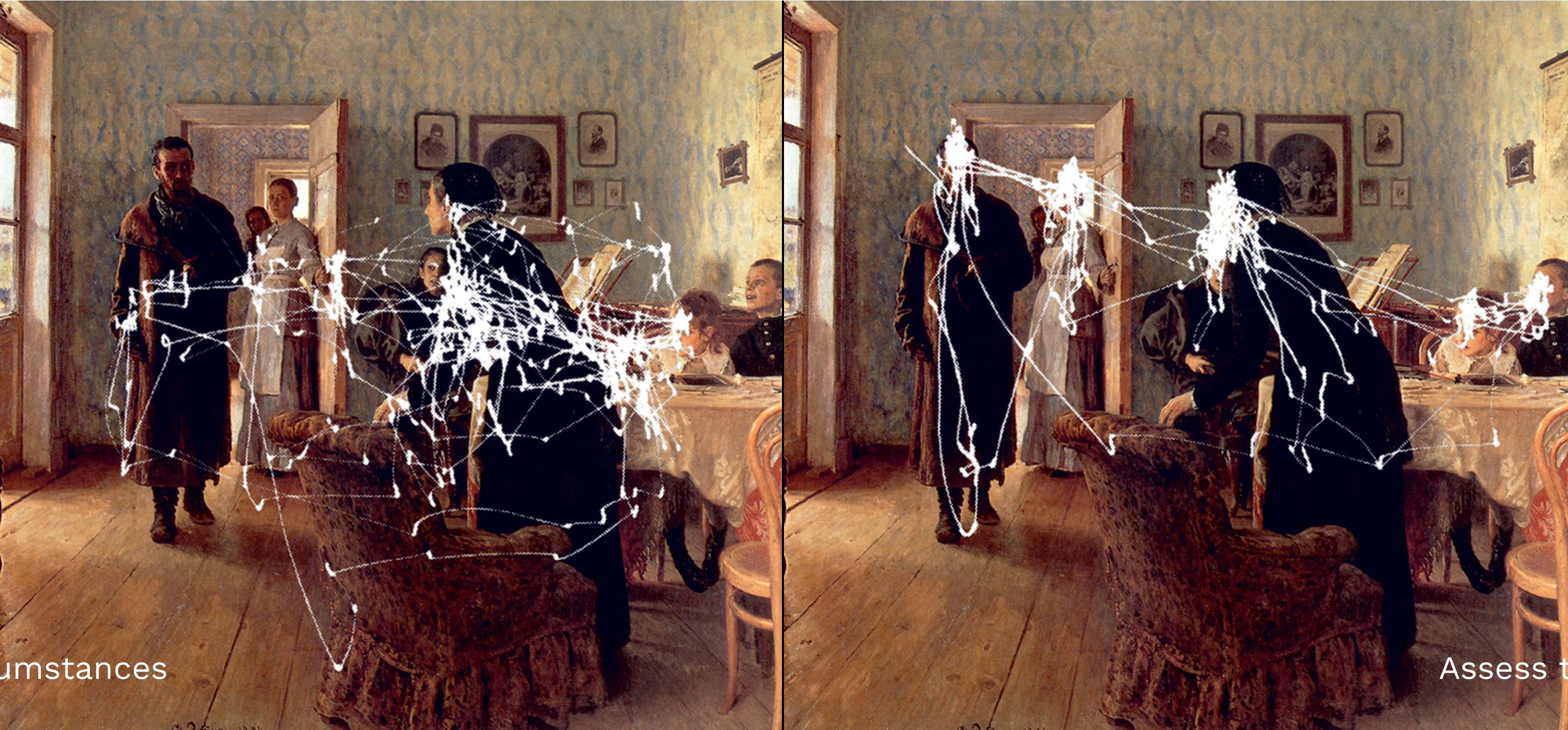
Yarbus showed that the trajectories followed by the gaze depend on the task that the observer has to perform.

Ilya Repin, An Unexpected Visitor, 1884.





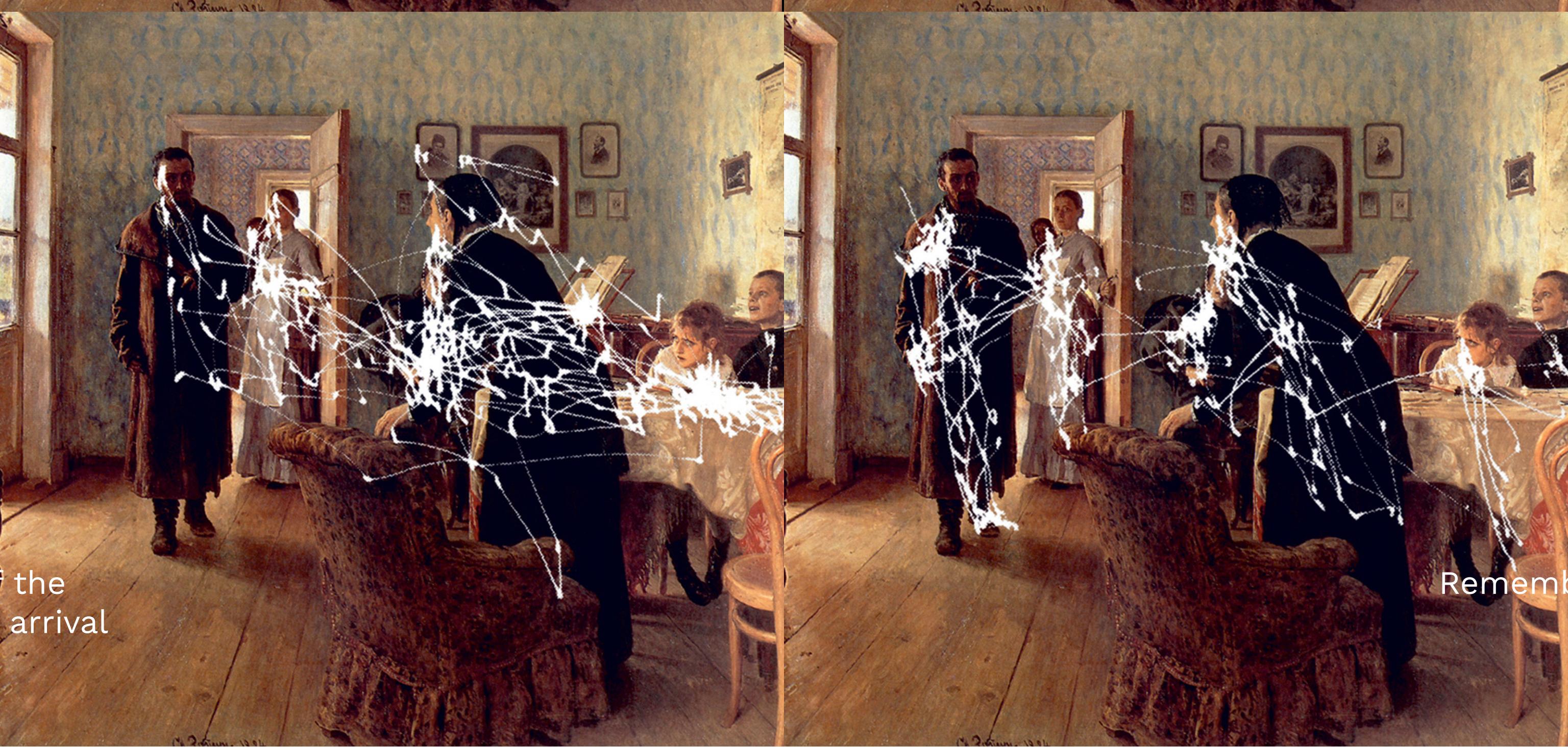
Examine the painting freely



Estimate the material circumstances
of the family

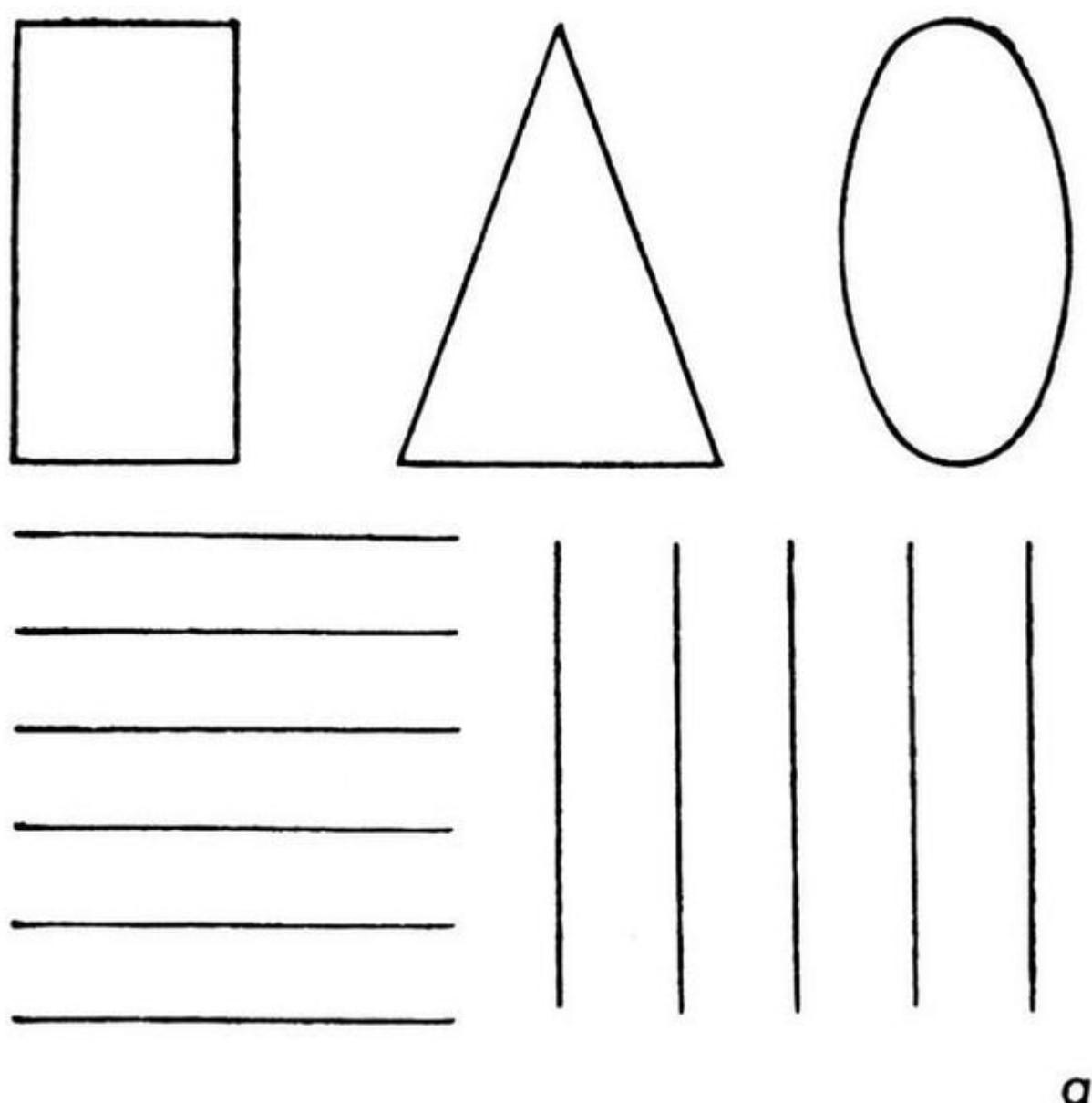


Assess the ages of the characters

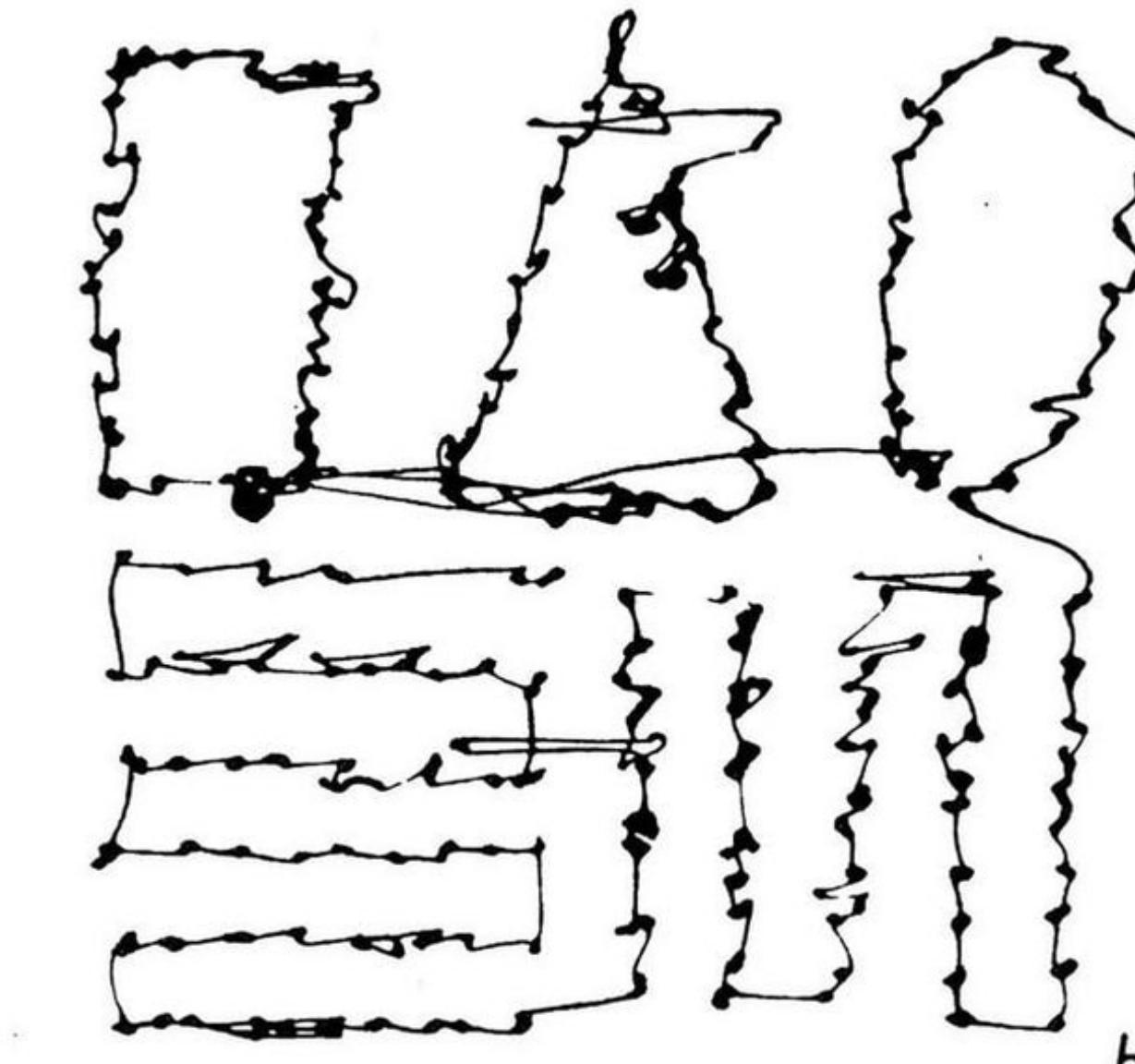


Determine the activities of the
family prior to the visitor's arrival

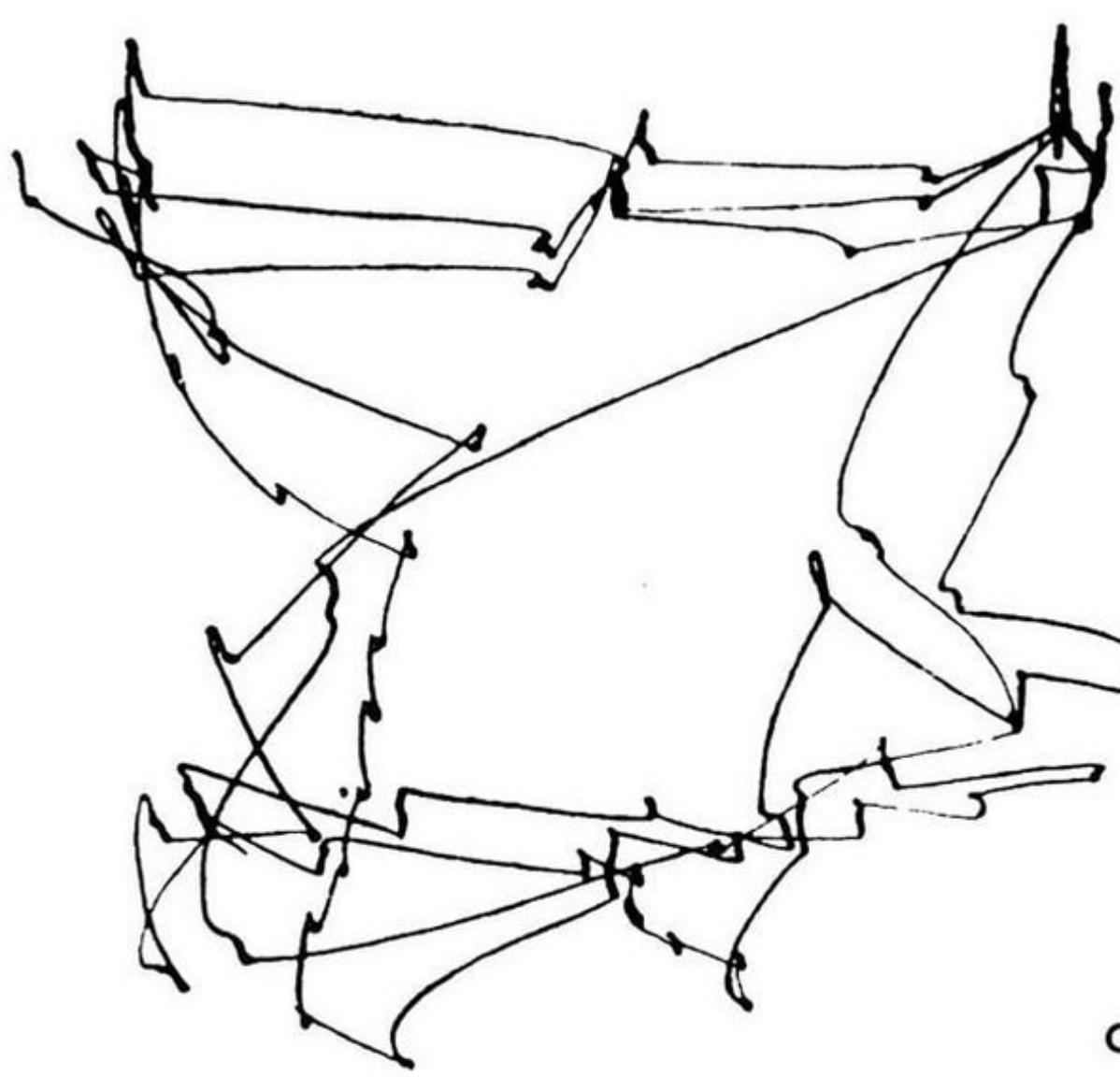
Remember the characters' clothes



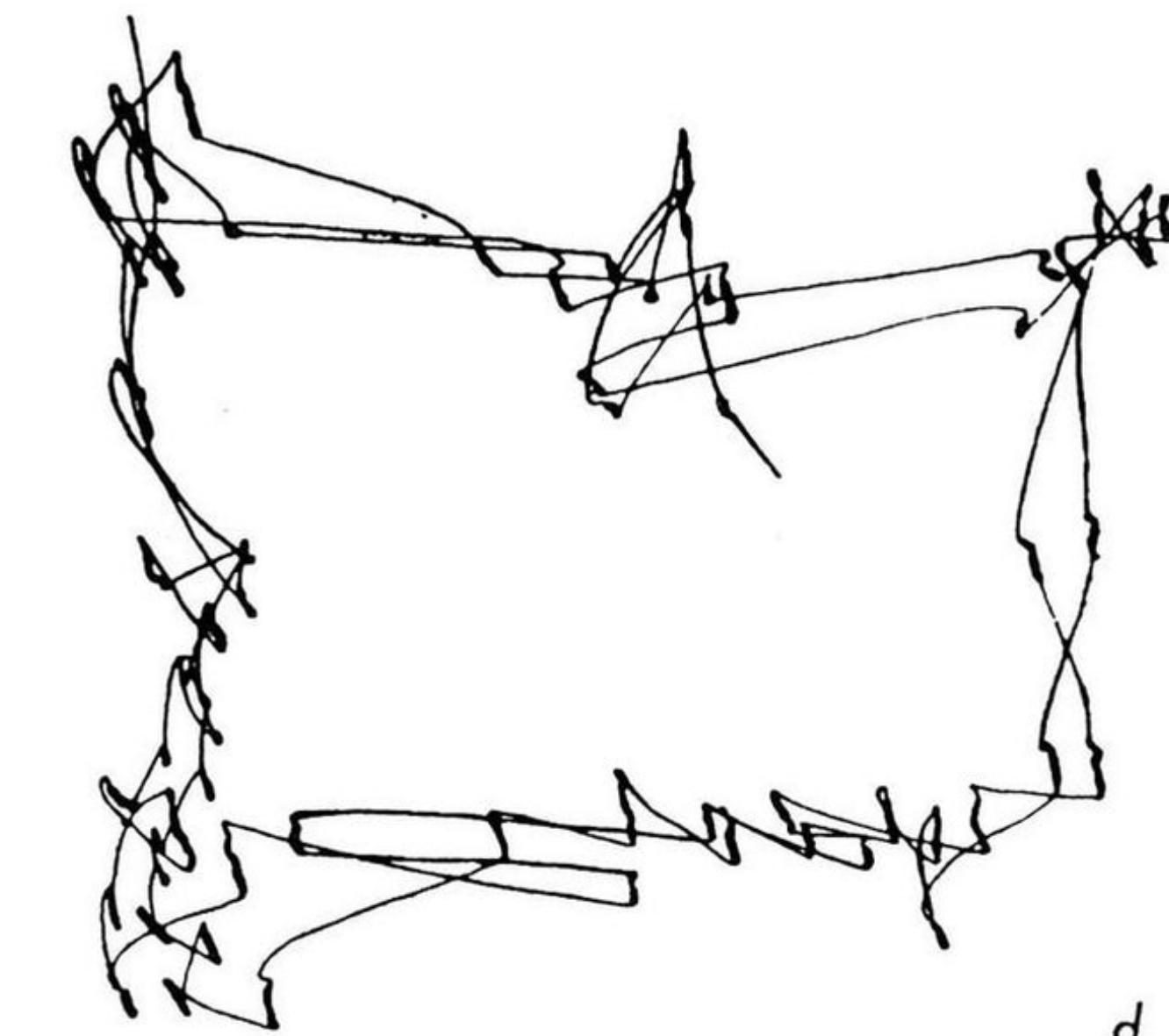
a



b



c



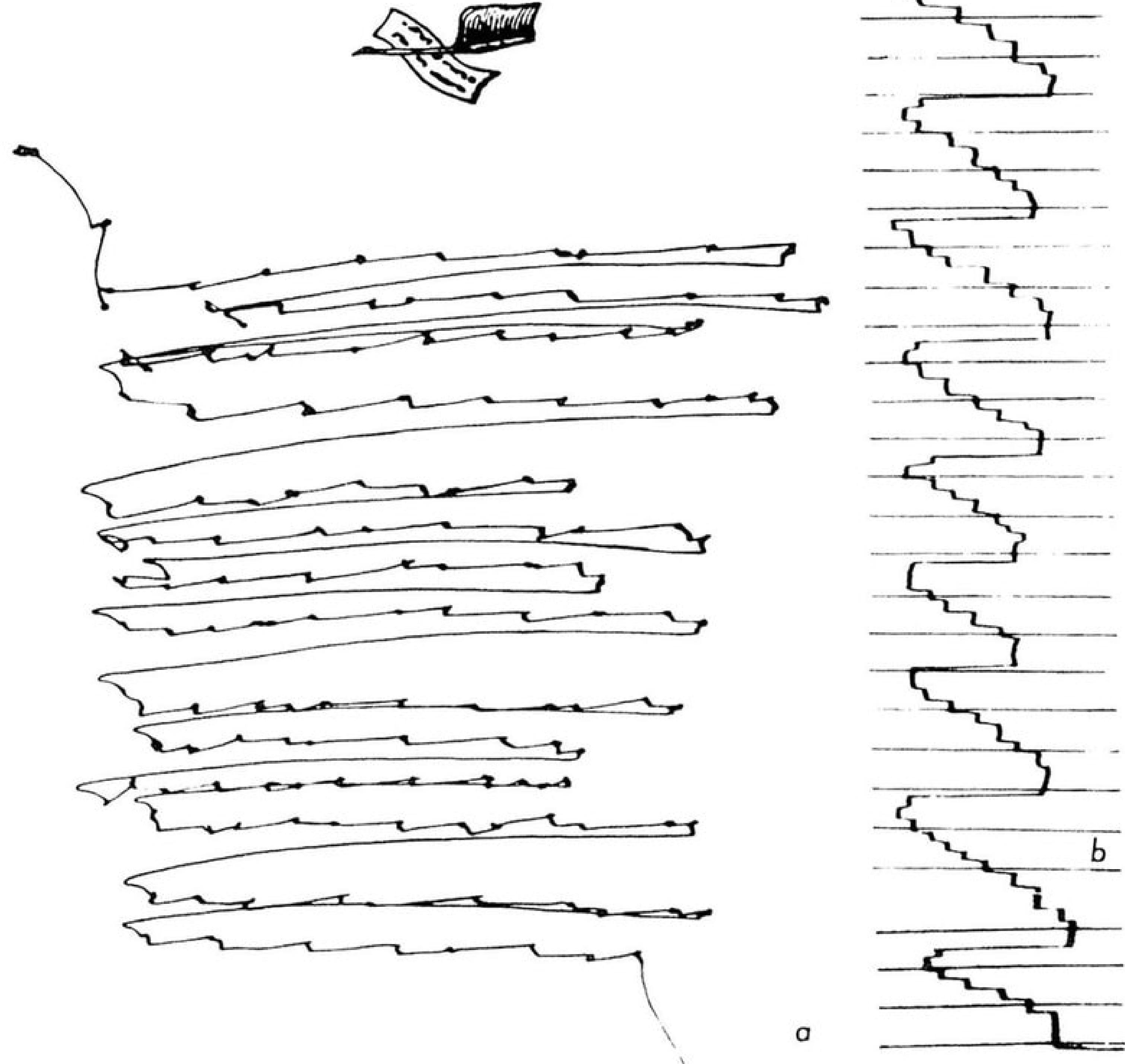
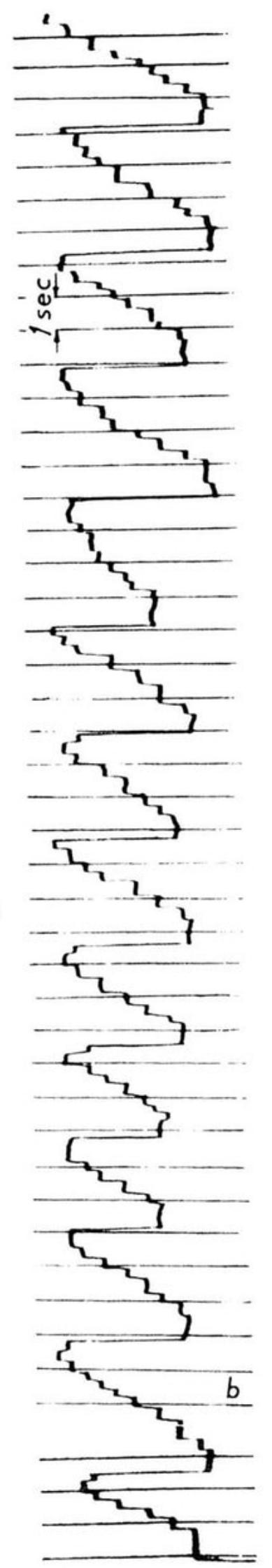
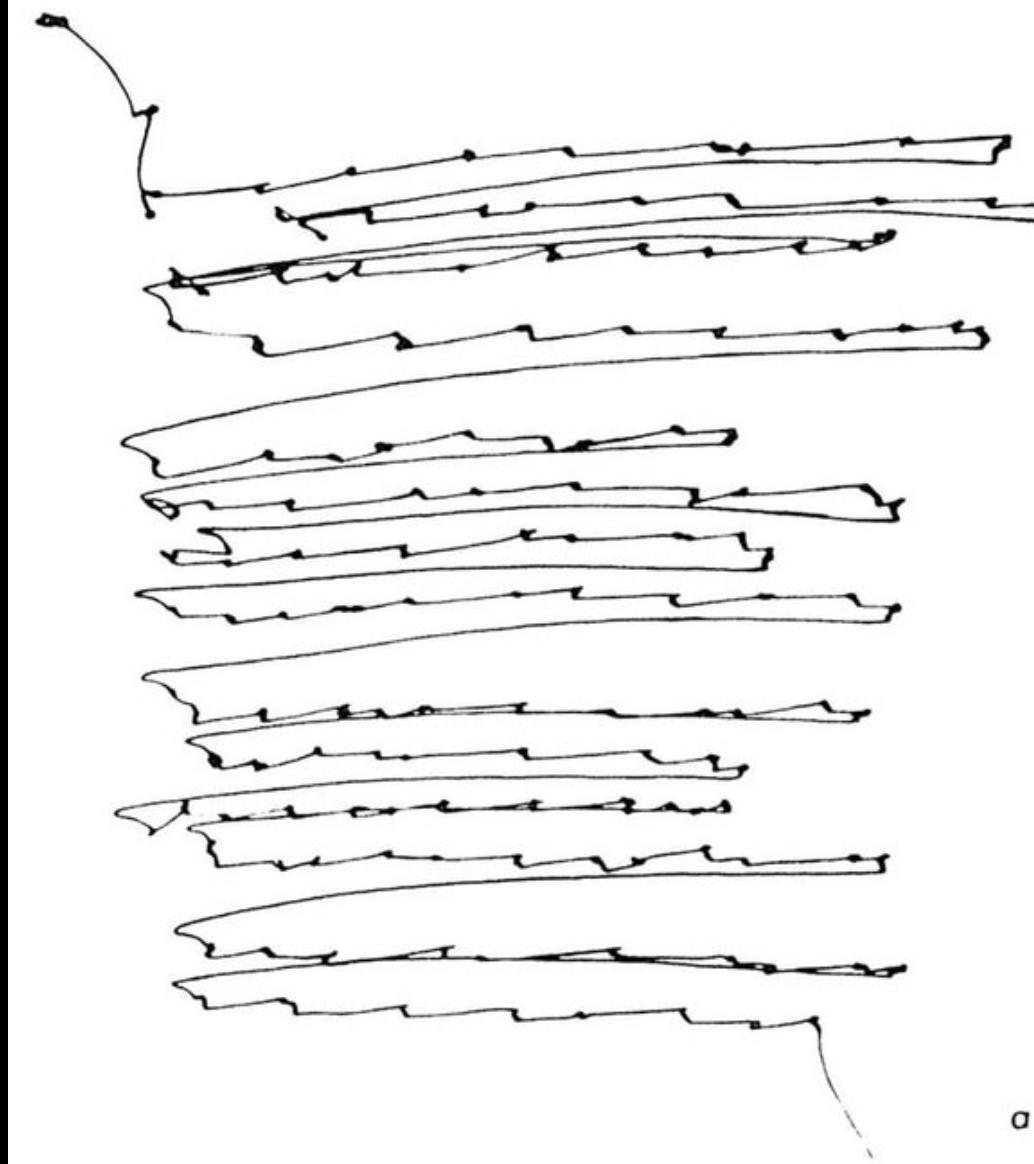
d

вы, мой стих не блещет новизной,
Разнообразьем перемен нежданных.
Не поискать ли мне тропы иной,
Приёмов новых, сочетаний странных?

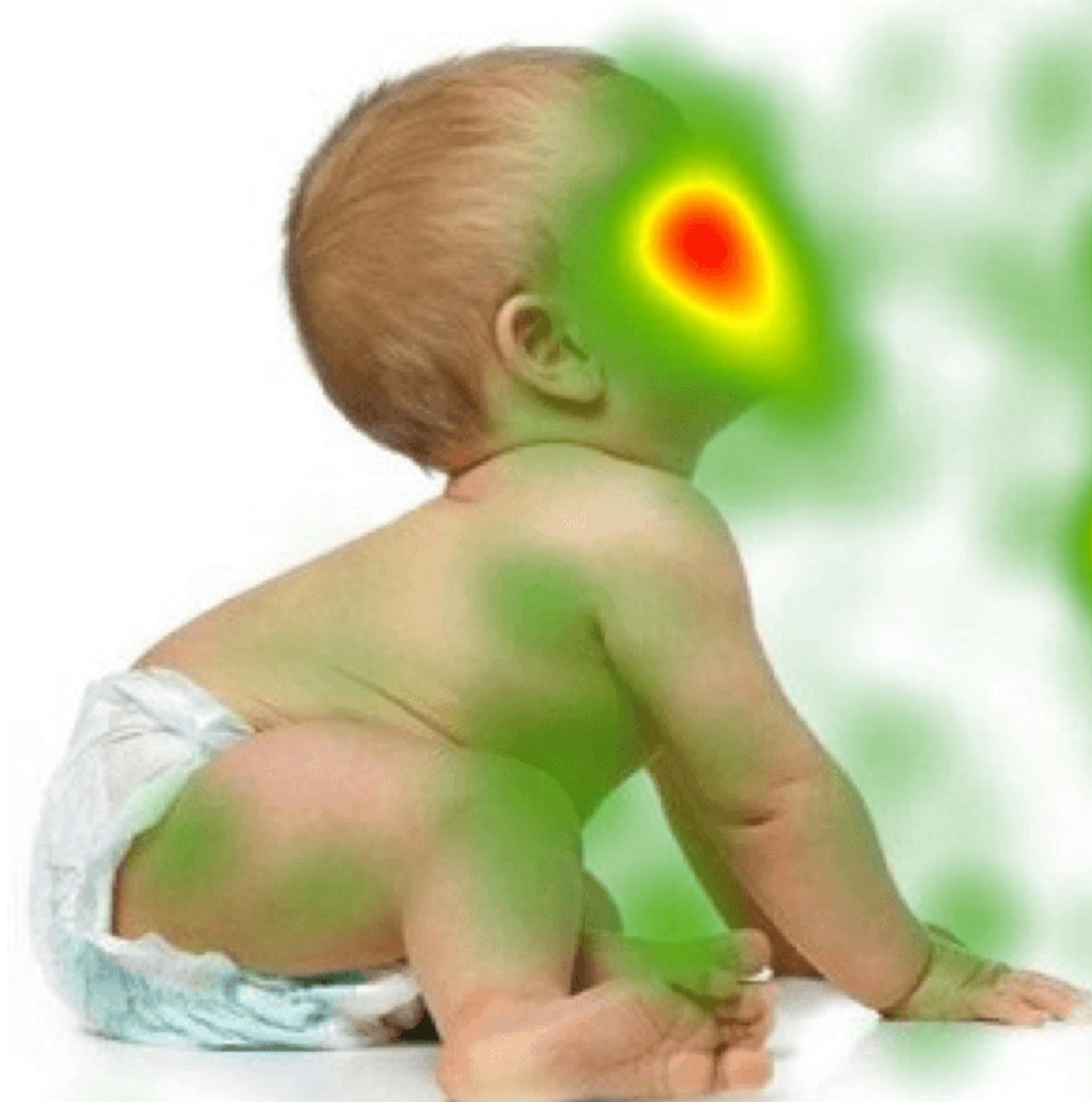
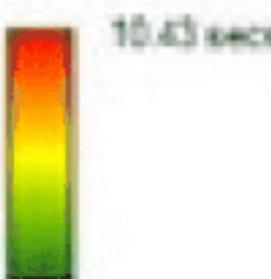
Я повторяю прежнее опять,
В одежде старой появляюсь снова.
И кажется, по имени назвать
Меня в стихах любое может слово.

Всё это оттого, что вновь и вновь
Решаю я одну свою задачу:
Я о тебе пишу, моя любовь,
И то же сердце, те же силы трачу.

Всё то же солнце ходит надо мной,
Но и оно не блещет новизной.



Participant filter: All



ErgoFit™ for the most sensitive skin.

With our unique leak-free protection, add the extra absorbency and moisture protection you have been looking for.

ErgoFit™ features our unique high-absorbency natural-blend cotton padding. This provides cotton-soft, extra thick, gel-free protection for your baby's sensitive skin. The chlorine-free materials and hypoallergenic polymers is non-toxic and non-irritating. Clinically tested and dermatologist recommended for babies with allergies and sensitive skin.



TM

If you are not satisfied with the baby leakage protection, you will get your money back. Read more about our leakfree guarantee at www.baby.com

Spacing

- Kerning
- Tracking
- Word spacing
- Line spacing (Leading)

fulip

fulip

Yarn

Yarn

You

Adobe Optical

You

Font Kerning

One day he writes to me: description of a dream. More and more my dreams find their settings in the department stores of Tokyo, the subterranean tunnels that extend them and run parallel to the city. A face appears, disappears... a trace is found, is lost. All the folklore of dreams is so much in its place that the next day when I am awake I realize that I continue to seek in the basement labyrinth the presence concealed the night before.

0 Tracking

One day he writes to me: description of a dream. More and more my dreams find their settings in the department stores of Tokyo, the subterranean tunnels that extend them and run parallel to the city. A face appears, disappears... a trace is found, is lost. All the folklore of dreams is so much in its place that the next day when I am awake I realize that I continue to seek in the basement labyrinth the presence concealed the night before.

75 Tracking

The God of Small Things

THE GOD OF SMALL THINGS

0 Tracking

The God of Small Things

THE GOD OF SMALL THINGS

75 Tracking

One day he writes to me: description of a dream. More and more my dreams find their settings in the department stores of Tokyo, the subterranean tunnels that extend them and run parallel to the city. A face appears, disappears... a trace is found, is lost. All the folklore of dreams is so much in its place that the next day when I am awake I realize that I continue to seek in the basement labyrinth the presence concealed the night before.

100% Word spacing

One day he writes to me: description of a dream. More and more my dreams find their settings in the department stores of Tokyo, the subterranean tunnels that extend them and run parallel to the city. A face appears, disappears... a trace is found, is lost. All the folklore of dreams is so much in its place that the next day when I am awake I realize that I continue to seek in the basement labyrinth the presence concealed the night before.

300% Word spacing

One day he writes to me: description of a dream. More and more my dreams find their settings in the department stores of Tokyo, the subterranean tunnels that extend them and run parallel to the city. A face appears, disappears... a trace is found, is lost. All the folklore of dreams is so much in its place that the next day when I am awake I realize that I continue to seek in the basement labyrinth the presence concealed the night before.

48/57

One day he writes to me: description of a dream. More and more my dreams find their settings in the department stores of Tokyo, the subterranean tunnels that extend them and run parallel to the city. A face appears, disappears... a trace is found, is lost. All the folklore of dreams is so much in its place that the next day when I am awake I realize that I continue to seek in the basement labyrinth the presence concealed the night before.

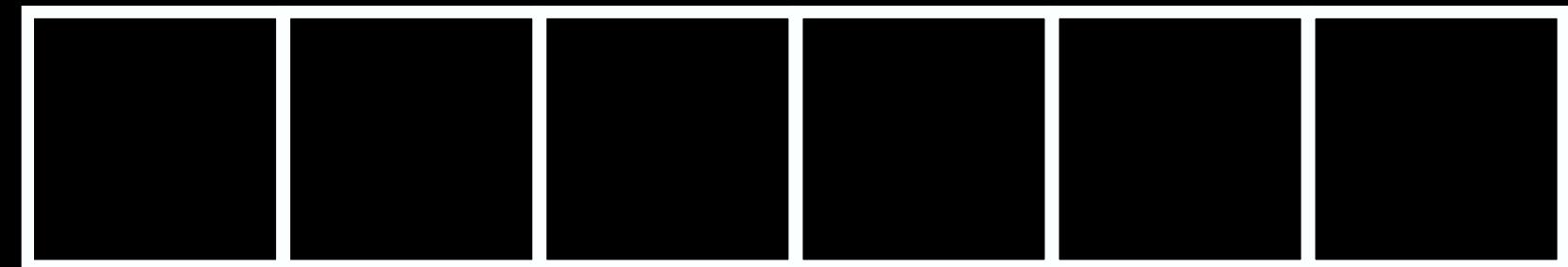
48/80

Hamburg

Hamburg

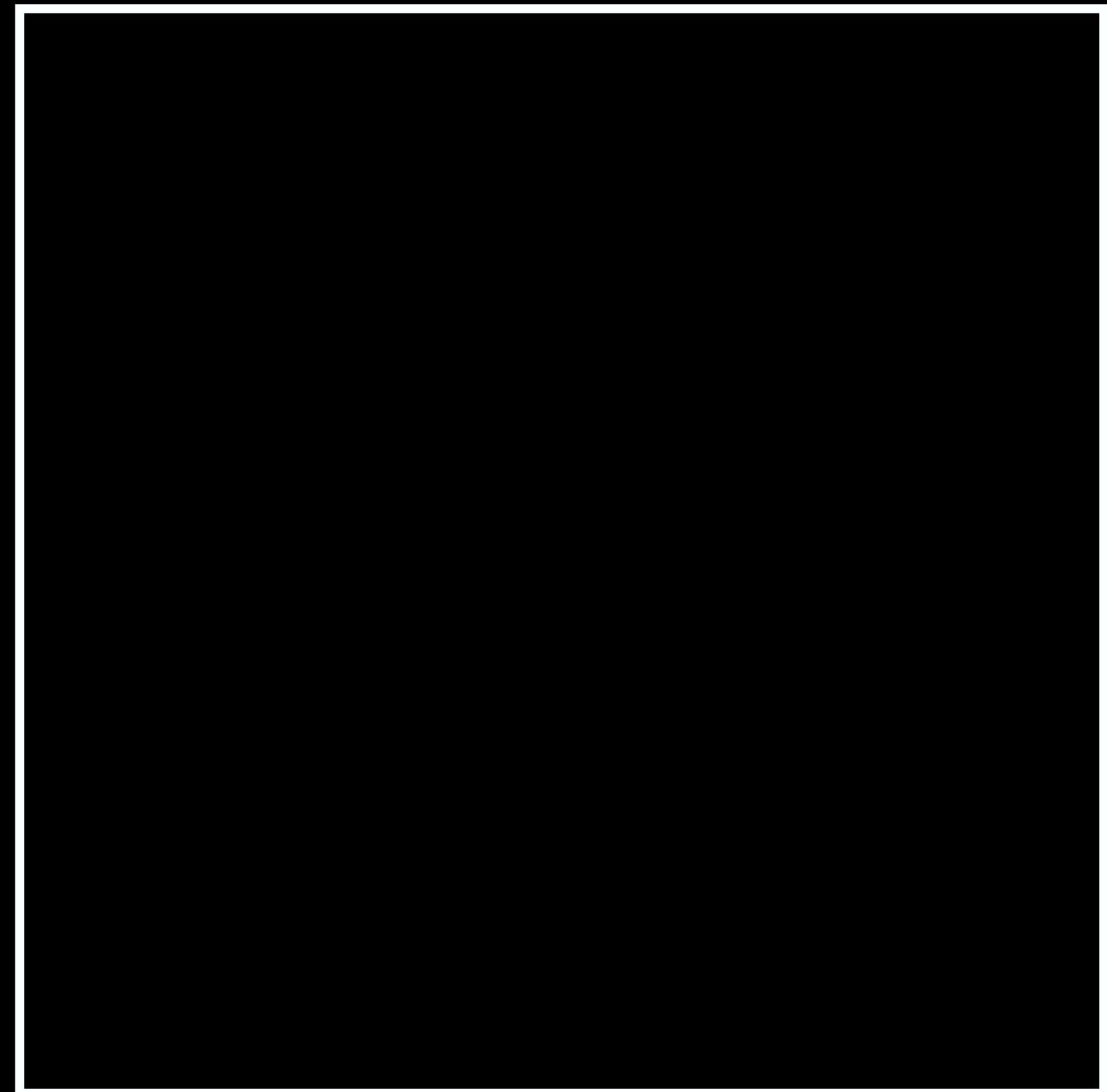
|.....|

72 points



6 picas

(1 pica = 12 points)



1 inch

Spacing Content

Music Genres & Subgenres Avant-garde Experimental music
Noise Lo-fi Musique concrète Electroacoustic Blues African blues Blues rock Blues shouter Canadian blues Chicago blues Classic female blues Contemporary R&B Country Blues country Hokum Outlaw country Progressive country Zydeco Country rap Folk American folk revival Anti-folk British folk revival Celtic music Chalga

Music Genres & Subgenres

Experimental music

Noise

Lo-fi

Musique concrète

Electroacoustic

African blues

Blues rock

Blues shouter

Canadian blues

Chicago blues

Blues country

Hokum

Outlaw country

Progressive country

Country rap

American folk revival

Anti-folk

British folk revival

Music Genres & Subgenres

Experimental music

Noise

Lo-fi

Musique concrète

Electroacoustic

African blues

Blues rock

Blues shouter

Canadian blues

Chicago blues

Blues country

Hokum

Outlaw country

Progressive country

Country rap

American folk revival

Anti-folk

British folk revival

Music Genres & Subgenres

1. Avant-garde

1.1 Experimental music

1.2 Noise

1.3 Lo-fi

1.4 Musique concrète

1.5 Electroacoustic

2. Blues

2.1 African blues

2.2 Blues rock

2.3 Blues shouter

2.4 Canadian blues

2.5 Chicago blues

3. Country

3.1 Blues country

3.2 Hokum

3.3 Outlaw country

3.4 Progressive country

3.5 Country rap

4. Folk

4.1 American folk revival

4.2 Anti-folk

4.3 British folk revival

Music Genres & Subgenres

Experimental music

Noise

Lo-fi

Musique concrète

Electroacoustic

African blues

Blues rock

Blues shouter

Canadian blues

Chicago blues

Blues country

Hokum

Outlaw country

Progressive country

Country rap

American folk revival

Anti-folk

British folk revival

Music Genres & Subgenres

1. Avant-garde

- 1.1 Experimental music
- 1.2 Noise
- 1.3 Lo-fi
- 1.4 Musique concrète
- 1.5 Electroacoustic

2. Blues

- 2.1 African blues
- 2.2 Blues rock
- 2.3 Blues shouter
- 2.4 Canadian blues
- 2.5 Chicago blues

3. Country

- 3.1 Blues country
- 3.2 Hokum
- 3.3 Outlaw country
- 3.4 Progressive country
- 3.5 Country rap

4. Folk

- 4.1 American folk revival
- 4.2 Anti-folk
- 4.3 British folk revival

Music Genres & Subgenres

Avant-garde

- Experimental music
- Noise
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- Electroacoustic

Blues

- African blues
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- Blues shouter
- Canadian blues
- Chicago blues

Country

- Blues country
- Hokum
- Outlaw country
- Progressive country
- Country rap

Folk

- American folk revival
- Anti-folk
- British folk revival

Music Genres & Subgenres

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Experimental music
Noise
Lo-fi
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Electroacoustic

Blues

African blues
Blues rock
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Canadian blues
Chicago blues

Country

Blues country
Hokum
Outlaw country
Progressive country
Country rap

Music Genres & Subgenres

Avant-garde

Experimental music
Noise
Lo-fi
Musique concrète
Electroacoustic

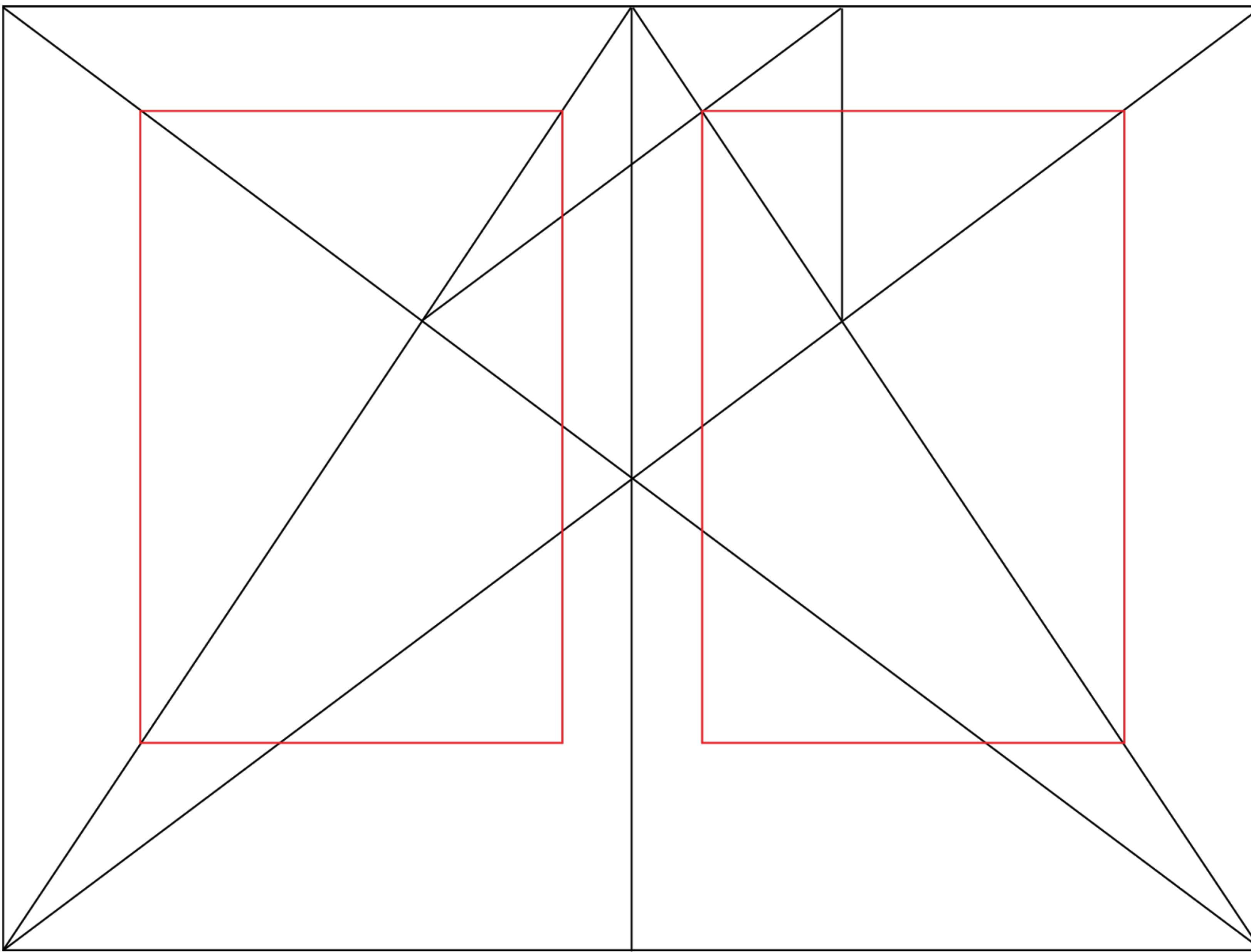
Blues

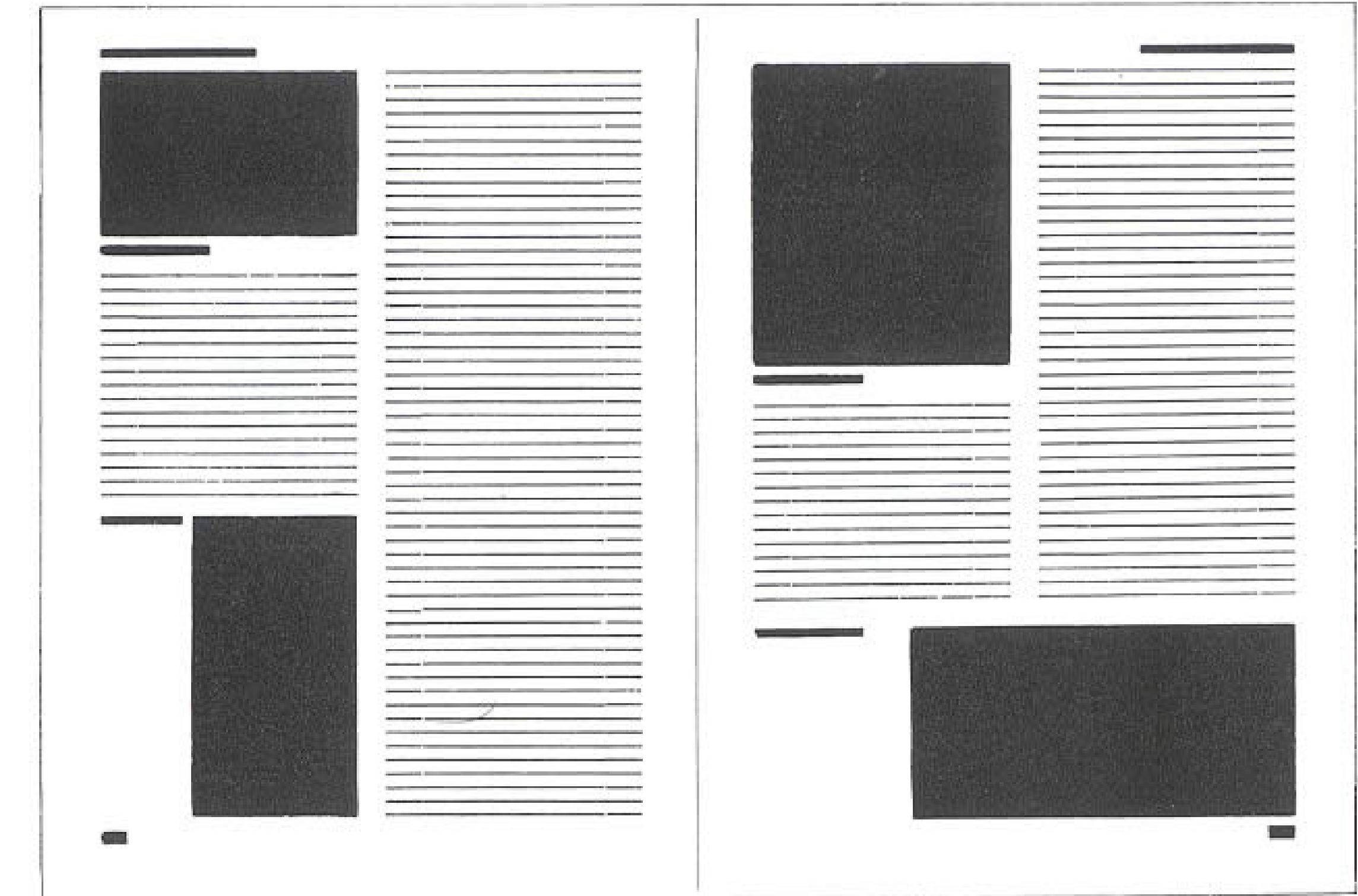
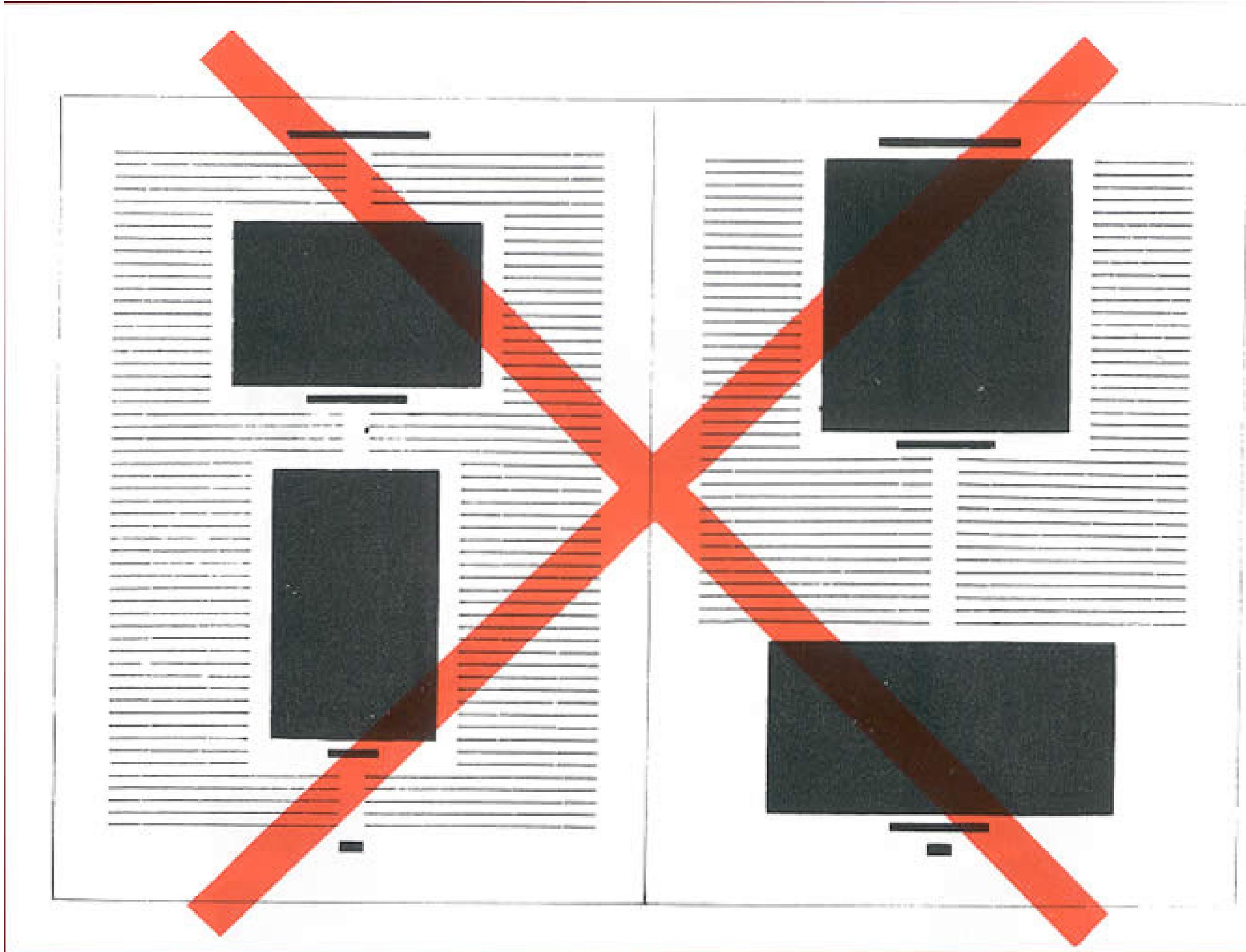
African blues
Blues rock
Blues shouter
Canadian blues
Chicago blues

Country

Blues country
Hokum
Outlaw country
Progressive country
Country rap

Grids

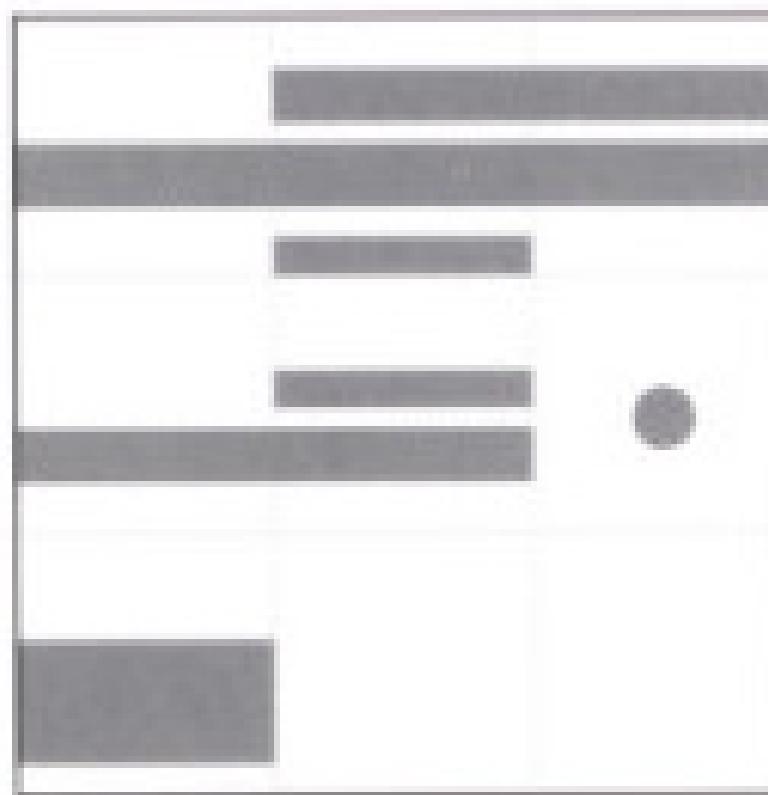




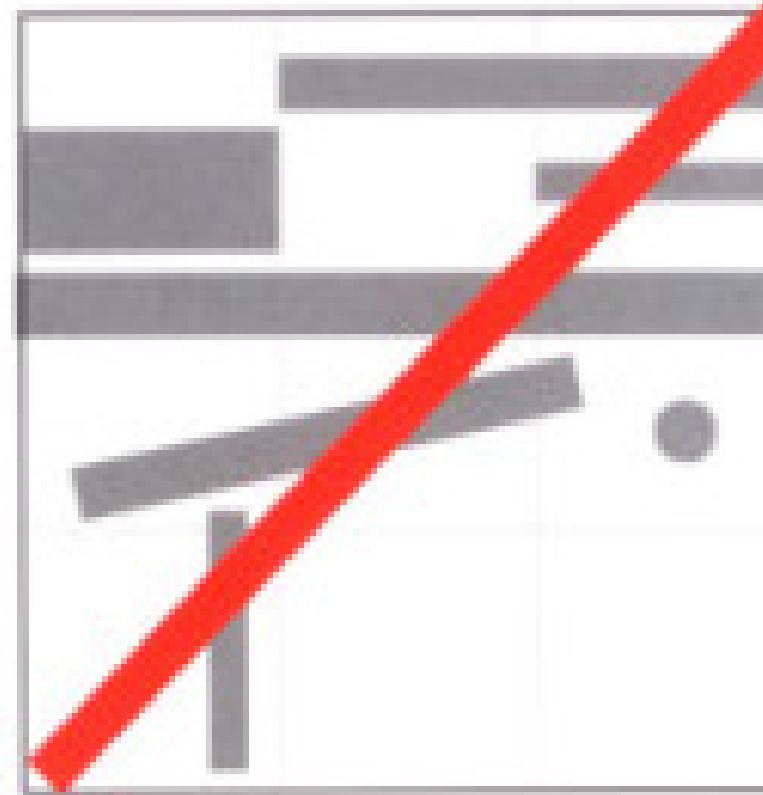
Constraints and Options

The format, rectangle elements, and a concise series of rules are given to the student:

- In the horizontal series, all rectangle elements must remain on the horizontal. In the horizontal/vertical series, all rectangles must be either horizontal or vertical. In the diagonal series, all rectangles must be on the same or contrasting diagonal.
- All rectangle elements must be used.
- No rectangle element may extend outside the format.
- Rectangle elements may almost touch but not overlap.



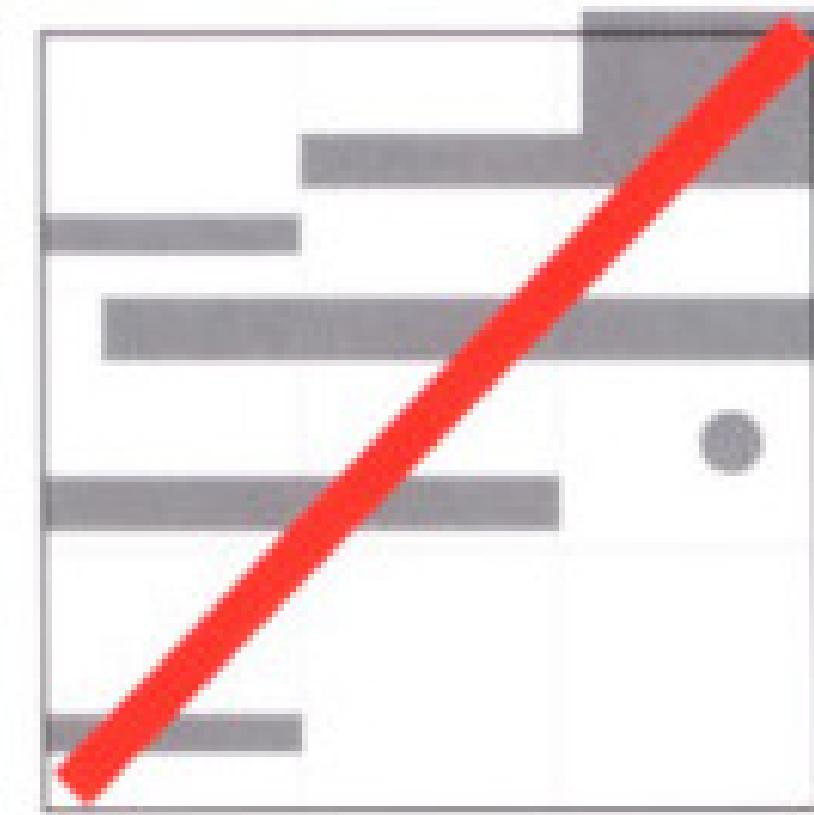
Yes. All rectangle elements are on the horizontal and all elements are used. Elements do not extend beyond the format or overlap. The circle may be placed anywhere in the format but may not overlap other elements.



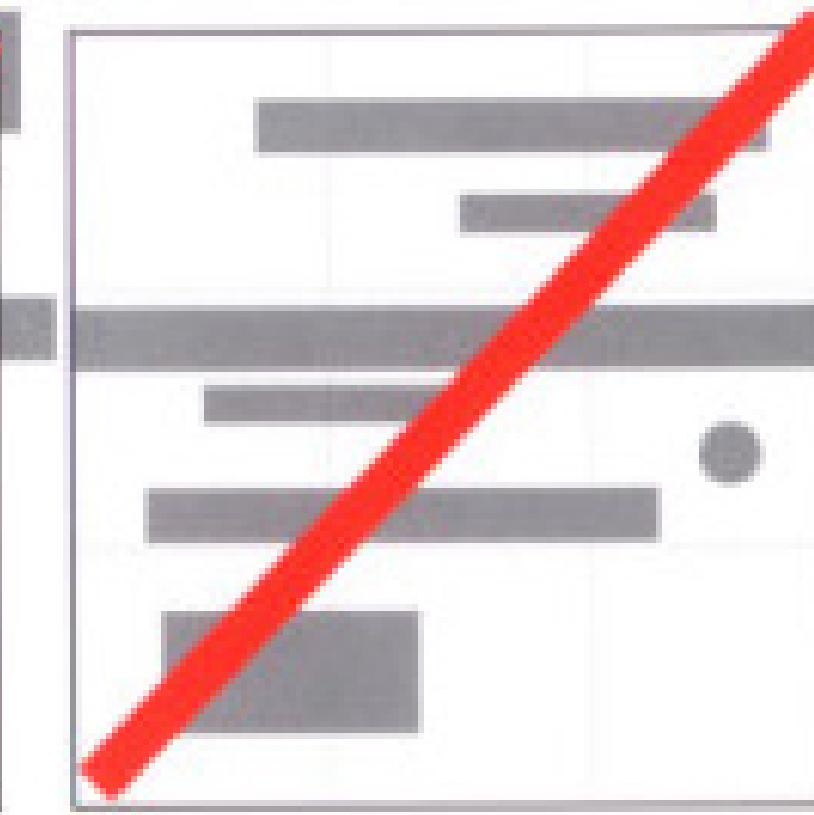
No. Elements must remain on the horizontal for the first series. Later compositions will work with vertical and diagonal elements.

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Since this is a formal composition project, the constraints are important rules for creating a cohesive whole. Elements must remain on the horizontal in the first series and will occupy other positions in later series. It is important that all elements are used, as each bar corresponds to a line of text from a message that will later replace the rectangle elements. All elements are sized to fit in either one, two, or three visual fields and must fit, left to right, within the grid columns.

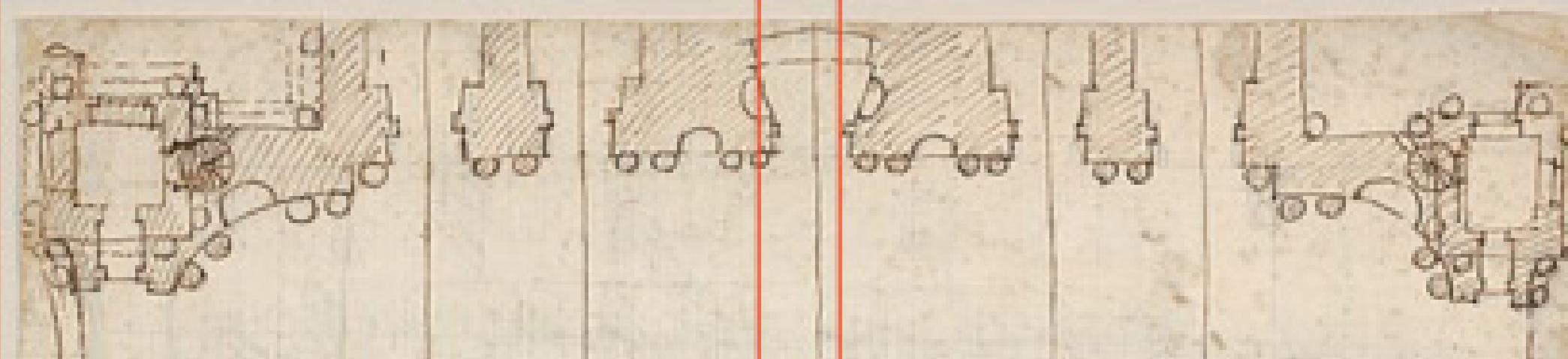


No. Elements may never overlap or extend beyond the format perimeter.

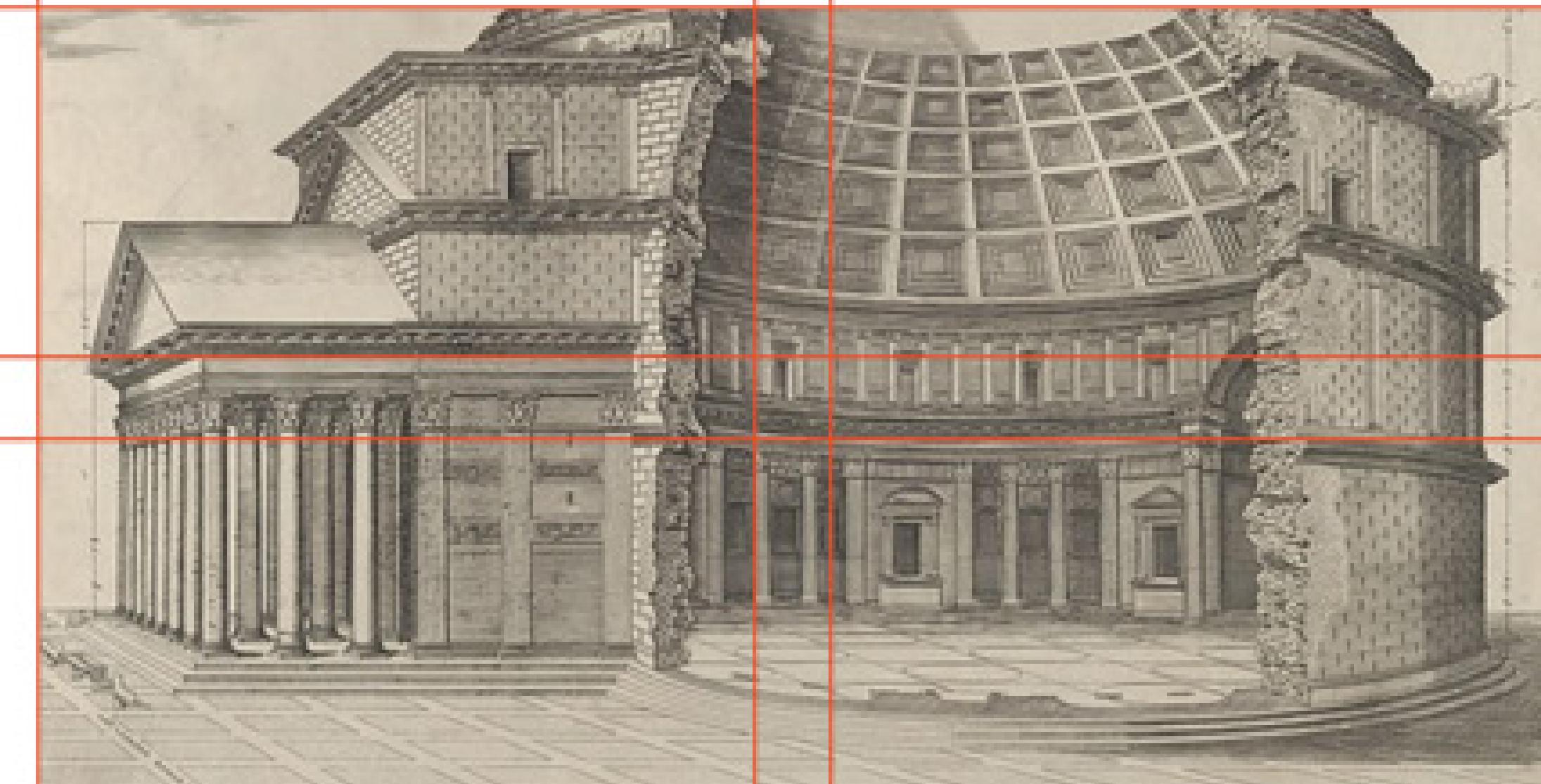


No. Elements must fit within the grid columns.

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora



molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur? At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas



incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum

molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta

The Grid System

The ultimate resource
in grid systems.

"The grid system is an aid, not a guarantee. It permits a number of possible uses and each designer can look for a solution appropriate to his personal style. But one must learn how to use the grid; it is an art that requires practice."
Josef Müller-Brockmann

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Compose to a Vertical Rhythm <small>On the Web, vertical rhythm is contributed to by three factors: font size, line height and margin or padding. All of these factors must be calculated with care in order that the rhythm is maintained.</small> 04.Dec.2008	960 Grid System <small>An effort to streamline web development workflow by providing commonly used dimensions, based on a width of 960 pixels. There are two variants: 12 and 16 columns, which can be used separately or in tandem.</small> 04.Dec.2008	Geometry of Design <small>The book focuses on the classic systems of proportioning, such as the golden section and root rectangles, as well as systems such as the Fibonacci Series.</small> 04.Dec.2008	InDesign 8.5x11 Grid System (12) <small>Adobe InDesign file with a grid system for an 8.5"x11" page that is divided into 12 columns and rows using the Rule of Thirds (Golden Ratio). Includes a 12pt baseline grid.</small> 29.Nov.2008	UX Magazine <small>A well designed collaborative site, with a very nice grid structure, that focuses on user experience.</small> 02.Dec.2008	Ace Jet 170 AisleOne Athletics BBDK Blanka Build Corporate Risk Watch David Airey Dirty Mouse Experimenta Experimental Jetset Form Fifty Five Grafik Magazine Grain Edit Graphic Hug Helvetica Film I Love Typography Lamosca magCulture Mark Boulton Minimal Sites Monocle Neubau NewWork OK-RM Original Linkage Robin Uleman SampsonMay Schmid Today September Industry Sonifyer Soulellis Subtraction Swiss Legacy Thinking for a Living This Studio Toko Visuelle Xavier Encinas Year of the Sheep
Incremental leading <small>In editorial design, there is a technique used for sidenotes and boxouts that aligns to the baseline grid, or vertical rhythm. It's called incremental leading.</small> 03.Dec.2008	Graph Paper by Konigi <small>This graph paper is made for visual designers, interaction designers, and information architects. You'll find styles for wireframing, story boarding, plotting values and for drafting sitemaps.</small> 03.Dec.2008	The Typographic Grid <small>We consider this to be the academic part two to "Grid Systems." Hans Rudolf Bosshard tackles a deeper understanding of the complex grid.</small> 30.Nov.2008	InDesign 11x17 Grid System (12) <small>Adobe InDesign file with a grid system for an 11"x17" page that is divided into 12 columns and rows using the Rule of Thirds (Golden Ratio). Includes a 12pt baseline grid.</small> 29.Nov.2008	Doane Paper Utility Notebook <small>A portable notebook featuring a patent pending Grid+Lines stationery design that combines the benefits of grid and ruled lines onto a single sheet of paper.</small> 28.Nov.2008	Grain Edit Graphic Hug Helvetica Film I Love Typography Lamosca magCulture Mark Boulton Minimal Sites Monocle Neubau NewWork OK-RM Original Linkage Robin Uleman SampsonMay Schmid Today September Industry Sonifyer Soulellis Subtraction Swiss Legacy Thinking for a Living This Studio Toko Visuelle Xavier Encinas Year of the Sheep
Applying Divine Proportion to Your Web Designs <small>This article explains what is the Divine proportion and what is the Rule of Thirds and describes how you can apply both of them effectively to your designs.</small> 01.Dec.2008	Syncotype <small>Syncotype is a simple tool to help align your text to a baseline grid. Enter your line height and offset in pixels in the Syncotype control box and click "Syncotype it" to overlay a baseline grid in red.</small> 01.Dec.2008	Grid Systems <small>Grid Systems provides a rich, easy-to-understand overview and demonstrates a step-by-step approach to typographic composition.</small> 21.Nov.2008	Photoshop 975px Grid System (12) <small>Adobe Photoshop file with a grid system for a 975px wide page that is divided into 12 columns and rows using the Rule of Thirds (Golden Ratio). Includes a 16px baseline grid.</small> 29.Nov.2008	Replica Typeface <small>Replica is a new typeface by Norm that was designed on a strict grid system. Available in the following weights: Regular, Italic, Light, Light Italic, Bold and Bold Italic.</small> 21.Nov.2008	Grain Edit Graphic Hug Helvetica Film I Love Typography Lamosca magCulture Mark Boulton Minimal Sites Monocle Neubau NewWork OK-RM Original Linkage Robin Uleman SampsonMay Schmid Today September Industry Sonifyer Soulellis Subtraction Swiss Legacy Thinking for a Living This Studio Toko Visuelle Xavier Encinas Year of the Sheep
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Josef Müller-Brockmann, born in 1914 in Rapperswil, Switzerland, was a designer who found calmness and serenity in great reductive and constructivist design. As someone with several muses including theatre, music, mathematics, logic, illustration, teaching, and structure, Brockmann used these necessities of his life to boil down his work to its simplest form, creating beauty through unburdening his work of the unnecessary.

Josef's love of structure possibly stemmed from several important facets of his life. As early as in middle school, Josef was showing signs of extreme intelligence. Not only was he studious and responsible, but his teachers noticed extreme talent in the areas of geometry and drawing. However, because Josef was one of eight children being raised by a widowed mother, there was simply not enough money for all the children to be educated. Though Josef longed to continue his education, he decided to leave school at the age of sixteen so he could begin working in an illustration-based trade. When asked about this time in his life, Josef recalls that the path to becoming a designer was always meant to be "winding."

Despite leaving education at an early age, Müller-Brockmann's tenacity for learning and art did not falter at all, and on the contrary, grew as he continued to age. After leaving school, Müller-Brockmann began working for Alex Walter Diggelmann, who, only 29 at the time, owned a small studio that had impressive clientele in Zürich. During his time at this apprenticeship, Müller-Brockmann learned much about typography and graphics. A key principle of Müller-Brockmann's that developed at this time was his appreciation for determining the quality of letterforms based on the needs, subject, and period of the pieces. Heavily inspired by Paul Rand, Müller-Brockmann focused on

poster design. Upon arrival, Müller-Brockmann asked to be registered as a student at the school Keller was teaching at, the Kunstgewerbeschule (the Zürich School of Arts and Crafts).

Through Müller-Brockmann had not completed any of the formal application to be considered for acceptance into the Kunstgewerbeschule, his yearn to be taught led him to show up at Keller's class everyday and stand in the doorway until Keller allowed him to audit the class. Since Müller-Brockmann had no way of paying for these classes, Keller arranged a deal that he could stay in the class if, in return, he would help prepare classrooms. Once a student at Kunstgewerbeschule, Müller-Brockmann found that along with Ernst Keller, he had acquired another mentor, Alfred Willimann, a famous designer and photographer.

Through Keller and Willimann, Müller-Brockmann not only learned a great deal about design and photography, but also began developing a design style of his own. An exercise of Keller's that helped shape Müller-Brockmann drive to create designs of essence instead of extravagance was to encourage his students to take their work and reduce it to its simplest state. Using this exercise, Müller-Brockmann learned the importance of using color, type, and form to convey messages, and to have evidence and reason behind even the smallest of details in his work. From Willimann, Müller-Brockmann honed his eye for photography, and began to see photographs as graphic objects, which could be edited and manipulated in innovative ways as well as the importance of process in any type of work. Müller-Brockmann began to see that the design process could be just as crucial as the final product, if not more so.

A central part of Müller-Brockmann's philosophy and his focus on design was the

The 1234 The ABC 567890 DEFGHI abcdefhij JKLMNO klmnopq PQRSTU stuvwxyz VWXYZ of Mate rialist Dia lectic.

"I will here attempt to sketch the substance of the problem in a very concise form. The Aristotelian logic of the simple syllogism starts from the proposition that 'A' is equal to 'A'. This postulate is accepted as an axiom for a multitude of practical human actions and elementary generalisations. But in reality, 'A' is not equal to 'A'. This is easy to prove if we observe these two letters under a lens – they are quite different from each other. But, one can object, the question is not of the size or the form of the letters, since they are only symbols for equal quantities, for instance, a pound of sugar. The objection is beside the point; in reality a pound of sugar is never equal to a pound of sugar – a more delicate scale always discloses a difference. Again one can object: but a pound of sugar is equal to itself. Neither is this true – all bodies change uninterruptedly in size, weight, colour, etc. They are never equal to themselves."

– From 'The ABC of Materialist Dialectics' (1939), Leon Trotsky.

Helvetica
A documentary film by
Gary Hustwit

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Rose Marcario

CEO, Patagonia Inc. • Ventura, Calif.
 Patagonia Action Works, a digital platform that connects customers with grassroots environmental organizations, is on target to raise more than \$1 million this year and facilitate about 10,000 hours of volunteer activity, the latest chapter in Patagonia's 40-year history of activism.

Bloomberg News reporter Kim Bhasin talked to Marcario about Patagonia's environmental advocacy and its effect on business. Excerpts:

How is Action Works different from Patagonia's regular championing of outdoor causes?

It gives people the ability to get involved in events, petitions, fundraising, volunteering. There are people showing up to our stores who are just there for the activism. We have stores and dealers everywhere in the country, and we'll build those communities, and they'll be their own little action centers around air, water, and soil issues in their neighborhoods.

The tone of Patagonia's activism has shifted of late. There seems to be more urgency behind your message.
 We've had rollbacks of some 70 protections of endangered species and public lands. And then the national monument reversal in Utah—the first time ever in American history where a president undid

And Now for...the Usual Suspects

We shouldn't have to explain why the people below are significant enough to be on their own list. So we won't!

- Jeff Bezos, CEO, Amazon.com Inc.
- Sergey Brin, president, Alphabet Inc.
- Warren Buffett, chairman and CEO, Berkshire Hathaway Inc.
- Tim Cook, CEO, Apple Inc.
- Recep Tayyip Erdogan, president of Turkey
- Ronan Farrow, journalist
- Pope Francis
- LeBron James, forward, Los Angeles Lakers
- Xi Jinping, president of the People's Republic of China
- Kim Jong Un, supreme leader of North Korea
- Emmanuel Macron, president of France
- Theresa May, prime minister of the United Kingdom
- Narendra Modi, prime minister of India
- Robert Mueller, special counsel, U.S. Department of Justice
- Elon Musk, CEO, Tesla Inc. and SpaceX
- Larry Page, CEO, Alphabet Inc.
- Vladimir Putin, president of Russia
- Mohammed bin Salman, crown prince of Saudi Arabia
- Sheryl Sandberg, COO, Facebook Inc.
- Masayoshi Son, CEO, SoftBank Group Corp.
- Donald Trump, president of the United States
- Margrethe Vestager, European commissioner for competition
- Serena Williams, tennis player
- Oprah Winfrey, chairman and CEO, Oprah Winfrey Network LLC
- Jeff Zucker, president, Cable News Network Inc.
- Mark Zuckerberg, chairman and CEO, Facebook

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Brian Roberts

CEO, Comcast Corp. • Philadelphia
 Comcast spent \$39 billion on British satellite-TV giant Sky Plc to gain a foothold in Europe and reduce its dependence on the declining cable-TV market in the U.S.

the work of three past presidents who established a national protected wilderness.

Why did Patagonia seize on the particular issue of Bears Ears and Grand Staircase-Escalante?

It was the largest elimination of public lands in history. It was almost 3 million acres. We joined with conservationists and native American tribes in filing a lawsuit because we felt it was an illegal action and set a terrible precedent.

Is that kind of activism good business for Patagonia?

It hasn't hurt our business at all. We've had an incredible year. We don't do it with the mind of, "Oh, this is going to generate business or not generate business." We do it with the mind that these places need defense and protection, and we want to help bring awareness.

Can businesses stay neutral on these topics anymore?

We're living in a time when it's important

for business to drive a new kind of economy, an aspirational view of the future where business is a force for good. We have to get out of this quarterly mentality.

When customers buy a Patagonia fleece, do you want that action to prompt them to think about these causes?

We hope if they're getting outdoors and enjoying wild places, they go there to protect them for future generations.

How do you know if it ever becomes too much activism? Is there a line?
 People expect it now. Younger customers are much more educated. They look at a product multiple times before they purchase it, and they do a lot of research. They vote with their dollars much more. If you're a brand and you're ignoring that, you're going to lose long term.



After buying Sky, Comcast, the second-largest cable company in the U.S., became a major competitor in the U.K. Entry didn't come cheap. It paid more than twice what Sky was worth when it first went up for sale in 2016, borrowing heavily to make it happen. But the deal gave Roberts a key victory over his chief rival, Walt Disney Co. Chief Executive Officer Bob Iger, who snatched 21st Century Fox Inc. away in a bidding war this summer. Owning Sky helps Comcast address perhaps its biggest weakness: cord cutting. While Comcast already owns NBCUniversal, home to a movie studio and TV

networks such as MSNBC and USA, it's been losing thousands of cable customers as Netflix Inc., Amazon.com Inc., and other online services entice people to drop their cable subscriptions. Sky, however, is still adding to its 23 million subscribers in countries such as the U.K., Italy, and Germany. The deal is also another sign of how Roberts has transformed the company he inherited from his father into a global entertainment empire that both owns the films and shows people watch and the cable and internet connections that deliver them. —Gerry Smith

Tim Sweeney

CEO, Epic Games Inc. • Cary, N.C.

Epic's megahit video game, *Fortnite*, claims 200 million players worldwide, five times the number at the start of the year, and it's made billions of dollars for the company.



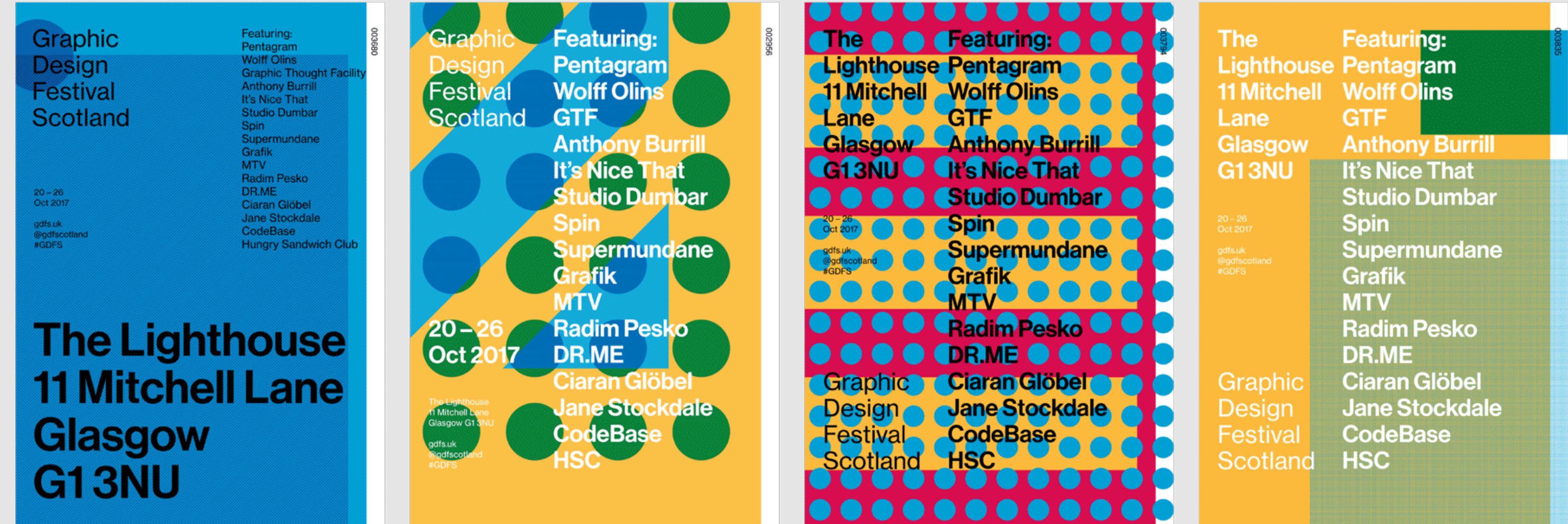
In *Fortnite*, a player uses his weapons and wits to become the last person alive on a rapidly shrinking island. The free game's cartoonish characters have proved palatable to kids and parents, and its victory dances have been performed by elementary school students and NBA stars alike. Sweeney's genius was in making *Fortnite* easily accessible across game consoles and smartphones; avatars, gadgets, and other in-game perks

generate revenue. *Fortnite's* popularity has also been fueled in part by its battle royal format and its appeal as a spectator sport: The contests are the most-

viewed on Twitch, Amazon.com Inc.'s game-streaming service, and the game's top "athlete," Tyler Blevins, earns \$500,000 a month. Sweeney is pressing his advantage: He's declined to put *Fortnite* in Google's app store as part of a dispute about revenue sharing, a move that threatens the fee structure that Google and Apple Inc. have enjoyed for years.

—Chris Palmeri





THE RESPONSIVE W

The easiest way to create the Whitney sign is by following these steps: first, draw the line in the available space. Then, kern and place the word 'Whitney' inside the line. And lastly, establish the exact line thickness.

Icons

Macro version
Use this version only when the word 'Whitney' would otherwise become too small (e.g. on narrow banners or ads).

1. Drawing the line
The corners of the line should have a 'miter linecap' (a point). This point should always be inside the grid, and not cross over it (the 'threshold').

All narrow angles the point would become too sharp. In the 'stroke' settings, set the 'miter limit' of the line to '4px', so that the point is converted to a 'bevel joint' (an angled joint, please do not use round joints).

2. Typesetting
'Whitney' is set in Neue Haas Grotesk Display 60 medium. Track and kern according to settings below. When using Adobe InDesign, use metric kerning. Shown values are in 1/1000 of an em.

Kerning: 0 -15 +5 -5 +10

3. Line thickness
The line thickness is 1/25th of the used font size (4px). If, for example, the size of the word 'Whitney' is set in 100 points, the thickness of the line is $100/25 = 4$ pixels. (Alternative line width can also be calculated by dividing the stem width (width of T) by 3.625 - that's 27.5%).

Font size: 100 or Stem width: 3.625

4. Placing the word 'Whitney'
The horizontal distance between the top and bottom left points of the letter W makes distance 'a' as shown right. The distance between the bottom right point of the letter Y to the line should be the same as 'a'.

Starter right

Regular version

Starter left

Regular version

Asymmetrical version

Emphasized version
To be used in specific cases, where 'Whitney' needs to match the size of other type (i.e. titles), or needs extra emphasis.

THE RESPONSIVE W

Whitney Museum of American Art

Chart of variations on the Responsive W

Started left

Regular version

Asymmetrical version

Experimental Jetset
2012/2013

APR

6



Member Night
Thursday, April 6
7:30–10 pm

Enjoy a members-only festive evening that includes short tours of the Biennial and *Fast Forward: Painting from the 1980s*, a life drawing workshop, cash bars, and more. Open to all members; members at the Dual level and above are invited to arrive for priority admission at 7 pm.

Whitney Museum of American Art. Photograph by Nic Lehoux



Public Program: *Protest Banner Lending Library* with Aram Han and Cauleen Smith
Friday, April 7
6:30–8 pm

Artist Aram Han and 2017 Biennial artist Cauleen Smith host a communal sewing event in which participants create their own banners. This workshop, inspired by Smith's work in the Biennial, continues an event series that Han organized in Chicago in partnership with several local organizations. Free with museum admission and free for members. For a full list of upcoming public programs, visit whitney.org/Education.

Installation view of *In the Wake* (2017) by Cauleen Smith (foreground) and Gail Whitney Version (2017) by Pope.Laka William Pope.l (background) in the 2017 Whitney Biennial. Photograph by Bill Orcutt

7



Preview Days for
Where We Are: Selections from the Whitney's Collection, 1900–1960
Wednesday–Thursday,
April 26–27
12–5 pm

Be among the first to experience the newest presentation of works from the Whitney's unparalleled collection of twentieth-century American art. Open to all members.

Louise Bourgeois (1911–2010). *Quarantine*, 1941. Painted wood, 84 x 29 1/4 x 47 1/4 in. (213.4 x 74.3 x 120.7 cm). Whitney Museum of American Art, New York; gift of an anonymous donor, 77.80. © The Easton Foundation/Licensed by VAGA, New York

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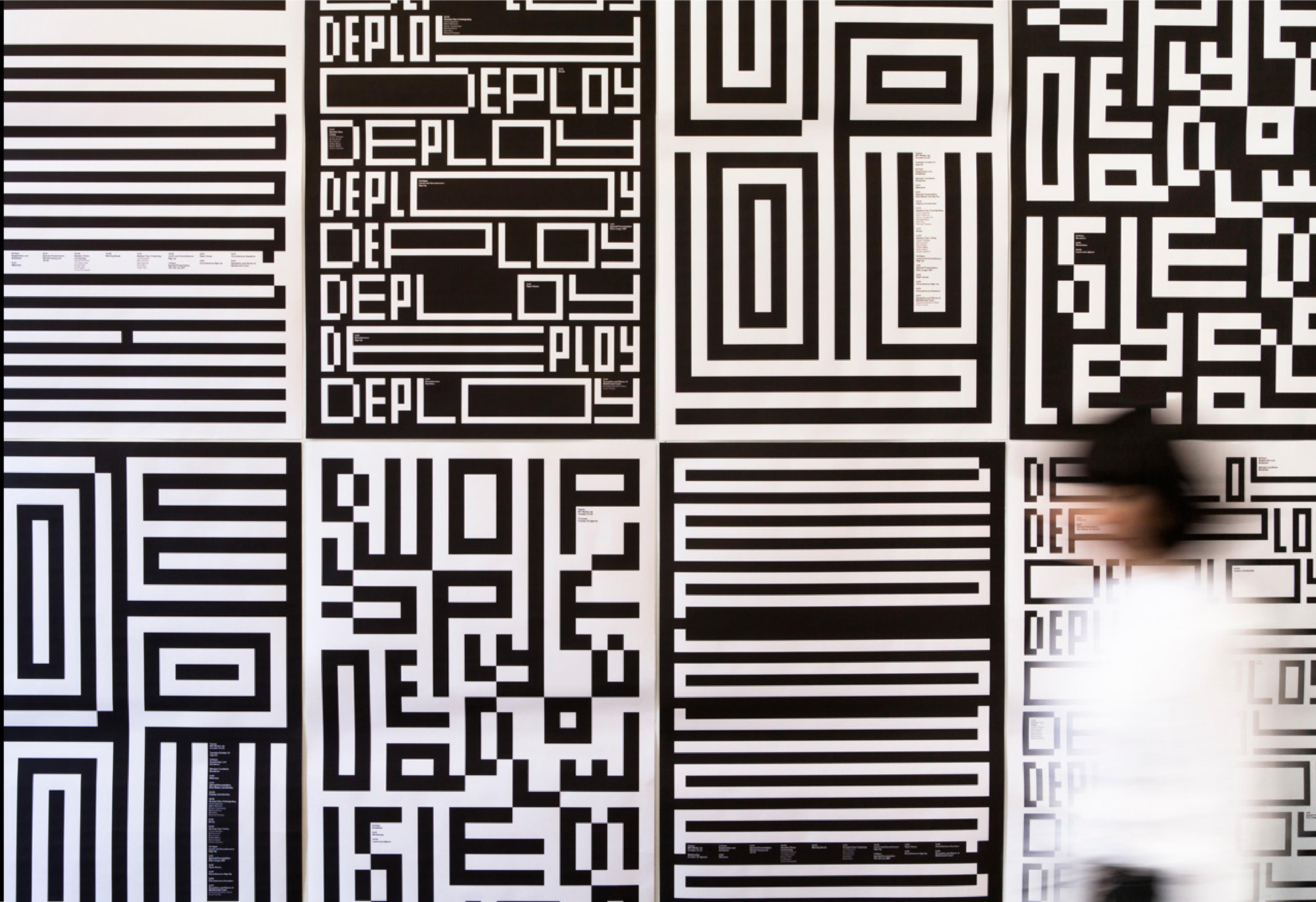
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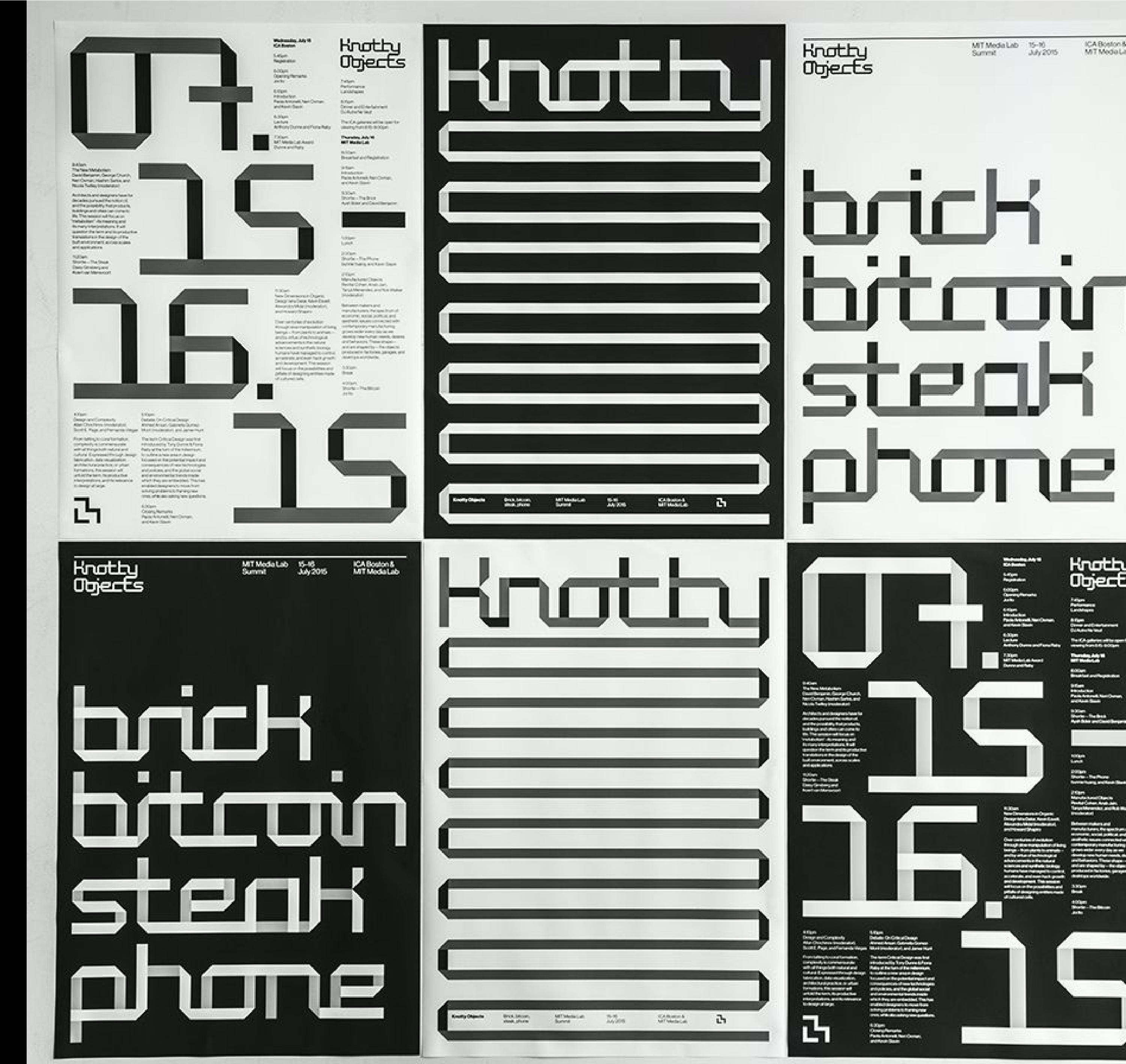


Member Night
Thursday, May 4
7:30–10 pm

Experience the Biennial as well as the collection exhibitions *Fast Forward: Painting from the 1980s* and *Where We Are: Selections from the Whitney's Collection, 1900–1960* during this festive evening. The event includes cash bars and short tours. Open to all members; members at the Dual level and above are invited to arrive for priority admission at 7 pm.

Julia Wachtel b. 1961. *Kempenberg*, 1994. Oil on canvas, 55 x 41 1/2 in. (139.8 x 105.7 cm). Whitney Museum of American Art, New York; purchase with funds from the Painting and Sculpture Committee 2016.114. © Julia Wachtel, courtesy the artist and Elizabeth Dee, New York





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Events

Body Mechanic Detroit every sunday Tickets

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Mamiko Motto Barcelona June 18, 2017

Midnight Chardonnay London Sept. 8, 2017

Midnight Chardonnay Amsterdam Sept. 9, 2017

Midnight Chardonnay Antwerp Sept. 10, 2017

Mamiko Motto Redlight Radio Amsterdam May 4, 2017

Visual Artists

ACACIO ORTAS

JASON HSU

MATTIS DOVIER

MEEUS VAN DIS

NEJC PRAH

PANE

Exercise 4