

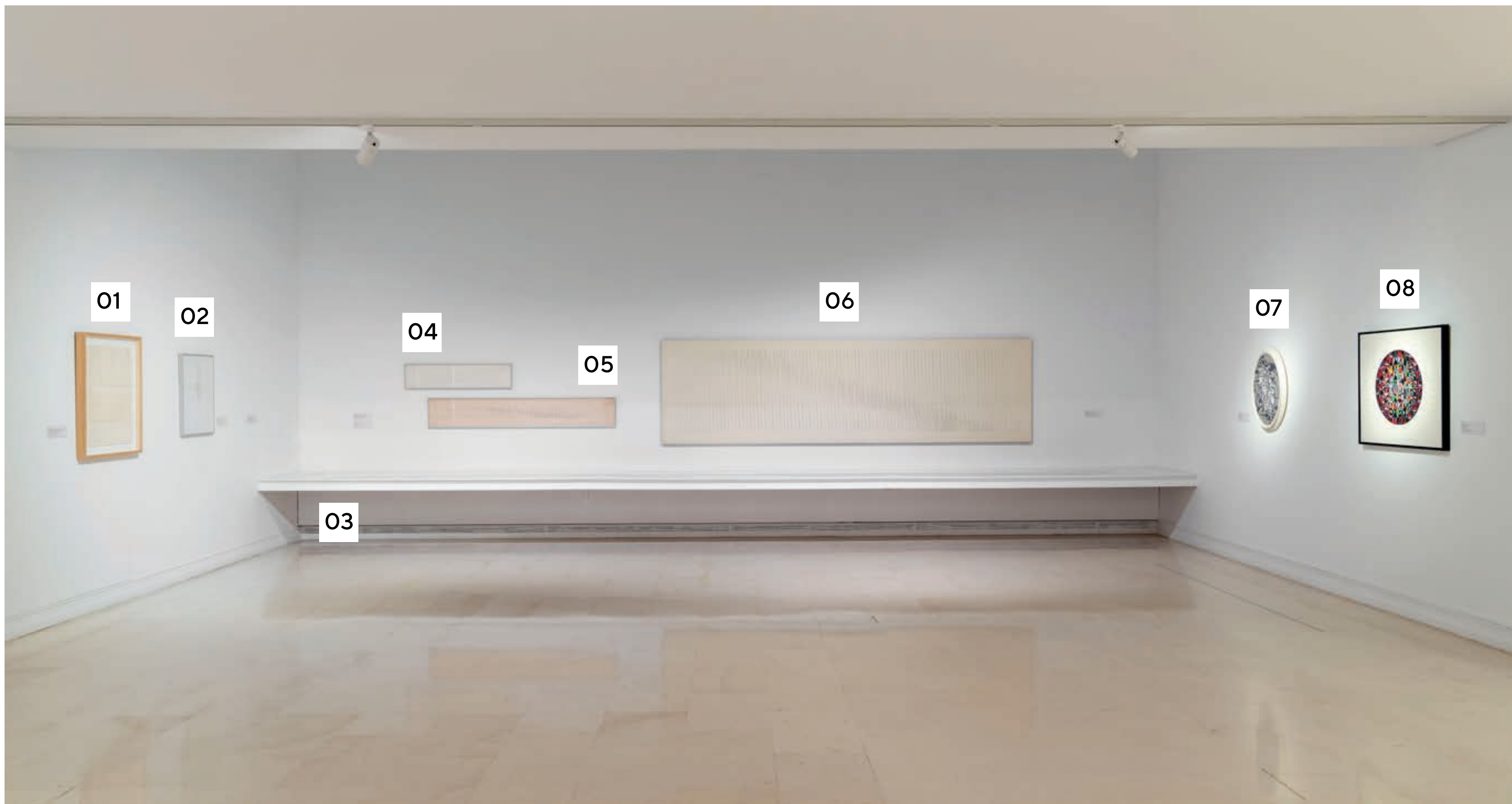
Cybernetic geometry and motion

The Cold War provoked an unprecedented technological revolution that influenced every sector of society. News bulletins around the world reported constantly on the progress achieved in that period, such as the appearance of electronic computers, the space race and its culmination in man's arrival on the moon, and the launch of the first satellites. The dissemination of this technological paraphernalia initiated the development of the aesthetic of motion and the radicalisation of science and mathematics in the concept of art that emerged and was implemented in the 1960s.

Between the mid-1950s and the late 1970s, there were two generations of artists in Spain who developed an abstract art on geometric principles. The first produced what was known as 'normative art', and its members investigated relations between mass and volume, the line and its tensions, dynamism and the limits of colour, and the repetition of structures and grids. Among its most prominent collectives and individual artists were Equipo 57 (1957-1966), Pablo Palazuelo, Eusebio Sempere, Manuel Calvo and Joaquín Michavila. The second generation worked on the interaction between art and science, and included artistic groups like Antes del Arte or the SGAFP (Seminars on the Automatic Generation of Plastic Forms) at the Centro de Cálculo (Computing Centre) of Madrid's Complutense University.*

The base of the Antes del Arte group (1968-69) was formed by José María Yturralde, Jordi Teixidor, Ramón de Soto and the theorist Vicente Aguilera Cerni, who expressed his interests in numerous texts opposing what he regarded as informalist irrationality while staunchly defending op art and kinetic art. The SGAFP (1968-1973) arose as a result of an agreement between the multinational IBM and Madrid's Complutense University aimed at fostering innovation in information science and its various applications, including the production of artworks through mathematical calculation and the use of computers. José Luis Alexanco, Manuel Barbadillo, Yturralde, Eusebio Sempere, Soledad Sevilla, Elena Asins and many others attended the seminars organised by Ernesto García Camarero and Florentino Briones, which were complemented with exhibitions, publications and a series of concluding lectures.

*. The structural framework of the two generations of Spanish geometric artists is defined in Barreiro López, Paula, *La abstracción geométrica en España, 1957-1969*. Editorial CSIC-CSIC Press, 2009.



01. Elena Asins

Estudio N° 14 para cuartetos prusianos (Study No. 14 for Prussian Quartets), September 1978. Ink on card. 70 x 54.5 cm

IVAM Institut Valencià d'Art Modern, Generalitat. Donación Juan Antonio Aguirre, Madrid

02. Elena Asins

Untitled, 1968
Collage of folded paper on paper. 63.5 x 50 cm
Museo Nacional Centro de Arte Reina Sofía

03. Elena Asins

Sin título (Variaciones Offset) (Untitled [Offset Variations]), 1975. Digital impression 1975 on continuous form paper. 75 x 836 cm

Museo Nacional Centro de Arte Reina Sofía.
Gift of the artist, 2012

04. Elena Asins

Cuarteto prusiano KW 589 (Prussian Quartet KW 589), 1978. Pencil and ballpoint with India ink on paper. 21.8 x 113.8 cm

Museo Nacional Centro de Arte Reina Sofía

05. Elena Asins

Untitled, c. 1975-1977
Pencil and India ink on graph paper. 29.7 x 198 cm
Museo Nacional Centro de Arte Reina Sofía

06. Elena Asins

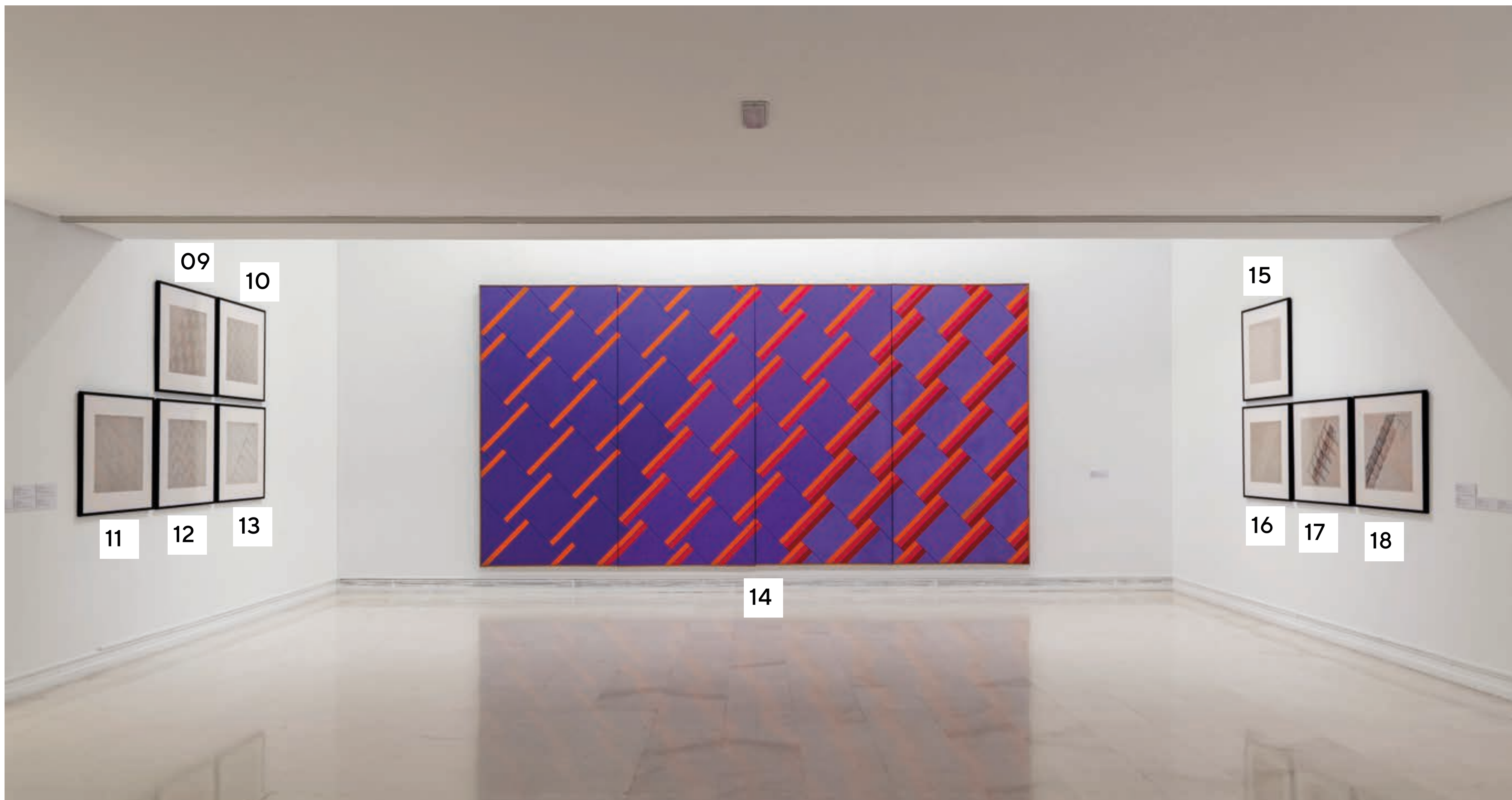
Desarrollo (Development), 1977
India ink on paper mounted on panel. 106.7 x 400 cm. Museo de Arte Abstracto Español. Fundación Juan March
Courtesy Fundación Juan March, Madrid.
Photo: © Fernando Ramajo

07. Elena Asins

Sin título (Composición geométrica) (Untitled [Geometric Composition]), c. 1967-1969. Acrylic on canvas. 61 x 46 cm
Museo Nacional Centro de Arte Reina Sofía

08. Elena Asins

Untitled, c. 1967
Oil on canvas. 74 x 86 cm
Museo Nacional Centro de Arte Reina Sofía.
Gift of Ignacio Gómez de Liaño, 2019



09. Soledad Sevilla

Untitled, 1969

Ink on grid paper. 54.5 x 59.2 cm

IVAM Institut Valencià d'Art Modern, Generalitat.
Gift of the artist

10. Soledad Sevilla

Untitled, 1969

Ink on grid paper. 54.5 x 59 cm

IVAM Institut Valencià d'Art Modern, Generalitat.
Gift of the artist

11. Soledad Sevilla

Untitled, 1969

Ink on grid paper. 52.5 x 56 cm

IVAM Institut Valencià d'Art Modern, Generalitat.

12. Soledad Sevilla

Untitled, 1969

Ink on grid paper. 55 x 59,5 cm

IVAM Institut Valencià d'Art Modern, Generalitat.
Gift of the artist.

13. Soledad Sevilla

Untitled, 1969

Ink on grid paper. 54.5 x 59 cm

IVAM Institut Valencià d'Art Modern, Generalitat.

14. Soledad Sevilla

Untitled, 1977

Acrylic on canvas, 300 x 600 cm. By piece: 300 x 150 cm

Museo Nacional Centro de Arte Reina Sofía. Donación del
Servicio de Exposiciones, Ministerio de Cultura, 1980

15. Soledad Sevilla

Untitled, 1969

Ink on grid paper. 61.3 x 70 cm

IVAM Institut Valencià d'Art Modern, Generalitat. Gift of
the artist

16. Soledad Sevilla

Untitled, 1969

Ink on grid paper. 55 x 58.9 cm

IVAM Institut Valencià d'Art Modern, Generalitat

17. Soledad Sevilla

Untitled, 1969

Ink on grid paper. 56 x 59 cm

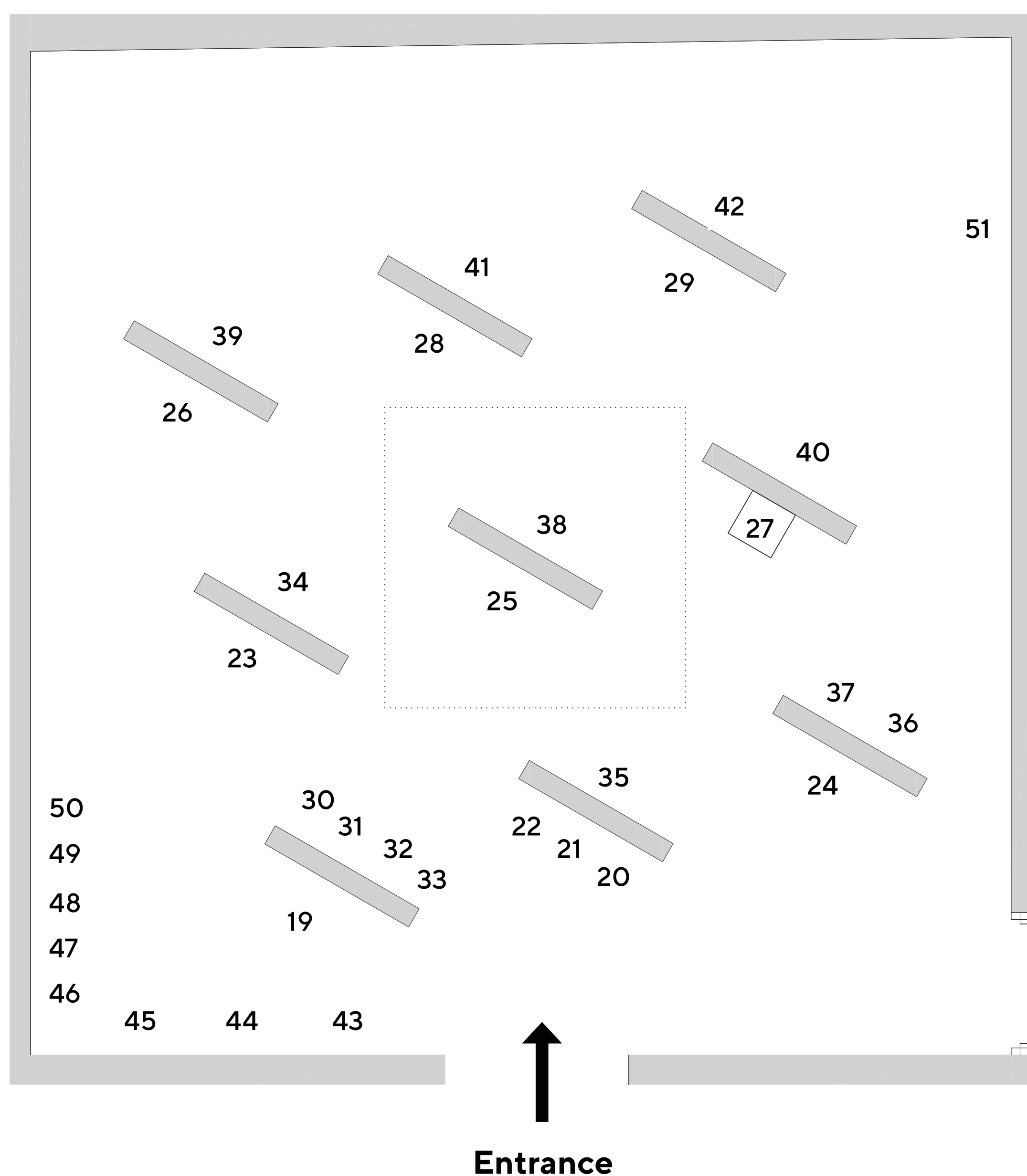
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18. Soledad Sevilla

Untitled, 1969

Ink on grid paper. 56 x 59 cm

IVAM Institut Valencià d'Art Modern, Generalitat



Entrance

19. Jordi Teixidor

Azul con puerta #48 (Blue with Door #48), 1967
Synthetic paint and metal on wood. 71.5 x 37.7 x 8 cm
IVAM Institut Valencià d'Art Modern, Generalitat

20. Andreu Alfaro

Sense títol (Untitled), 1973
Methacrylate. 50 x 50 x 32 cm
Colección Alfaro Hofmann

21. Andreu Alfaro

Triangles perpendiculars taronja (Orange Perpendicular Triangles), 1977. Methacrylate. 135 x 18 x 12.5 cm
Colección Alfaro Hofmann

22. Andreu Alfaro

Triangles taronja (Orange Triangles), 1973
Methacrylate. 65 x 27 x 13 cm
Colección Alfaro Hofmann

23. Eusebio Sempere

Gouache, 1960
Gouache on paper. 65 x 50 cm
IVAM Institut Valencià d'Art Modern, Generalitat

24. José María Yturralde

Situación espacial (Spatial situation), 1967
Synthetic and acrylic painting on Wood. 46 x 44.5 cm
IVAM Institut Valencià d'Art Modern, Generalitat

25. José María Yturralde

Movimiento espacio opuesto II (Opposite Space Movement II), 1967. Synthetic enamel on wood. 66 x 81 cm
IVAM Institut Valencià d'Art Modern, Generalitat.
Donación Juan Antonio Aguirre, Madrid

26. José María Yturralde

Relieve luminoso (Luminous Relief), 1960
Mixed media: wood, plastic, acrylic, incandescent light bulbs and AC motor. 120 x 63.7 x 15 cm
IVAM Institut Valencià d'Art Modern, Generalitat

27. José María Yturralde

Variación derivada de la figura radial de McKay (Variation Derived from McKay's Radial Figure), 1967. Plastic, wood and electric motor. 70 x 70 x 22 cm
IVAM Institut Valencià d'Art Modern, Generalitat

28. José María Yturralde

Estructura cinética. Multiplicación cromática y formal (Kinetic Structure. Chromatic and Formal Multiplication), 1967-2019. Wood, steel, acrylic paint and silkscreen on canvas mounted on panel and electric motor. 70 x 70 x 70 cm
IVAM Institut Valencià d'Art Modern, Generalitat

29. Manuel Barbadillo

Untitled, c. 1968-1979
Methacrylate. 100 x 100 cm. Ed 1/10
IVAM Institut Valencià d'Art Modern, Generalitat

30. Andreu Alfaro

Sketch for *Sense títol* (Untitled), 1977
Methacrylate. 20 x 20 x 20 cm
Colección Alfaro Hofmann

31. Andreu Alfaro

Quadrat rombe gris (Grey Rhombus Square), 1977
Methacrylate. 98 x 17 x 11 cm
Colección Alfaro Hofmann

32. Andreu Alfaro

Quadrats perpendiculars blaus (Blue Perpendicular Squares), 1976
Methacrylate and wooden base. 33 x 23 x 23 cm
Colección Alfaro Hofmann

33. Andreu Alfaro

Sketch for *Covergència de quadrats blaus i verds* (Convergence of Blue and Green Squares), 1977
Methacrylate. 68 x 6 x 6 cm
Colección Alfaro Hofmann

34. Julian Gil

Untitled, 1965
Mixed media on wood. 100.5 x 130.5 cm
IVAM Institut Valencià d'Art Modern, Generalitat.
Gift of the artist

35. Joaquín Michavila

Convergencias (Convergences), 1973
Acrylic on canvas. 120 x 120.3 cm
IVAM Institut Valencià d'Art Modern, Generalitat

36. José Luis Alexanco

Curvas de nivel (Level Curves), 1969
Methacrylate, 19 pieces. Various measurements
IVAM Institut Valencià d'Art Modern, Generalitat

37. José Luis Alexanco

Mouvnt 5, 1972

Methacrylate (reconstruction). 15 x 15 x 15 cm

IVAM Institut Valencià d'Art Modern, Generalitat

38. Ramón De Soto

Homenaje a Fibonacci

(Homage to Fibonacci), 1968/2006

Red polychromed steel. 120 x 120 x 15 cm

Herederos de Ramón De Soto

39. Eusebio Sempere

Móvil (Mobile), c. 1972-1973

Stainless steel. 180 x 60 x 50 cm

IVAM Institut Valencià d'Art Modern, Generalitat

40. Equipo 57

PA 8, 1960

Paint on panel. 122.5 x 137.5 cm

IVAM Institut Valencià d'Art Modern, Generalitat

41. Javier Calvo

Itinerario que conduce al invierno (Nº 63) (Itinerary Leading to the Winter [No. 63]), 1974

Synthetic on canvas. Triptych, total measurements

132 x 186 x 2 cm

IVAM Institut Valencià d'Art Modern, Generalitat

42. Manuel Barbadillo

Módulos agrupados en cuatro unidades independientes

(Modules grouped in four independent units), 1966

Acrylic on canvas. 73 x 73 cm

IVAM Institut Valencià d'Art Modern, Generalitat.

Donación Juan Antonio Aguirre, Madrid

43. Eusebio Sempere

Se-3. Composiciones (SE-3. Compositions), 1974.

Series of 5 lithographs on Guarro paper. 76 x 56 cm

Hors Commerce copy. Polígrafa, Barcelona.

Printer: Abel Martín, Madrid.

IVAM Institut Valencià d'Art Modern, Generalitat.

Depósito Estado Español

44. Eusebio Sempere

Se-4. Composiciones (Se-4. Compositions), 1974.

Series of 5 lithographs on Guarro paper. 76 x 56 cm

Hors Commerce copy. Polígrafa, Barcelona.

Printer: Abel Martín, Madrid.

IVAM Institut Valencià d'Art Modern, Generalitat.

Depósito Estado Español

45. Eusebio Sempere

Se-2. Composiciones (Se-2. Compositions), 1974.

Series of 5 lithographs on Guarro paper. 76 x 56 cm

Hors Commerce copy. Polígrafa, Barcelona.

Printer: Abel Martín, Madrid.

IVAM Institut Valencià d'Art Modern, Generalitat.

Depósito Estado Español

46. Eusebio Sempere

Sem-13. Formas (Sem-13. Forms), 1975

Series of 5 silkscreen prints on card. 65 x 50 cm

Hors Commerce copy. Polígrafa, Barcelona.

Printer: Abel Martín, Madrid.

IVAM Institut Valencià d'Art Modern, Generalitat.

Depósito Estado Español

47. Eusebio Sempere

Sem-14. Formas (Sem-14. Forms), 1975.

Series of 5 silkscreen prints on card. 65 x 50 cm

Hors Commerce copy. Polígrafa, Barcelona.

Printer: Abel Martín, Madrid.

IVAM Institut Valencià d'Art Modern, Generalitat.

Depósito Estado Español

48. Eusebio Sempere

Se-5. Composiciones (Se-5. Compositions), 1974.

Series of 5 lithographs on Guarro paper. 76 x 56 cm

Hors Commerce copy. Polígrafa, Barcelona.

Printer: Abel Martín, Madrid.

IVAM Institut Valencià d'Art Modern, Generalitat.

Depósito Estado Español

49. Eusebio Sempere

Sem-12. Formas (Sem-12. Forms), 1975

Series of 5 silkscreen prints on card. 65 x 50 cm

Hors Commerce copy. Polígrafa, Barcelona.

Printer: Abel Martín, Madrid.

IVAM Institut Valencià d'Art Modern, Generalitat.

Depósito Estado Español

50. Eusebio Sempere

Sem-11. Formas (Sem-11. Forms), 1975

Series of 5 silkscreen prints on card. 65 x 50 cm

Hors Commerce copy. Polígrafa, Barcelona.

Printer: Abel Martín, Madrid.

IVAM Institut Valencià d'Art Modern, Generalitat.

Depósito Estado Español

51. Eusebio Sempere

Lunariae, 1972

Portfolio with 8 aquatints, accompanied by poems

by Max Hölzer. Copy 24/ 150, stamped by

the Fondation Maeght, Paris, 1972

IVAM Institut Valencià d'Art Modern, Generalitat.