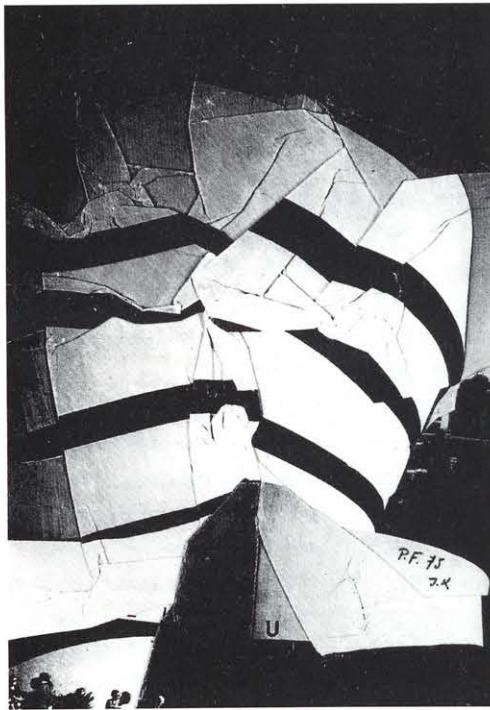


better, an American logo for the project of a "late" (in the double sense of "tardy" and of "recently passed away") modernism. Like the structures of the fairs, this was a consumable image, devoted to presentation and display, constructed out of paper thin modern materials, and incorporating movement of crowds into its strategies of exhibition. Once again, a technical description seems significant. Wright stated in 1945:

"The building is a modern problem in air conditioning and acoustics. The structure itself is novel in New York. A fibrous fabrication like a steel basket shot with gunnite (a high pressure plastic concrete) a new process saving several hundred thousand of dollars over standard construction. Except the marble facing of the construction."¹⁰

"Except the marble facing of the construction" (which of course was never executed). In this respect, Wright exhibits a flexibility that is the exact counterpart to the fluid geometries of the Guggenheim. For example, early in the development of the project, Wright contemplated a structure of steel plates, to take advantage of wartime shipbuilding technologies, under-utilized in the post-war economy. Wright, for symbolic reasons, sanctions a mismatch between fabric and surface (image and structure). The supplementary of the surface itself is encoded in the very grammar



Jiri Kolar, *Crumplage*, Museo Guggenheim, 1975.

Jiri Kolar, *Crumplage*, Museo Guggenheim, 1975.

of the passage. A picture of Wright emerges not as the dogmatic adherent of tectonic consistency or the expression of the "nature of materials", but as an architect of supple tectonic imagination at the service of unfettered spatial invention. A double history of ingenuity and compromise made possible the realization of this unprecedented structure. This double history offers paradoxical confirmation that the later appropriation of the image of the building, its circulation as available currency in an economy of images, was in fact already anticipated

by the architecture's uncharacteristically delicate disavowal of its own material presence.

The photographs published here were taken by William Short, Wright's Clerk of the Works, during the construction of the museum in 1958 and 1959, and are supplemented by photographs of the restoration and addition taken in 1990 and 1991, supplied by the Guggenheim Museum. Thanks to Glory Jones and Julie Zander for assistance with photographic documentation.

¹ From: Guilles Deleuze and Felix Guattari, *A Thousand Plateaus*; trans., 1987: "Whenever ambulant procedure and process are returned to their own model, points regain their positions as singularities that exclude all biunivocal relations, the flow regains its curvilinear and vertical that excludes any parallelism between vectors, and smooth space reconquers the properties of contact that prevent it from remaining homogeneous and striated." pp. 372-3.

² "Space enclosed by space" is Edgar Kaufman's formulation, cited in William Jordy: *American Buildings and their Architects*, 1972, p. 280.

³ Jordy, pp. 312-313.

⁴ "Pragmatists are supposed to treat everything as a matter of choice of context and nothing as a matter of intrinsic properties. They dissolve objects into functions, essences into momentary foci of attention, and knowing into success at reweaving a web of beliefs and desires into more supple and elegant folds." Richard Rorty, "Philosophy without Principles" in *Against Theory*, Ed. W.J.T. Mitchell; 1985, p. 134.

⁵ Jordy, p. 137.

⁶ Jordy, p. 317.

⁷ From Frank Lloyd Wright The Guggenheim Correspondence, Bruce Brooks Pfeiffer, Editor, 1986, p. 207.

⁸ This also suggests a way of re-framing the supposed antipathy of Wright and his space to the works displayed within (note the letter signed by many prominent painters of the New York School, published on page 242 of the Correspondence). It is at precisely this moment that the fixity of the canvass of the abstract painters was being questioned by early minimalist works: see Tony Smith's famous statement of the early 1950's, describing a ride on the yet unfinished New Jersey Turnpike: "The experience on the road was something mapped out but not socially recognized. I thought to myself, it ought to be clear that's the end of art." As Rosalind Krauss has remarked, "Tony Smith's "end of art" coincided with—indeed conceptually undergirded—the beginning of minimalism."

⁹ Jordy, p. 314.

¹⁰ Correspondence, p. 62.

El Castillo de Roma Halat

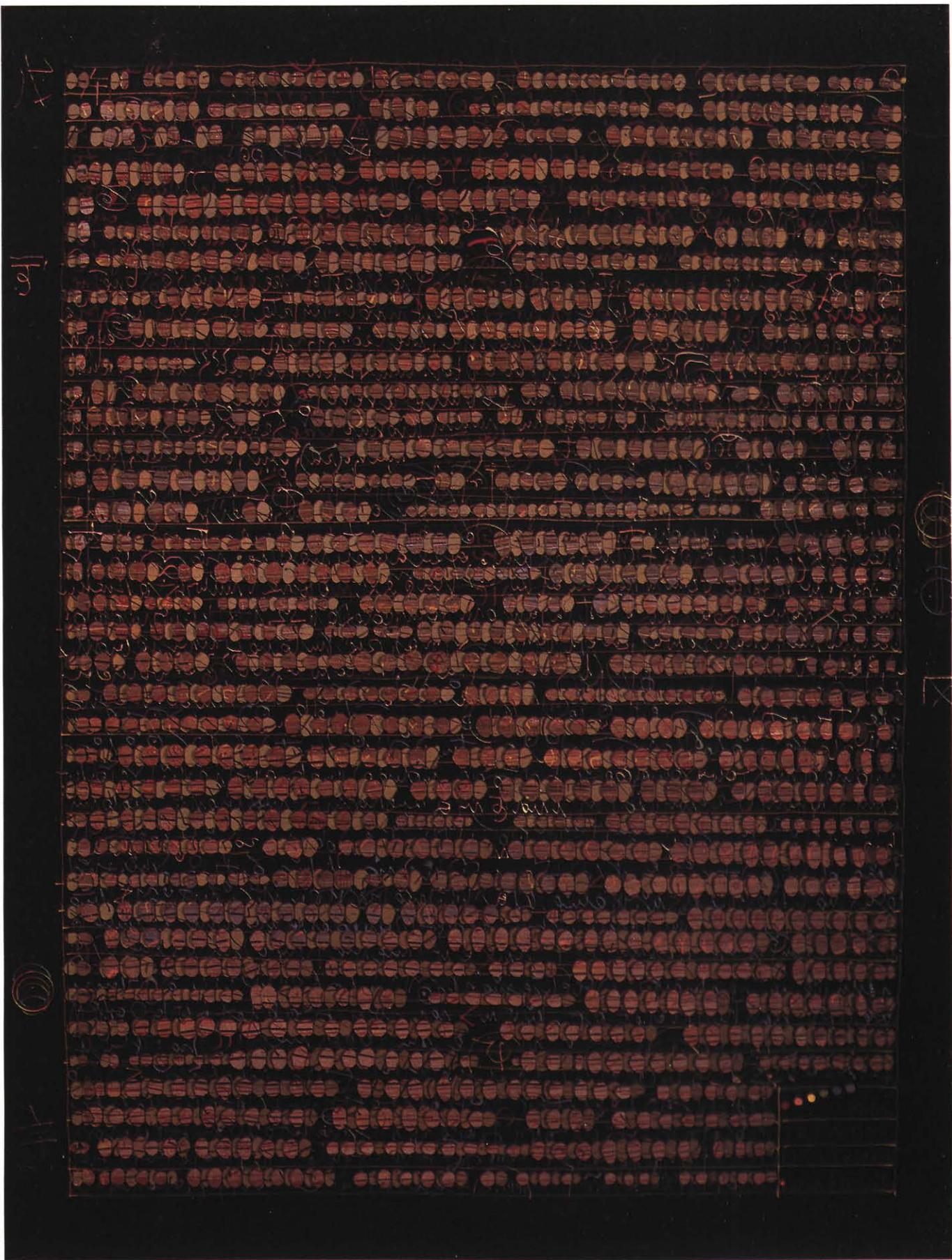
El Castillo by Roma Halat

JANUSZ K. GLOWACKI

Janusz K. Glowacki es historiador del arte y fue director del Museo de Arte Moderno de Lodz durante el período 1975-1981. Desde 1984 dirige, junto con Grzegorz Musiad la galería de Arte 86 en Lodz. Este texto es un comentario a la obra de la artista polaca Roma Halat, recientemente expuesta en ARCO 92, Madrid.

Janusz K. Glowacki is an art historian and was the director of the Museum of Modern Art in Lodz between 1975-1981. Since 1984, he has directed, together with Grzegorz Musiad, the Art 86 gallery in Lodz. This text is a commentary on the work of the Polish artist Roma Halat, recently exhibited at ARCO 92 in Madrid.

La galería polaca Galería 86, de la ciudad de Lodz, ha presentado en ARCO 92, en Madrid, entre otras, un lote de obras de Roma Halat, profesora de la Escuela Superior de Artes Plásticas de Lodz. Desde 1984, estos trabajos tienen un título común: *La Triada*. Son unos dibujos laminares, espaciales, compuestos de tres folios. Las láminas están colocadas una encima de la otra. "Existe —según afirma la autora— un principio, un centro y un final. Se forma una Triada". La superficie exterior de la primera hoja está cubierta con una escritura codificada, escrita al revés y con la mano izquierda, "la mano de la naturaleza" según Roma Halat. Son trozos de textos literarios o poesías preferidas, de textos propios... En esta hoja se han recortado y abierto semicírculos que destapan el envés de la hoja, un registro del dibujo automático. Este se une a la "magia



Roma Halat, Triada. El Castillo, 1990.
Roma Halat, Triady: El Castillo, 1990.

blanca" practicada por Roma Halat en la tercera lámina (que se encuentra en la última hoja), a menudo la primera en ser creada, mucho antes que el resto de la obra. Forma un registro por medio del dibujo de "la vida de la sombra de la mano". La sombra marca, para la autora, una frontera entre el representado y el representante, está al borde de la materia, es un anuncio de una existencia distinta. El ritmo de estos círculos es, en la mayoría de los casos, lineal; su número y composición expresan el "ritmo de la aventura". Los ritmos recortados son las aperturas a través de las cuales aparecen fragmentos del segundo y tercer folio. La casualidad decide sobre lo que se nos aparecerá en este caso. Las láminas interiores de las Triadas están escondidas, son un secreto "como en el caso de un hombre". Este convencimiento acerca de la importancia de lo secreto y lo oculto, acompaña a Roma Halat en toda su actividad creativa desarrollada hasta ahora. Las Triadas suman toda esta experiencia. Por su forma triple forman un tejido cuya vitalidad, alma y espíritu han de crear una "unidad de conciencia"; han de expresar la naturaleza triple del hombre, según escribe Ortega y Gasset. Los múltiples hilos conductores del pensamiento y de las actividades de la autora, la variedad de los efectos plásticos (línea, mancha, color, luz, semisombra, espacio) constituyen una estructura extraordinaria de estas obras, que quizás reflejen "la idea de la conciencia colectiva" del padre Teilhard de Chardin, cuyos textos Roma Halat lleva leyendo desde hace años. La conciencia colectiva es una forma de la unidad. Y aquí es, donde aparece aún otra función extraordinaria, afrontada con éxito por Roma Halat; la ordenación, dotación de forma, en este caso plástica, casi arquitectónica, donde la función múltiple ha de unirse con una unidad lógica y estable. Unidad de contenido y forma de la obra. Esta concepción de la obra de arte ha sido, sin duda, influenciada por la tradición de los círculos de arte de la ciudad de Lodz, donde han ejercido una influencia muy notable Wladyslaw Strzeminski y Katarzyna Kobro. En los años veinte y treinta publicaron en Lodz sus teorías vanguardistas acerca de la pintura —Wladyslaw Strzeminski; *El unismo*

en la pintura y escultura— Katarzyna Kobro; *Cálculo de los ritmos del tiempo y espacio en la escultura*. Gracias a estas teorías y logros plásticos los dos entraron de forma duradera en el panteón europeo de la vanguardia constructivista.

Esta tradición ha sido modificada y desarrollada hasta hoy día en los círculos artísticos de Lodz. Roma Halat es un ejemplo de actitud creativa respecto a esta tradición porque, aunque en su nueva obra creativa se haya alejado de las cuestiones clásicas, puramente plásticas y de algún modo objetivas, su hábito de síntesis es evidente, al igual que la necesidad de la disciplina de la construcción de estructuras lógicas en su subjetivismo y sistema de multiramas.

Hace unos años, Roma Halat encontró un trabajo científico sobre los ritos y señales del hombre de la época de alto paleolítico en la cueva de El Castillo, cerca de Santander. Allí se hallaron numerosas filas de puntos y señales cuadradas y miles de huellas de la manos humanas. Una asociación con sus propios trabajos del ciclo de Triada, una comparación con las filas, ritmos de semicírculos inclinados y el registro de "la vida de la sombra" de la mano fue su reacción inmediata. Por ello, desde 1989, estas obras se titulan *El Castillo-continuación*. "La obra de arte es siempre una expresión del tiempo en que el autor vive y crea su obra. Se forma con un presentimiento de la perspectiva de su posterior existencia, subrayando a la vez su presencia, dejando sus huellas en la existencia histórica del ciclo del arte". Y, realmente, las Triadas son una continuación del ciclo de El Castillo; es un ciclo contemporáneo que refleja el camino andado por el hombre desde la época paleolítica hasta la modernidad. Este mismo camino corresponde también a la arquitectura desde las cuevas hasta las construcciones modernas, refinadas en su funcionalidad, estética y construcción. Lo mismo que las huellas en las cuevas, con su orden caótico y casual, constituyen una expresión de las aspiraciones humanas, necesidades, creencias y una simple necesidad de perpetuarse a sí mismo en aquella época, las Triadas *El Castillo* de Roma Halat, en su complejidad y, a la vez, en su

armonía lógica, pueden ser una expresión del mundo contemporáneo y junto con la arquitectura de hoy constituir una unidad integral, a semejanza de las cuevas prehistóricas.

During the ARCO'92 exhibition in Madrid, Gallery 86, Lodz, Poland, presented —among others—the set of works by Roma Halat, from the Lodz School of Art and Design. Since 1984, they have been known under the common title, The Triads. They are spatial drawings made up of three pages, each of them implanted upon the other in layers. "There is the beginning, the middle and the end", the author says. "The triad is thus made." The outer side of the first sheet is covered with the handwritten code, written backward with the left hand, the author's natural style. These are fragments of some literary passages, some of her favorite poetry, her own texts.... Half circles have been cut and folded back in the sheet. They reveal the reverse of the sheet —the record of the automatic drawing, combining the "white magic" practiced by Roma Halat with the third layer (on the bottom sheet)— often made much earlier than the whole work —the drawn recording of the "life" of the hand's "shadow". For the author it is the shadow that marks the borderline between the presented and the presenting, it is itself on the borderline of matter, it is a forecast of some other existence. The rhythm of these openings—mostly linear—as well as their number, and arrangement express the "rhythm of good fortune". "The cut-out rhythms open up the access to some fragments of the second and third pages. What is going to be revealed is but a matter of chance. The inner layers of "The Triad" are hidden; they are a mystery—man's mystery". The artist's conviction of the value of the secretive, of what is concealed, has followed Roma Halat in all her artistic activity so far. "The Triads" sum up this experience. In their triple form they build the tissue whose liveliness, soul and spirit are to make "the unity of our consciousness; to Ortega y Gasset they express the triple nature of man. The great variety of the author's ideas and activities, the wide range of the plastic effects (line, patch, colors, light and shadow, space) determine the extraordinary structure of these works, perhaps carrying out Father Teilhards de Chardin's "idea of collective consciousness",

studied by Roma Halat for years. The collective consciousness is a form of unity. Yet another function appears which is successfully undertaken by Roma Halat—that of ordering, forming. Here is the plastic form which is almost architectural, where the variety of functions must be united in the logical stable whole—the unity of the contents and the form of the work. Such understanding of the work of art follows from the tradition of the Lodz artistic circle, bearing a stigma of the constructivist outlook of Wadysaw Strzeminski and Katarzyna Kobro. In the 1920's and 1930's they worked out and published their avant guard theories about painting—Wladyslaw Strzeminski—Uniem in Painting and about sculpture—Katarzyna Kobro—Calculating the Time Spatial Rythmns in Sculpture. Owing to their theories and achievements in art they were forever included in the pantheon of the European constructivist avant guard. This tradition has been modified and

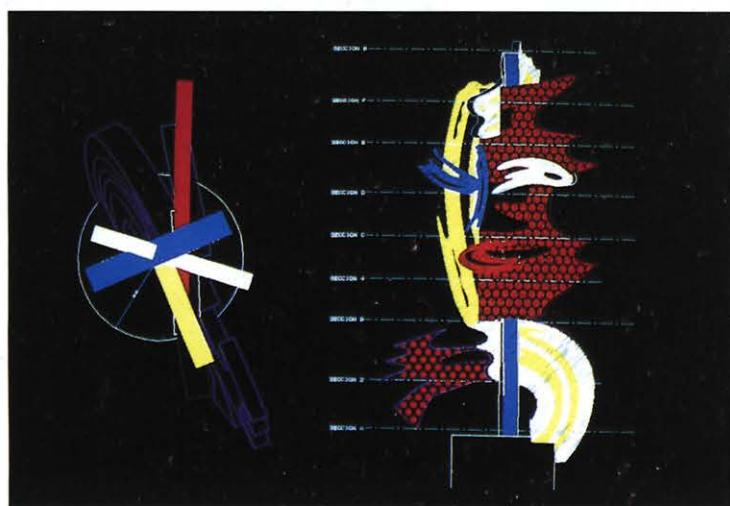
developed in the Lodz circle until the present day. Roma Halat is a unique example of the creative attitude to this tradition since—having abandoned the classic, formal and, in fact, standard problems—she has the habit of synthesis, the evident hand of discipline in building logical (in their multi-motif and subjective form) structures. Some years ago Roma Halat came across the study of the carvings and tracings left by men of the late Paleolithic age in the cave of Castillo near Santander, Spain. There, there are a particularly numerous sequence of points and square signs as well as thousands of imprints of people's hands. Her immediate reaction was the association with her own works from the cycle of Triads—the sequences, rhythms of the inclined semi-circles and the recording of "the life of the hand's shadow". Hence, since 1989, the works have born the title, "El Castillo ctnd". The author herself saying; "the work of art is always an expression of

time in which the artist lives and works. It is formed with one's presentiment of one's further life perspective, at the same time marking one's own presence, inscribing one's own trail in the historical sequence of art's existence". Indeed, the cycle the "Triads" is the continuation of El Castillo, the present day continuation, reflecting the distance man has covered from Paleolithic to modern times. And, it is the same distance covered by architecture from caves to modern construction, with its refined functionality, aesthetic value and construction. Just as the prints in the cave, with their chaotic and casual order, were the expression of human aspirations, needs, and the simple need to leave a trace of his own existence in time, so also the "Triads El Castillo ctnd" of Roma Halat—in their multi-level complexity and logical harmony—expresses the modern world; and together with the architecture of the present day make, like the archaic caves, an integrated whole.

La Ingeniería de una escultura de Roy Lichtenstein

The Engineering of a Roy Lichtenstein Sculpture

IGNACIO COBIÁN BABE y JAVIER RUI WAMBA



Ignacio Cobián Babe es arquitecto. Javier Rui-Wamba es ingeniero de Caminos, Canales y Puertos, y director de la empresa consultora de ingeniería ESTEYCO, S. A., que fue la encargada de realizar el proyecto de ejecución de la escultura de Roy Lichtenstein para Barcelona que aparece comentada en esta LECTURA.

Ignacio Cobián Babe is an architect. Javier Rui-Wamba is an engineer of roads, canals and ports, and also director of the engineering consulting service ESTEYCO, S. A., which was responsible for the production of the Roy Lichtenstein's sculpture for Barcelona, upon which this article comments. Translated by Deborah Gorman.

1. Alzado y planta de la escultura de Roy Lichtenstein que se está instalando en Pla de Palau, en Barcelona. La escultura tiene 14,00 m. de altura, una anchura máxima de 6,00 m. y apoya sobre un pedestal de 6,00 m. de altura cimentado sobre cuatro pilotes hincados de 90 toneladas de capacidad útil. Construida con la tecnología de los puentes de voladizo con dovelas conjugadas prefabricadas, mediante ocho piezas de 2,80 m. de altura máxima y un peso máximo de 20 toneladas. Las piezas prefabricadas se han construido con un hormigón H-300 con fibras de acero inoxidable. La dosificación de las fibras ha sido de 45 kg/m³. Las piezas se unen, *en situ*, mediante cables postensados y las juntas se tratan con morteros de resina epoxi.

1. Elevation and plan of the Roy Lichtenstein sculpture that is being installed in Pla de Palau, in Barcelona. The sculpture is 14.00 meters tall, with a maximum width of 6.00 meters and presses down to a pedestal 6.00 meters tall piled to four driven piles of 90 tons of service capacity. Built with the technology of corbeled bridges with prefabricated interconnected voussoirs, by means of eight pieces with a maximum height of 2.80 meters and a maximum weight of 20 tons. The prefabricated pieces have been built with an H-300 concrete with stainless steel fibers. The batching of the fibers has been 45 kg/m³. The pieces join, *in situ*, by means of posttensioned cables, and the joints are treated with epoxy resin mortars.