CUBISM AND ABSTRACT ART

With Alfred H. Barr's 1936 diagram of the flow of art in the twentieth century as its core, the exhibition *Genealogies of Art, or the History of Art as Visual Art* brings together visual representations of the history of art by artists and art historians, from the genealogical tress of the twelfth through the fifteenth centuries and the Renaissance to more current information graphics, including paintings, sketches, maps, plans, prints, drawings, diagrams and information graphics.
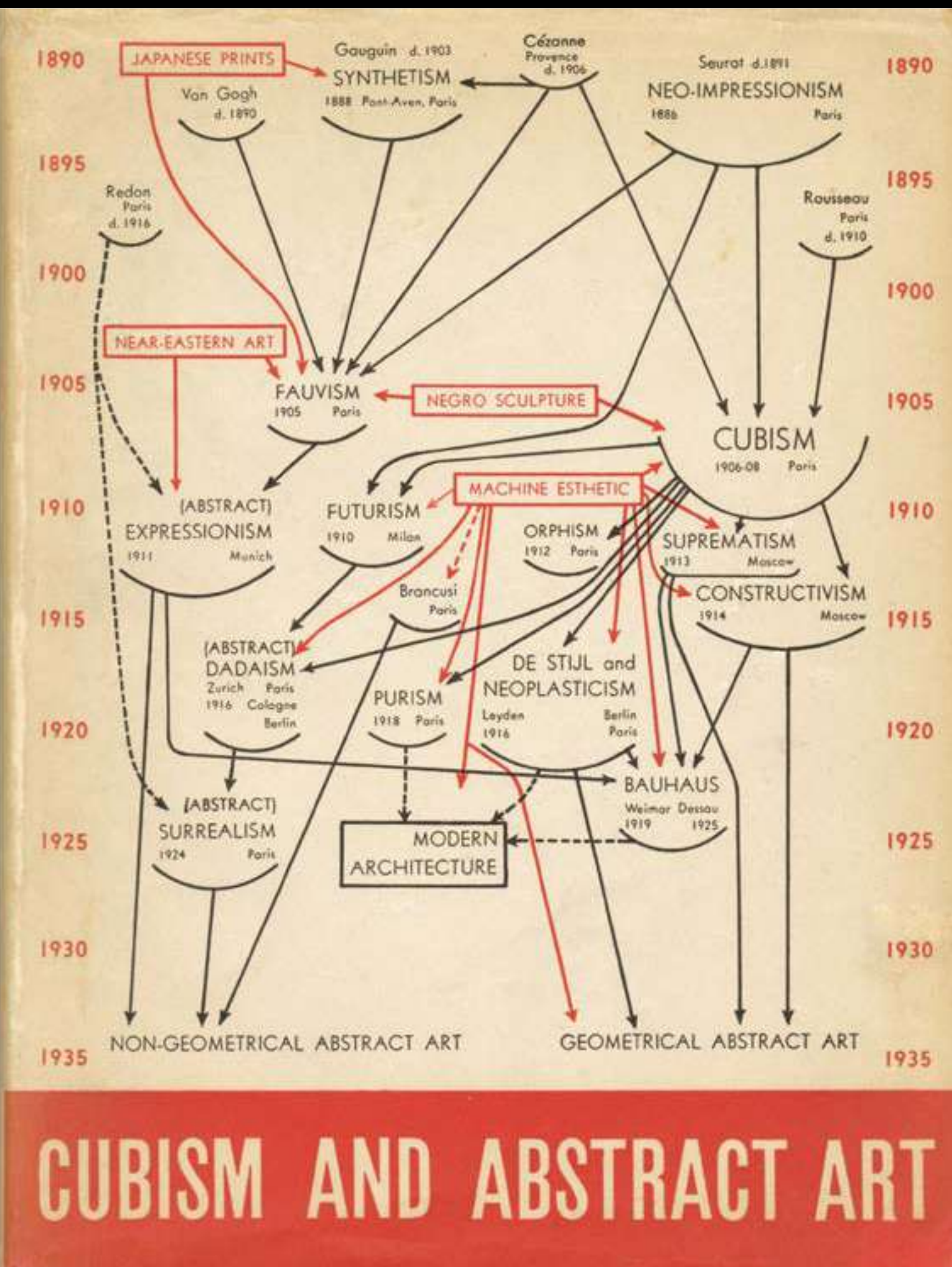
FUNDACIÓN JUAN MARCH

museoPICASSOmálaga

GENEALOGIES / OF / ART

GEN
EA
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IES
OF
ART

THE HISTORY
OF ART AS
VISUAL ART

# To read,
# to see,
# to leave out,
# to make people see

ABOUT THIS EXHIBITION

**La exposición** a la que esta publicación acompaña es un empeño común de las dos instituciones que la han concebido, organizado y finalmente presentado en el Museo Picasso en Málaga y en la Fundación Juan March, en Madrid. La muestra apunta, desde el nacimiento y los primeros pasos de la idea que la originó, a dejar a la vista un hecho peculiar que afecta a las obras de arte y a los modos de contar su historia.

Ese hecho, que es el punto de partida de *Genealogías del arte, o la historia del arte como arte visual*, puede formularse con una pregunta: si la historia de las obras de arte es la de un tipo de artefactos cuya diferencia específica es que han sido hechos para ser vistos, ¿no debería estar muy presente esa diferencia en el modo de contar esa historia? La exposición y su catálogo quieren ocupar el lugar que abre esa pregunta con un sí decidido. Sí: la historia de los objetos creados sobre todo para ser vistos y admirados también debería, ella misma, poder ser vista –y no solo explicada y leída–. Al menos, debería poder visualizarse en mayor medida que la historia de la economía o de la piscicultura. Y esa es una de las razones por las que *Genealogías del arte, o la historia del arte como arte visual* exhibe (es decir, hace ver) una selección de muchas de las representaciones visuales de la historia del arte que se han dado a lo largo de la propia historia del arte.

La muestra despliega el intento de contar visualmente la historia de las artes visuales en tres secciones: la primera y la última exhiben representaciones visuales de la historia del arte llevadas a cabo por artistas, diseñadores, ilustradores, historiadores, ensayistas, poetas y escritores, críticos y teóricos del arte, desde los primeros árboles genealógicos de la Edad Media hasta los diagramas modernos y contemporáneos y las presentaciones virtuales que se pueden encontrar hoy en la red. La segunda, en el centro, se toma tan en serio la pregunta inicial acerca de la visualidad de la historia del arte como para plantear un experimento visual, consistente en materializar una de esas representaciones –uno de esos diagramas– en el espacio expositivo real (y, también, en alguna medida, en el de las páginas de esta publicación). El diagrama elegido para el experimento es el célebre que Alfred H. Barr, Jr., el fundador en 1929 del Museo de Arte Moderno de Nueva York y su primer director, compuso para la sobrecubierta del catálogo de una exposición pionera: *Cubism and Abstract Art*, celebrada en el MoMA en

1936. Con su diagrama, Barr pretendía hacer visible la misma genealogía del arte moderno desde 1890 hasta 1936 que reconstruía en la exposición y argumentaba por extenso en los textos que escribió para su catálogo.

La exposición reúne más de un centenar de artistas y autores relacionados con el pensamiento visual e incluye las tipologías más variadas de árboles genealógicos, tablas, representaciones visuales, alegorías y diagramas, en un lapso temporal que va desde el siglo XV hasta hoy. En números absolutos, la suma asciende a 230 artistas y autores, 350 obras y más de un centenar de documentos. Con todo, *Genealogías del arte, o la historia del arte como arte visual* está muy lejos de ser una muestra colectiva o una exposición temática cuyo tema sea una selección de representaciones de la historia del arte que tienen en común la curiosidad de no estar basadas mayoritariamente en textos o en textos ilustrados. Es más bien una exposición sobre modos de narrar visualmente una historia (la del arte), una muestra con un pie puesto en la práctica curatorial (y la conciencia de esa práctica) y otro en el pensamiento visual, en determinadas teorías literarias y en los *Visual Studies*. También es una exposición sobre otra exposición –la extraordinaria *Cubism and Abstract Art*– y también una muestra sobre el creador del primer museo de arte moderno del mundo y el primer "curador" en el sentido contemporáneo de esa palabra, Alfred Hamilton Barr, Jr. (1902-1981). Por los dos últimos motivos, esta exposición constituye además un ejercicio de reconstrucción del que quizá haya sido el intento más ambicioso (y temprano) de dotar al arte de la primera mitad del siglo XX de todo un canon y de una genealogía que abarca más de tres generaciones.

# THE TREES OF KNOWL EDGE

DIAGRAMATIC
TRADITIONS
FROM THE MIDDLE AGES
TO THE
RENAISSANCE

## Manuel Lima

**Fig. 12**

Anonymous, Buddha, c. 701–750. Tang dynasty painting on silk, 139 x 102 cm. The British Museum, London

Silk painting depicting Buddha seated under an adorned Bodhi tree, preaching to his disciples.



**Fig. 13**

Konchog Gyaltsen, Refuge tree in the assembly with Tsongkhapa, c. 18th century. Tibetan painting on cotton with fine golden lines. Rubin Museum of Art, New York

A Tibetan cotton painting with fine gold line, also known as a *thangka*, depicting Je Tsongkhapa at the very center of the field (tree) for the Accumulation of Merit. Je Tsongkhapa (1357–1419) was an illustrious philosopher and Tibetan religious leader whose undertakings led to the formation of the dominant Gelug school of Buddhism. This painting places Tsongkhapa at the center of a tree, surrounded by a multitude of meditational deities, confession Buddhas, bodhisattvas, arhats, and protectors. These religious figures are seated in the tree, which rises from a blue pond below. Surrounding the pond, at the bottom of the composition, are the seven jewels of Royalty, Four Direction Guardians, Brahma, and Vishnu. Above the tree is the incarnation lineage of Panchen Lama, the highest-ranking lama after the Dalai Lama in the Gelug lineage of Tibetan Buddhism.

**Fig. 14**

Vincent van Gogh, *The Mulberry Tree*, 1889. Oil on canvas, 54 x 65 cm. Norton Simon Art Foundation, Gift of Mr. Norton Simon, Pasadena (California)

View of a mulberry tree painted in October 1889, less than a year before van Gogh died. The painting depicts a tree growing out of a rocky terrain, seen from the garden of the Saint-Paul Asylum in Saint-Rémy-de-Provence, southern France, where van Gogh was staying following the notorious incident with Paul Gauguin. In this painting, which apparently held some fascination for van Gogh, who wrote about it to his brother and sister, we can see autumn taking over the tree, with yellow and orange leaves dominating the composition, in contrast with the blue sky. Van Gogh was particularly interested in the mutations of foliage, affected not just by the season but also by changes of tone in the sky.



**Fig. 16**

Leonardo da Vinci, Tree Branching, c. 1495–99. From Leonardo's Manuscript M, c. 1495–99, page: 100 x 70 cm. Bibliothèque de l'Institut de France, París

Study of a tree branching, produced a few years before Leonardo's death, in which he proposes a possible equation for the branching scheme of trees. Leonardo's rule is fairly simple, stating that "Every year when the boughs of a tree have made an end of maturing their growth, they will have made, when put together, a thickness equal to that of the main stem" (see Richter 1970: 205). This engineering principle has recently been recognized as the main source of trees' resilience to wind and other external forces.
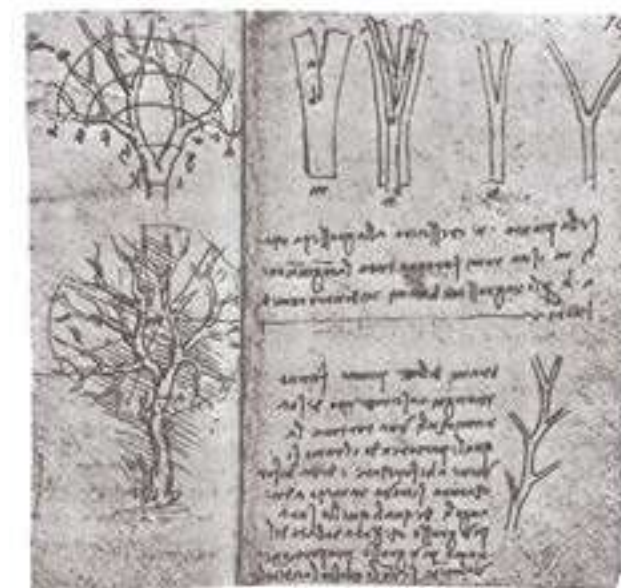




**Fig. 15**

Gustav Klimt, *Lebensbaum* [The Tree of Life], c. 1910–11. Colored pencil, pastel and gouache on tracing paper, 200 x 102 cm. Part of a series of mosaics commissioned for the Palais Stoclet in Brussels. MAK-Österreichisches Museum für angewandte Kunst / Gegenwartskunst, Vienna

Study for *The Tree of Life*, one of the most reproduced oil paintings in modern times. Painted during a productive period for Klimt, *The Tree of Life* reflects the painter's obsession with this recurrent theme. The painting is organized in an enigmatic spiraling configuration, with branches forming a convoluted whirlwind enclosing various symbols, including geometric fruits and leaves, as well as animals such as birds and butterflies.

displaying and permitting interaction with large hierarchies.

The computer, the internet, and new algorithmically generated models have fostered an array of new methods and designs. The past two decades alone have witnessed an explosion of originality in the representation of hierarchical structures—particularly with the introduction of alternative space-filling techniques and adjacency diagrams, which have expanded the benefits and functionality of older node-link diagrams. Many of these new models integrate multiple types of quantitative data attributes, such as size, length, price, time, and temperature, and they use color in a meaningful way, to indicate qualities such as type, class, gender, and category.

In the early 1990s Ben Shneiderman suggested the notion of successively decomposing a given area into ever-smaller elements, allowing for the integration of numerous hierarchical levels (see Biographical note, p. xx). This breakthrough led to the creation of the treemap—a space-filling visualization model that uses polygonal areas and nesting to indicate different ranking levels. In a rectangular treemap, each branch or section of the tree is represented by a rectangle, which is tiled with smaller rectangles representing its subsections.

This major milestone in turn propelled the emergence of other variants. Many of the new alternatives, such as the circular treemap and the Voronoi treemap, are similar in principle to the rectangular model set forth by Shneiderman but use different polygonal constructs. But, as of today, the original rectangular treemap—notwithstanding a few algorithmic tweaks and enhancements—is still the most popular of its kind and one of the most widespread methods for visualizing hierarchical structures.

Sunbursts, the area-based cousin of radial trees, probably emerged as a variant of pie charts, which explains why they are also known as multilevel pies, or, simply, nested pie charts. It's conceivable that the sunburst dia-gram was simply developed as a way of accommodating subdivisions of the primary sections of the pie chart (the earliest known example of which is credited to William Playfair's *Statistical Breviary* from 1801).

The last (and perhaps least-known) model is the icicle tree, also known as the icicle plot, which was developed in the early 1980s by statisticians including Beat Kleiner, John Hartigan, Joseph Kruskal, and James Landwehr. Considered the adjacency diagram counterpart of vertical and horizontal trees, icicle trees employ a series of sequential, juxtaposed rectangles to imply a given ranking, but despite their highly adaptable layout, icicle trees have not been widely employed. There have been other complementary models, such as bubble trees, cone trees, and ring trees, some venturing into tridimensional space; however, all these models have been somewhat marginal and experimental and to this day haven't proved particularly useful.

As one of the most ubiquitous and long-lasting visual metaphors, the tree figure is an extraordinary prism through which we can observe the evolution of human consciousness, ideology, culture, and society. From its entrenched roots in religious exegesis to its contemporary secular digital expressions, the multiplicity of mapped subjects cover almost every significant aspect of life throughout the centuries. But this dominant symbol is not just a remarkable example of human ingenuity in mapping information; it is also the result of a strong human desire for order, balance, hierarchy, structure, and unity. When we look at an early twenty-first-century sunburst diagram, it appears to be a species entirely distinct from a fifteenth-century figurative tree illustration. However, if we trace its lineage back through numerous tweaks, shifts, experiments, failures, and successes, we will soon realize there's a defined line of descent constantly punctuated by examples of human skill and inventiveness.

This long succession of steps has led to a wide array of contemporary techniques for de-picting and analyzing hierarchical structures. What this diversity also shows us is that there is not a right or wrong approach, but rather a choice of the most effective model for the task at hand. As with most systems we choose to map, hierarchical structures can be portrayed from various angles and by a broad number of visual methods. Like any map, a visualization is always an interpretation, a single viewpoint from which to understand the system. However, as we can witness from the examples of the Porphyrian tree, the tree of Jesse, the consanguinity tree, Llull's tree of science, and Darwin's tree of life, when sustained by a unique thesis or proposition, a visualization can become an immensely powerful tool and an enduring, contagious meme. What this text ultimately conveys, through hundreds of tree diagrams, is the power of visual aids in facilitating understanding. It shows us, simply, the power of visual communication.

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END NOTES

This text was published for the first time in English as an introduction to the author's book *The Book of Trees. Visualizing Branches of Knowledge* (see Lima 2014: 15–43).

1. *The Holy Bible: King James Version*. Dallas, TX: Brown Books, 2004.

2. Philpot 2004: 11.

3. Ibid.: 38.

4. Lima 2011: 25.

5. Warren et al. 2013.

6. Carruthers 1990: 7.

7. Heyworth 1981: 216.

8. Franklin-Brown 2012: 141.

9. Darwin 1859: Letter no. 2465.

10. Pietsch 2012: 87.

11. Work originally published in ten booklets between 1899 and 1904. See Haeckel 1899–1904 [Ed. note].

12. See Lima 2017.

# BIOGRAPHICAL NOTES OF RELEVANT AUTHORS



## Aristotle
(384–322 bc)

Known by medieval Muslim scholars as "the First Teacher," Aristotle was highly dedicated to the tangible world and the notion of essentialism—the presence of an immutable essence in every thing. This conception provided the foundational yearning for an absolute taxonomy of nature, in which all species could be organized in a natural hierarchy from lowest to highest. In the text *Categories*—part of a series of works on logic called *Organon* (40 bc)—Aristotle assembles every entity of human understanding under one of ten categories: substance, quantity, quality, relation, place, time, position, state, action, and affection. As the basis of his ontology, substance is the most important of the ten classes, since it is the primary characteristic on which all remaining features are predicated. Aristotle further expands his fundamental view of classification in *Topics*, by providing a list of five classifiers (predicables) of the possible relations between a predicate and its subject: *horos* [definition], *genos* [genus], *diaphora* [difference], *idion* [property], and *sumbebekos* [accident]. A major influence on all subsequent classification efforts, Aristotle's syllogistic structure is not just a single-layered grouping; it implies a specific hierarchical mechanism, whereby a sequence of premises is based on an original first principle—the source of all subsequent truths.



## Porphyry
(ad 234–c. 305)

Some centuries after Aristotle's fundamental classification work, Greek philosopher and logician Porphyry further developed it in his short *Isagoge* [Introduction] to Aristotle's *Categories*. Produced between ad 268 and 270 and widely circulated throughout medieval Europe following a Latin translation by the Roman philosopher Anicius Manlius Severinus Boethius (c. ad 480–524 or 525), *Isagoge* became a highly influential textbook on logic, inspiring subsequent scholars such as the Muslim philosopher and polymath Averroes and the English Franciscan friar and philosopher William of Ockham. In addition to reframing Aristotle's original fivefold list of predicables and replacing *horos* [definition] with *eidos* [species], Porphyry introduces a hierarchical scheme of classification—what became known as the Porphyrian tree, also known as *scala praedicamentalis*. Resembling an arboreal construct, the model is a diagrammatic representation of the logical division of the highest genus, or substance, into succeeding dichotomies until the *infima species* [lowest species] is reached. It essentially portrays the basis of Aristotle's proposition in a memorable, easy-to-grasp, treelike visual scheme. Even though Porphyry's original scheme is not extant, the model was continuously adapted in numerous works throughout the Middle Ages and the Renaissance. The Porphyrian tree is, as far as we know, the earliest metaphorical tree of human knowledge.



## Isidore of Seville
(c. 560–636)

Born in Cartagena, Spain, Isidore of Seville is widely considered the last scholar of the ancient world. He received his elementary education in the cathedral school of Seville and went on to become archbishop of Seville for thirty-seven years. Known for his open-mindedness and love of learning, Isidore promoted the teaching of all branches of knowledge, including the arts and medicine, in seminaries across Spain. A master of Latin, Greek, and Hebrew, Isidore was a prolific and versatile writer, leaving behind several treatises and other works. But his most grandiose piece was the attempt to compile the summa of universal knowledge, in what became one of the most influential and revered medieval encyclopedic works. Compiled between c. ad 615 and 630, *Etymologies* comprises twenty volumes with quotes from 154 Christian and pagan authors of antiquity. Considered a repository of classical learning on topics such as medicine, law, natural phenomena, architecture, and agriculture, *Etymologies* is filled with remarkable illustrations and maps, including the earliest printed example of a T-O map of the world (a medieval map style representing the world as a letter *T* inside a circle). Among the illustrations are a few hierarchical schemes, notably a renowned consanguinity tree introduced for the first time by Isidore and replicated in several works throughout the succeeding centuries.
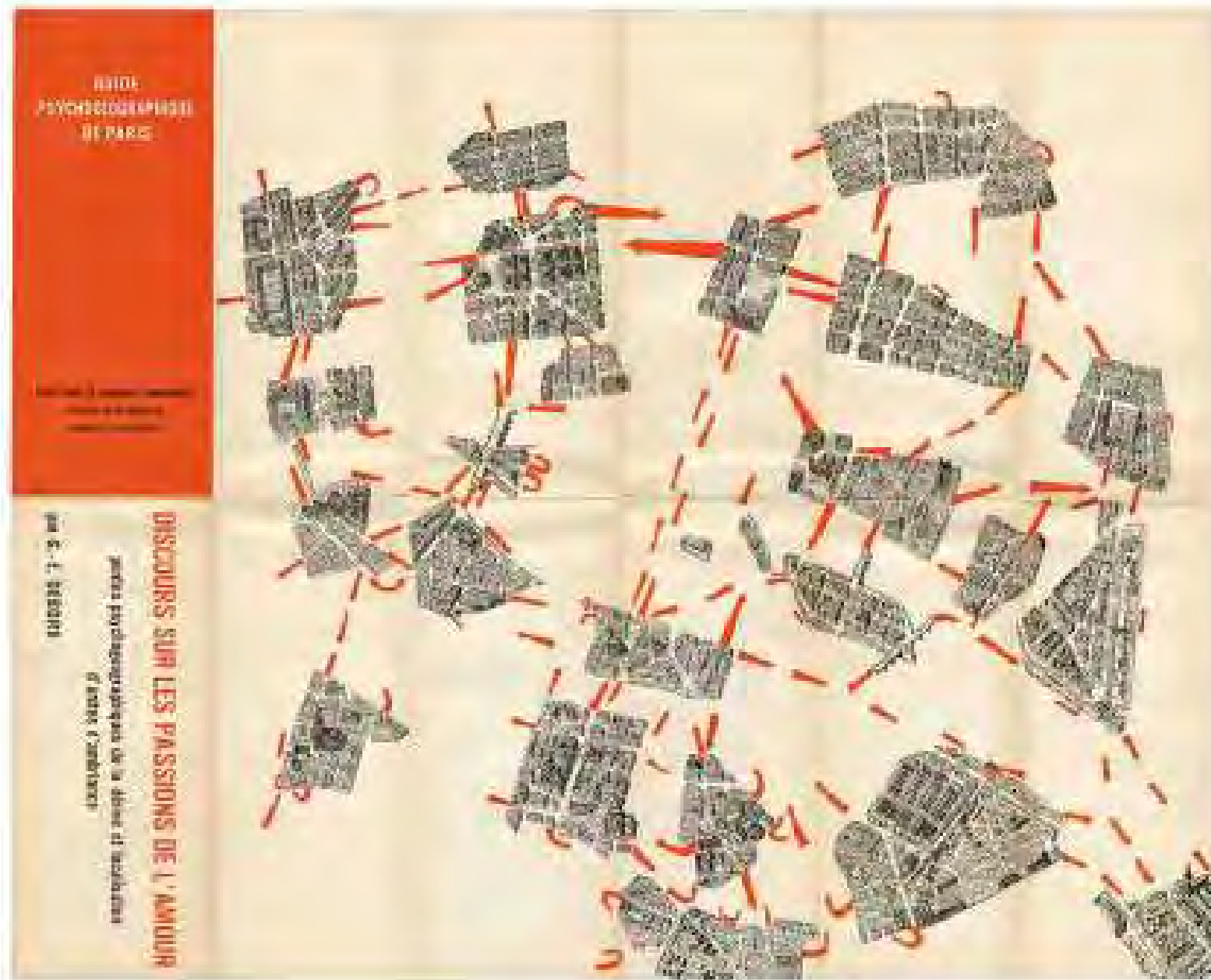


## Lambert of Saint-Omer
(c. 1061–c. 1125)

Little is known about the French medieval scholar, Benedictine monk, and chronicler Lambert of Saint-Omer. We know that he frequented the ancient and influential monastery of Saint Bertin in northern France, as well as several prominent French schools, and was well versed in grammar, theology, and music. Lambert became a prior at Saint Bertin at a young age and in 1095 was elected abbot by the monks at the monastery and the canons of Saint-Omer. He is most famously known for *Liber floridus* [Book of Flowers], compiled between the years 1090 and 1120, when he was a canon of the church of Our Lady in Saint-Omer. The book was the first of the encyclopedias of the High Middle Ages, which slowly supplanted Isidore of Seville's magnum opus *Etymologies*. Fearing that all the knowledge from previous centuries would be lost in the future, Lambert gathered a vast number of texts and manuscripts to construct a universal history of the world, divided into 161 sections on topics such as astronomy, philosophy, and natural history. This stunning work is beautifully illustrated with various charts, diagrams, and maps, including two impressive tree figures: a mystical palm tree of virtues and a single root that splits into two horizontal trees of virtues and vices.

**Guy Debord**

*Guide psychogéographique de Paris. Discours sur les passions de l'amour. Pentes psychogéographiques de la dérive et localisation d'unités d'ambiance* [Guía psicogeográfica de París. Discurso sobre las pasiones del amor. Pendientes psicogeográficas de la deriva y localización de unidades de ambiente], 1957
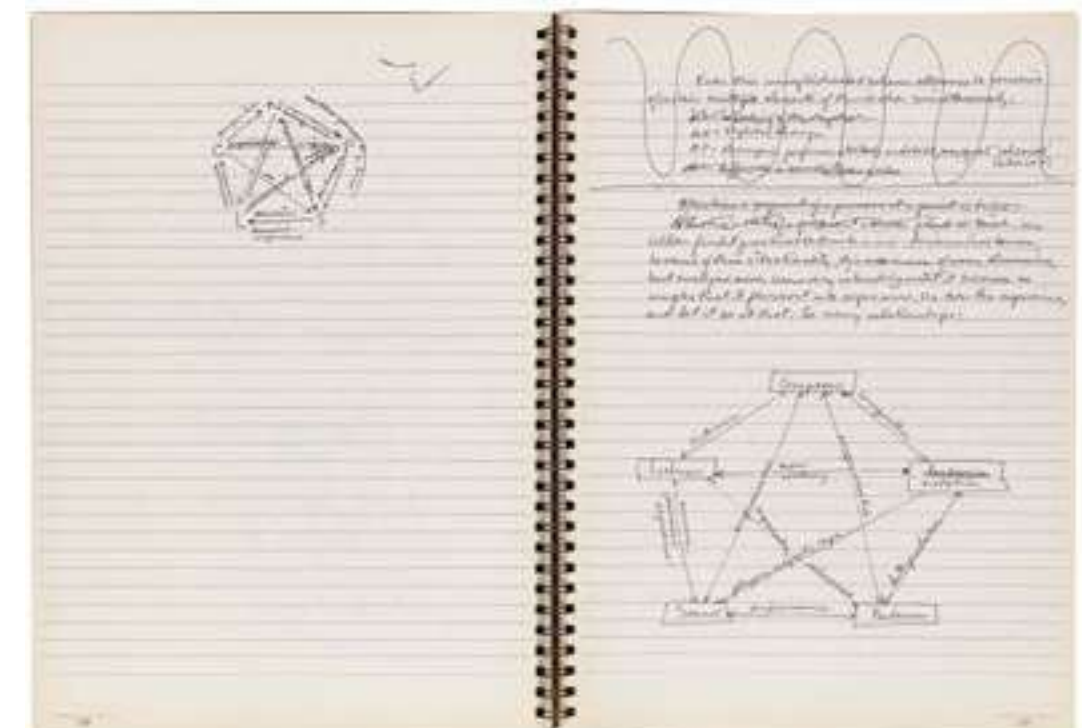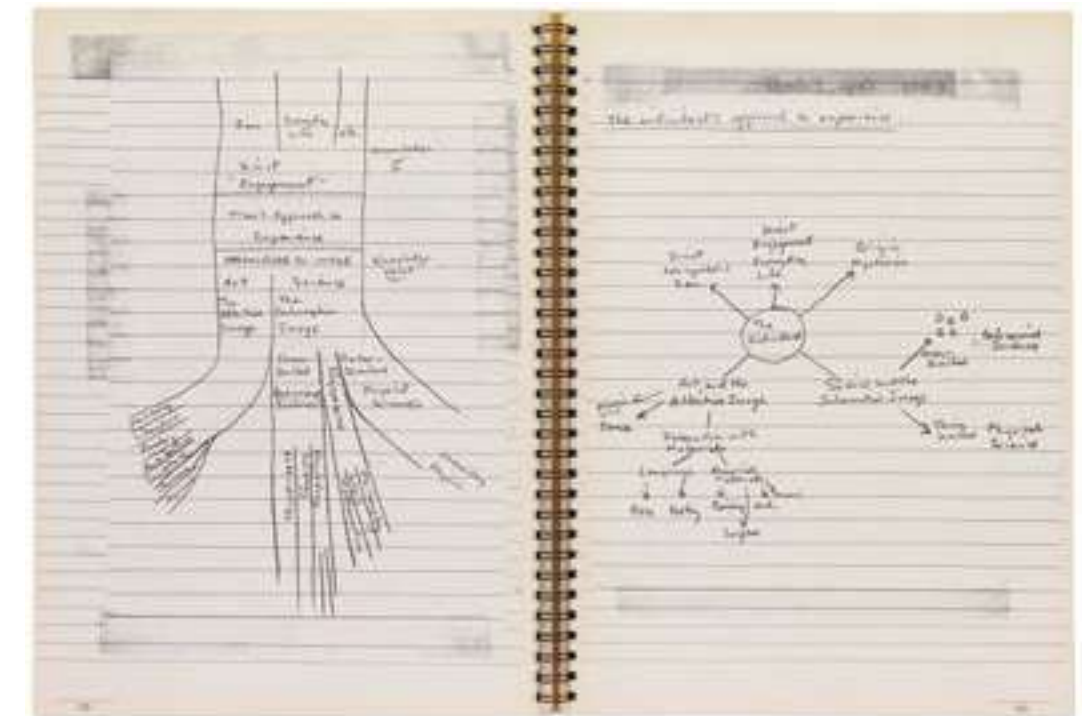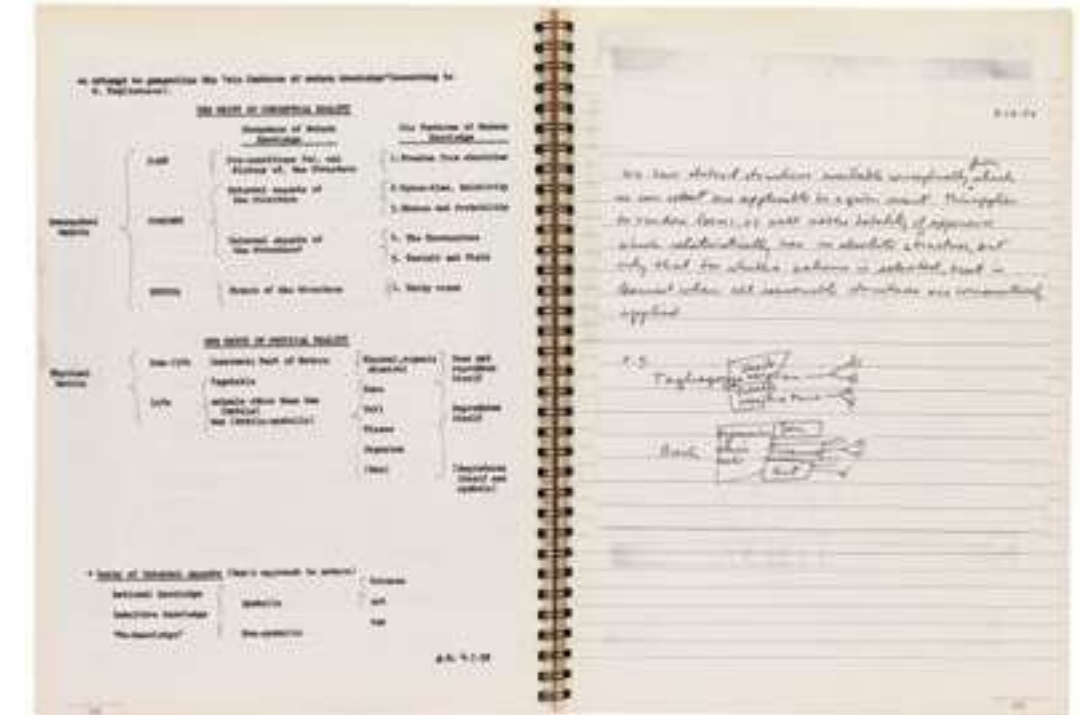
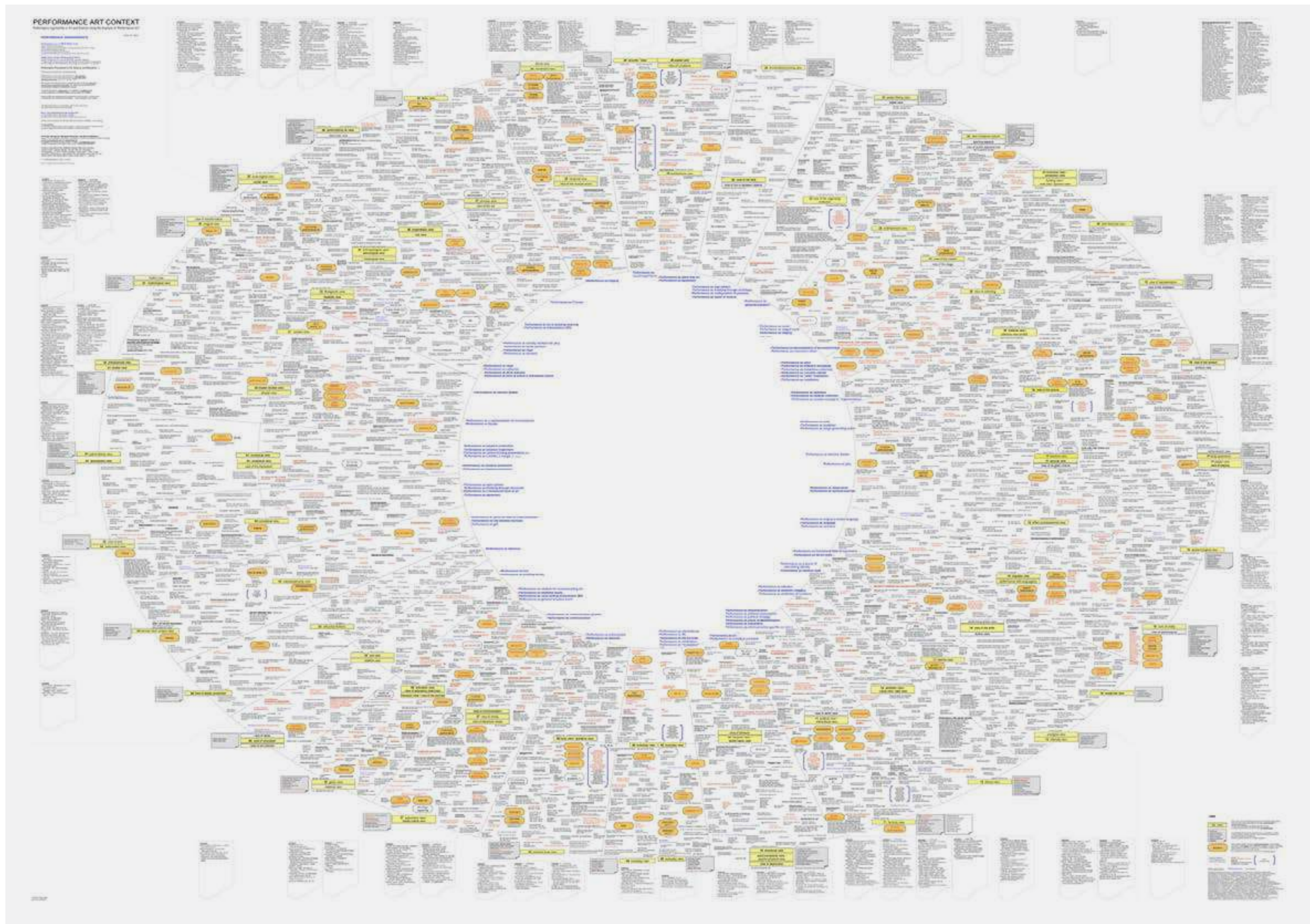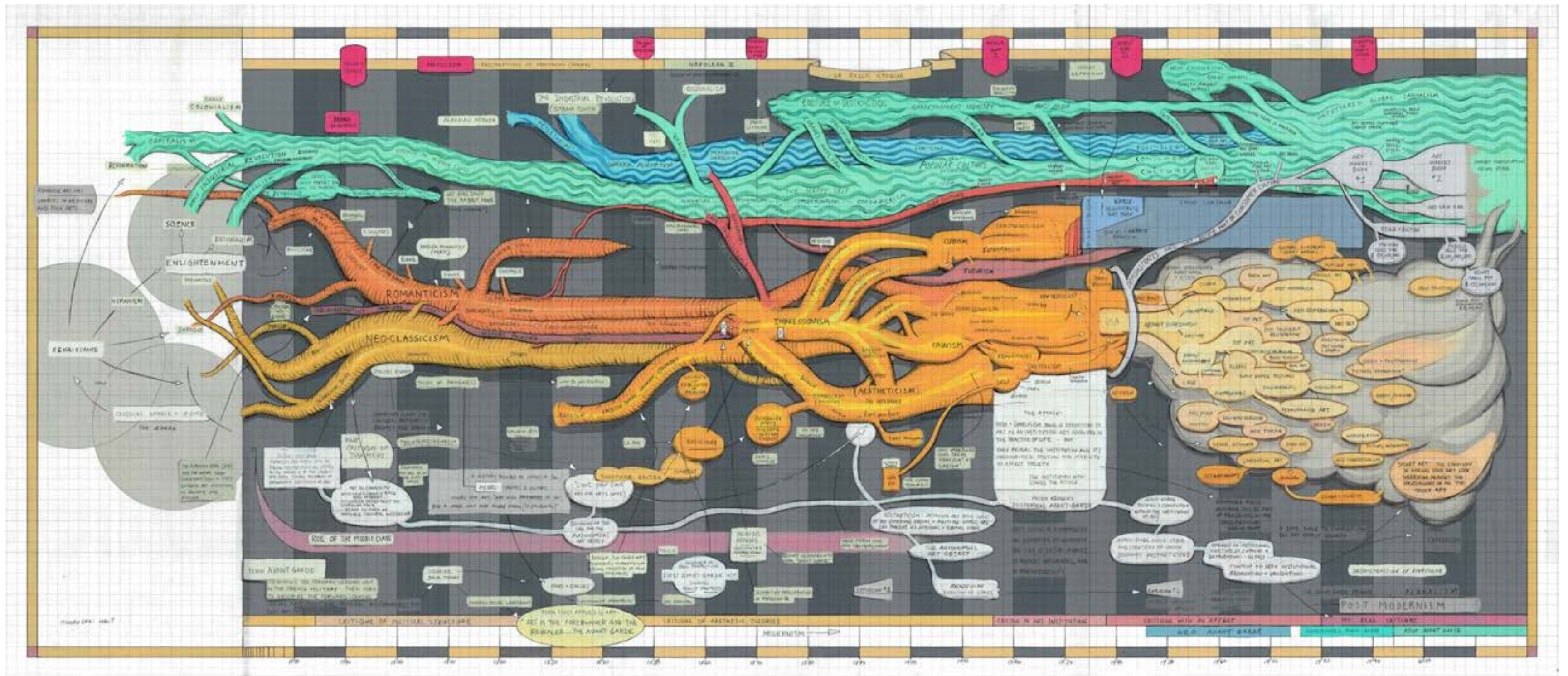Litografía sobre papel, 59,4 x 73,8 cm

Archivo Lafuente

**George Brecht**

*Diagramas en* Notebooks [Cuadernos de notas]. Edición de Dieter Daniels con la colaboración de Hermann Braun. Colonia: König, 1991, pp. 122-23 (vol. II: *October 1958-April 1959*), pp. 126-27 (vol. III: *April-August 1959*)

Libro, 29,5 x 22 cm

Biblioteca Fundación Juan March, Madrid

PERFORMANCE ART CONTEXT

**392\***

**Ward Shelley**

*Who Invented the Avant-
Garde? V. 3* [¿Quién inventó
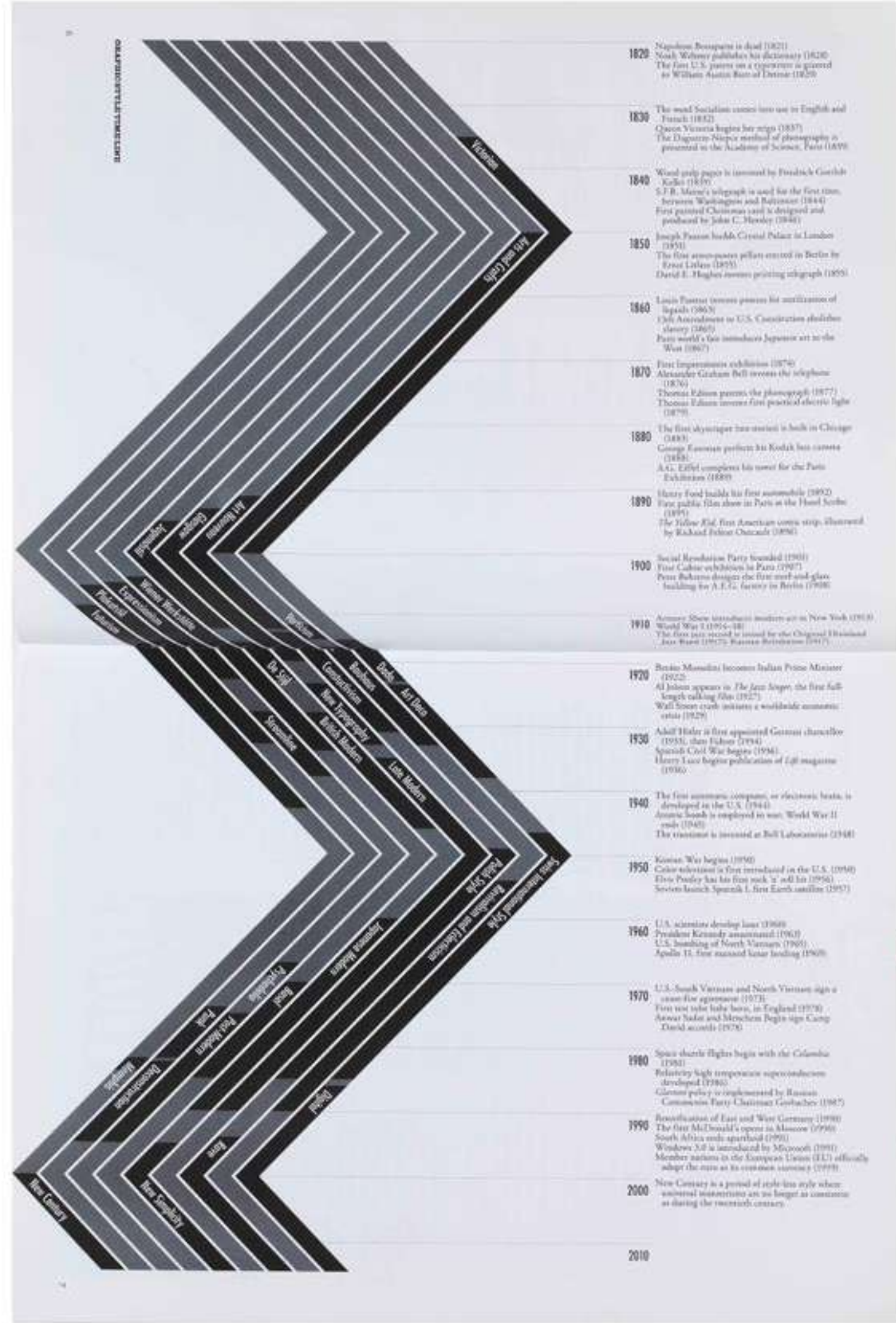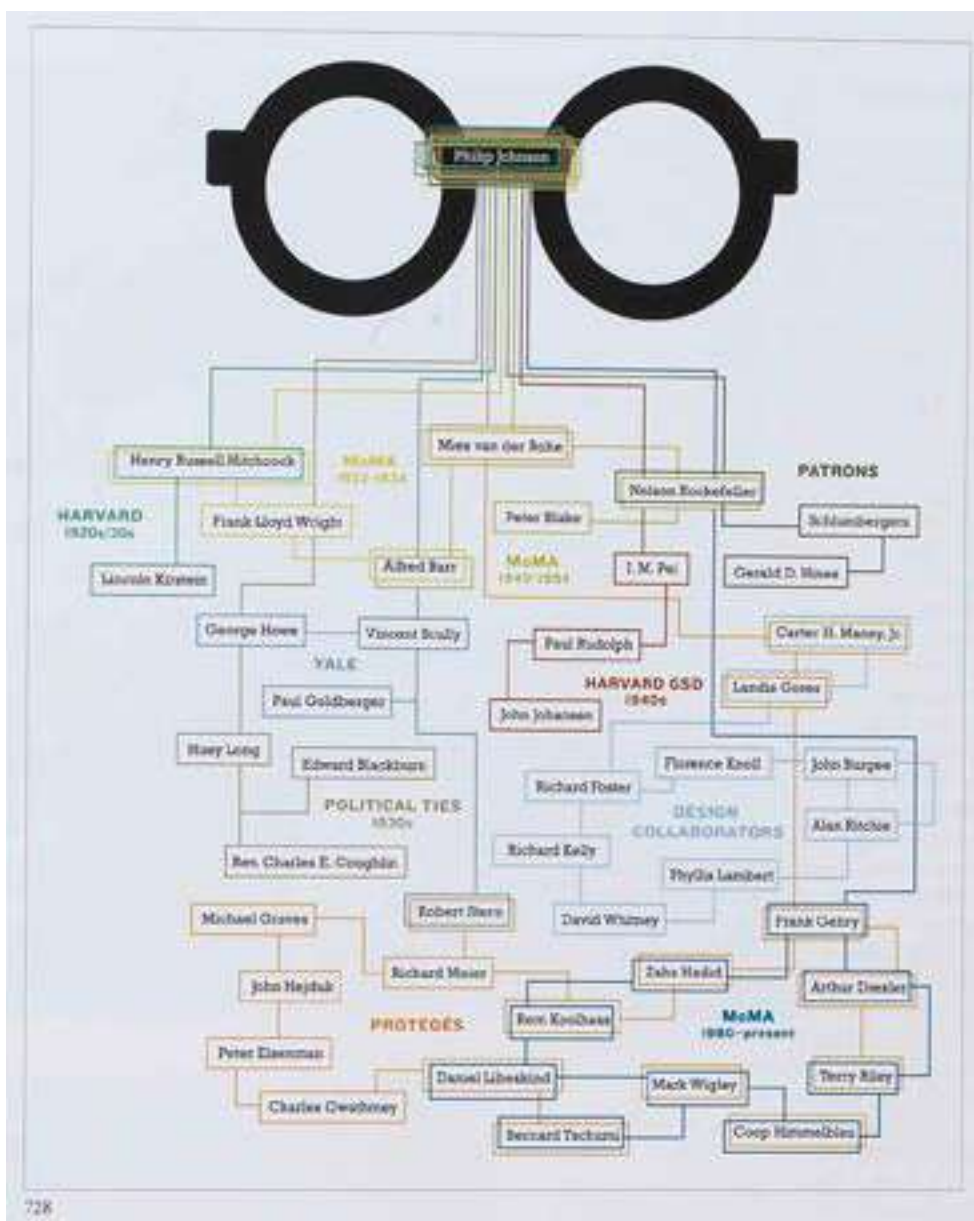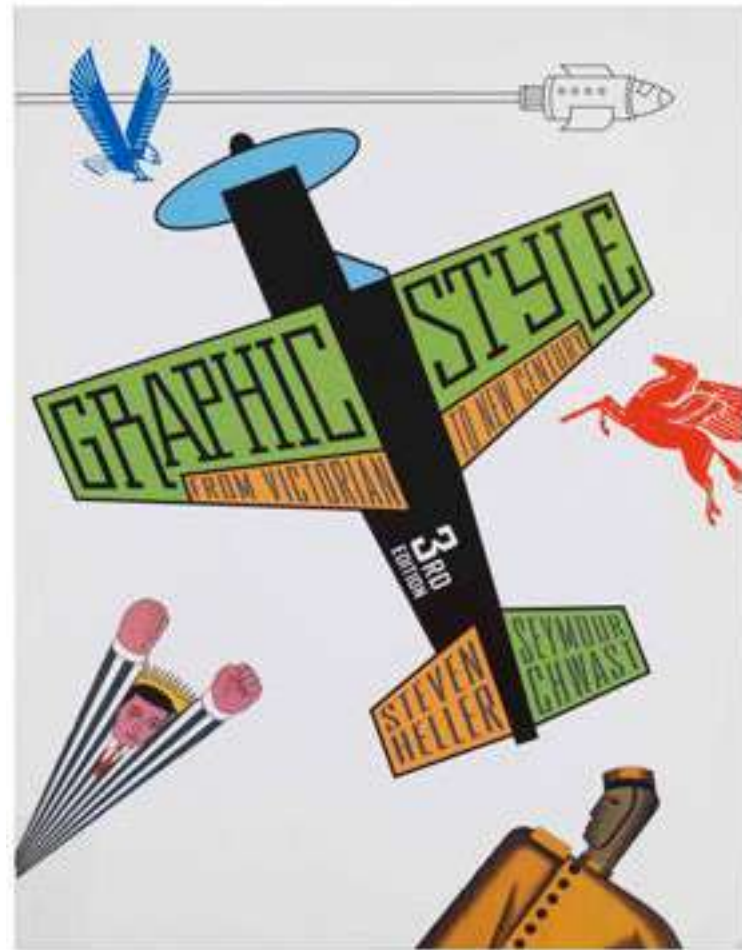la vanguardia? Versión 3],
2008

Óleo y tóner sobre Mylar,
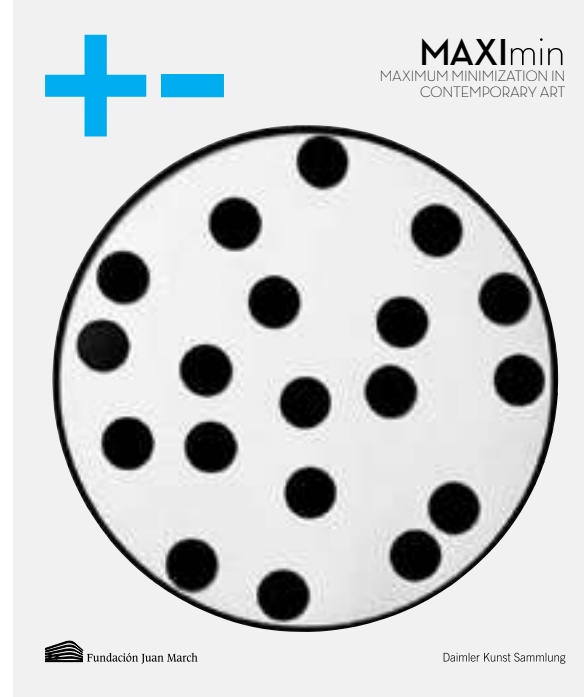158,75 x 72,39 cm

Cortesía del artista

**Steven Heller** y Seymour
Chwast, "Graphic Style
Timeline" [Cronograma del
estilo gráfico] y Alicia Cheng
[estudio mgmt.] [diseño] y
Criswell Lappin (traslación
gráfica), "Philip Johnson",
en id., *Graphic Style. From
Victorian to New Century*
[Estilo gráfico. Desde la arte
de la época victoriana hasta
el nuevo siglo]. Nueva York:
Abrams, 2011 (3.ª ed.),
cubierta y pp. 6-7, fig. 728
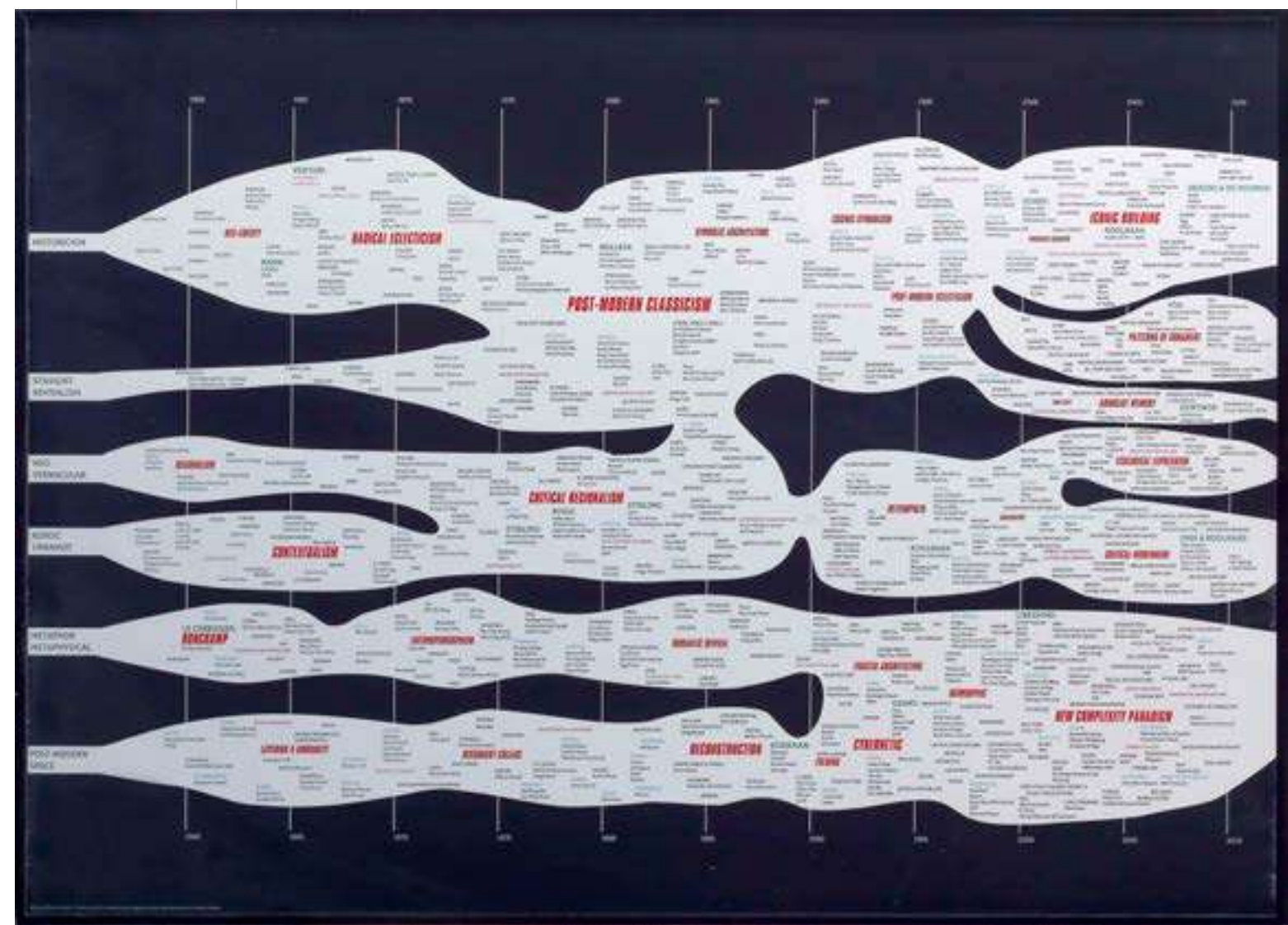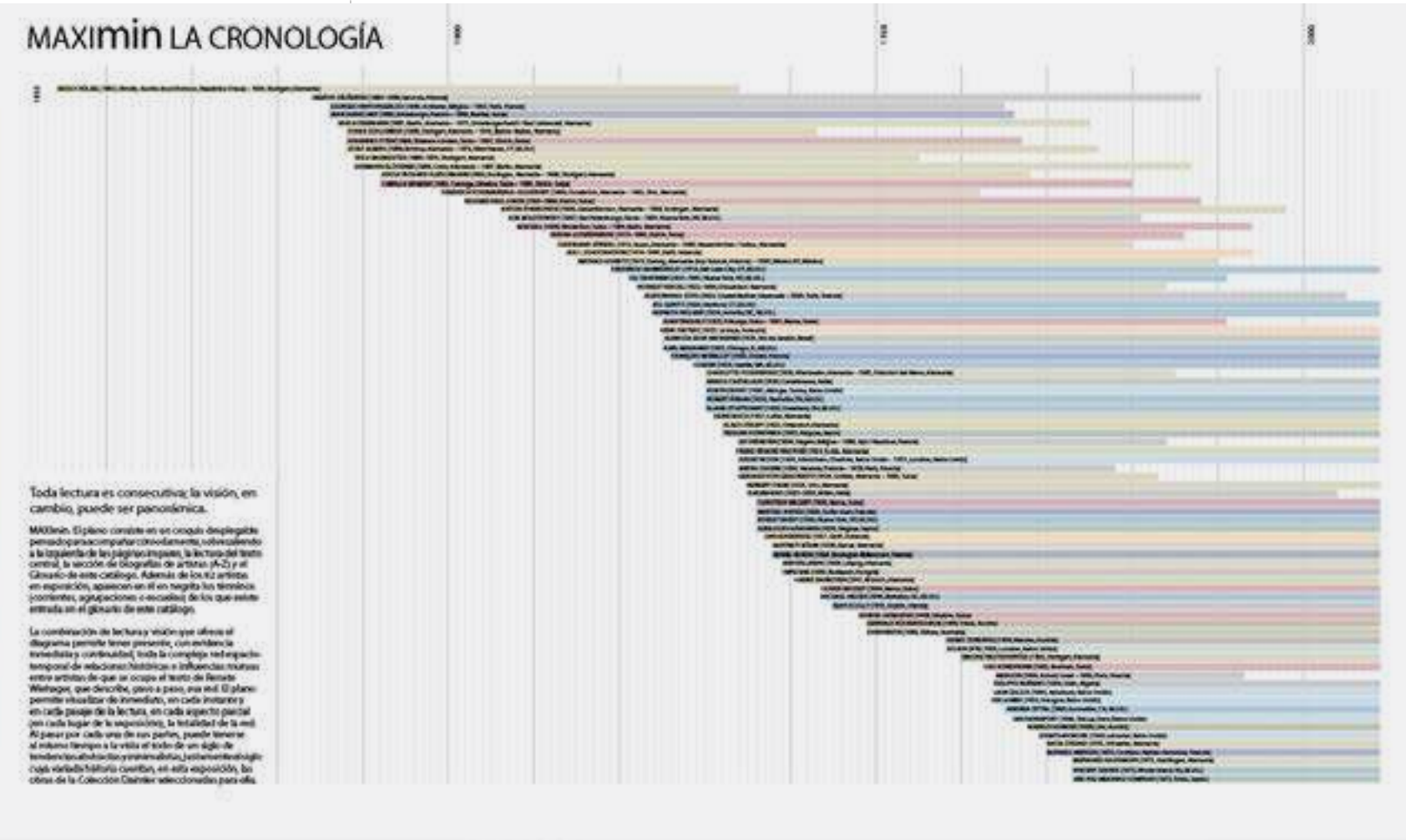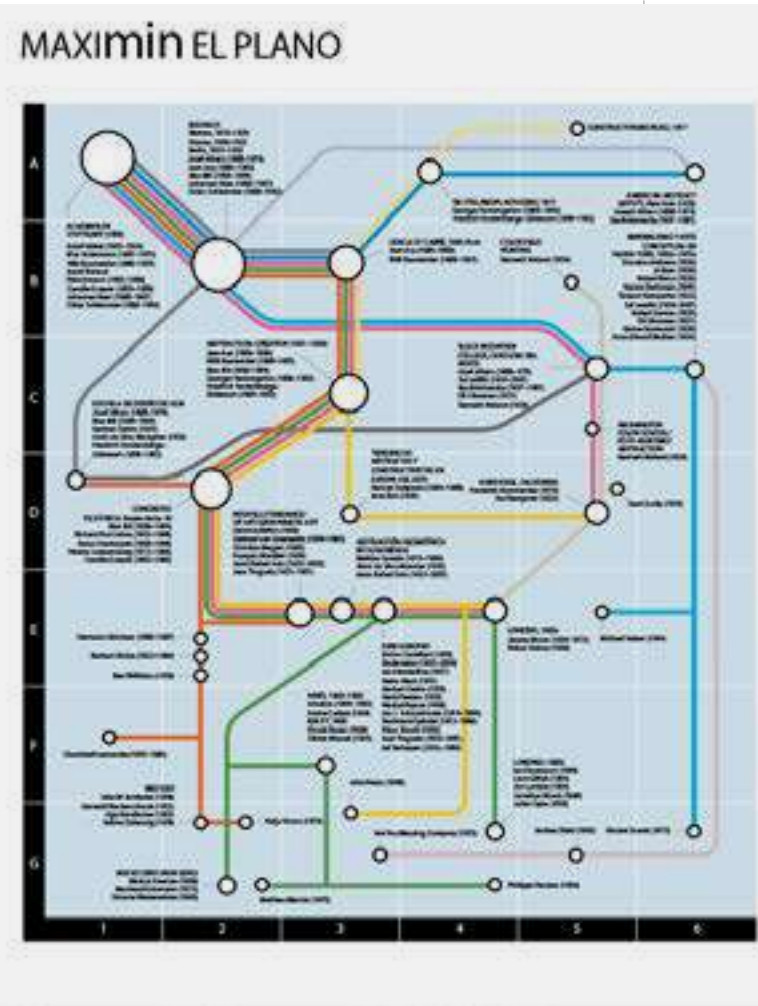(p. 267)

Libro, 30 x 22 cm

Biblioteca Fundación Juan
March, Madrid

MAXImin
MAXIMUM MINIMIZATION IN
CONTEMPORARY ART

Fundación Juan March

Daimler Kunst Sammlung

**394**

**Charles Jencks**

*A Sea of Many Streams* [Un
mar de muchas corrientes],
2011

Cartel. Impresión offset,
49 x 69 cm

Biblioteca Fundación Juan
March, Madrid



MAXI**min** EL PLANO



MAXI**min** LA CRONOLOGÍA

**395**

**Daniel Feral**

*Graffiti and Street Art*
[Grafiti y arte callejero],
2011. Cartel publicado
con ocasión de la muestra
sobre la evolución del arte
abstracto urbano *Futurism
2.0,* celebrada en el espacio
Blackall Studios, Londres,
septiembre-octubre de 2012.

Cartel. Impresión offset,
45,72 x 30,48 cm

Cortesía el artista / EKG Labs





GRAFFITI AND STREET ART

**William Powhida**

*A Solipsistic Artist's Map of the World* [Mapa solipsista del mundo, de artista], 2015

Acrílico y óleo sobre lienzo, 97 x 152 cm

Cortesía de William Powhida and Gallery Poulsen, Copenhagen