

# Whitney Museum of American Art 59 New American Film and Video Series

## New Directions in Holography

November 19–December 29, 1991

Gallery talk, Tuesday, December 17 at 6:30.  
René Paul Barilleaux will be present.

### Works in the Exhibition

Dimensions are in inches; height precedes width precedes depth.  
All works are lent courtesy of the artists.

#### Rudie Berkhout

Born in Amsterdam, 1946  
Lives in New York City and Cairo, New York

#### *Kuan Yin*, 1981

Light, glass-plate hologram with frame, 12 × 16 × ¼, on tripod

#### *Ukiyo*, 1981

Light, glass-plate hologram with frame, 12 × 16 × ¼, on tripod

#### *The New Territories*, 1984

Lights, two glass-plate holograms, 12 × 16 × ¼ each, with frame

#### *Transfer 339*, 1987

Light, glass-plate hologram with frame, 12 × 16 × ¼

#### *Primal Mix I*, 1988

Light, glass-plate hologram with frame, 12 × 16 × ¼

#### *Breakthrough*, 1990

Light, glass-plate hologram with frame, 12 × 16 × ¼

#### Wenyon & Gamble

##### Susan Gamble

Born in London, 1957  
Studied at the Winchester School of Art, England (1975), and  
Goldsmiths' College, University of London (BA, 1979)

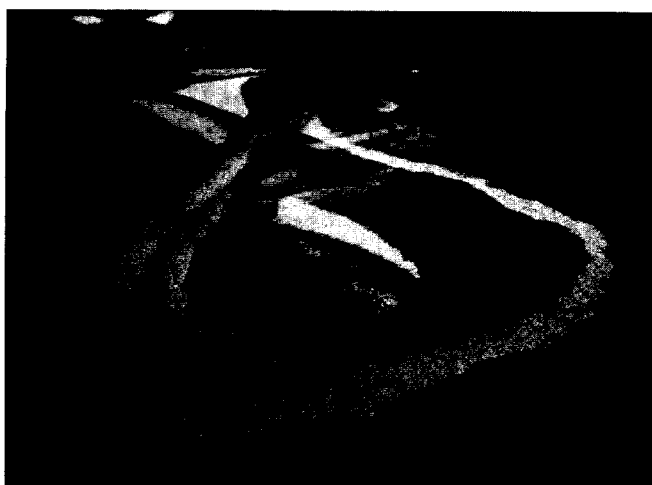
##### Michael Wenyon

Born in Dayton, Ohio, 1955  
Studied at the University of Bristol, England (BSc, 1977), and Imperial  
College, University of London (MSc, 1978)

Wenyon & Gamble currently live in Tsukuba, Japan

#### *Stella Maris*, 1989–91

Lights, five glass-plate holograms, 20 × 24 × ¼ each, on wall with  
specified lighting



*Breakthrough* (1990), Rudie Berkhout.

The Whitney Museum of American Art's first exhibition to focus exclusively on holography brings together works by three artists—Rudie Berkhout and the collaborative team of Susan Gamble and Michael Wenyon. Each has a highly personal artistic vocabulary that can be achieved only through holography, and each extends the medium's basic principle of three-dimensional replication into altogether new directions.

Artists first made and exhibited holograms in the late 1960s, often working in tandem with holography technicians, scientists, and engineers. The late 1960s was also a period of great experimentation in other technology-based media, for example, video and audio art. During this period four artists publicly exhibited holograms and focused attention on the relatively new form—Margaret Benyon in England, Harriet Casdin-Silver and Bruce Nauman in the United States, and Carl Fredrik Reuterswärd in Sweden.<sup>1</sup> These pioneers established an important cornerstone on which subsequent generations of artists working in holography, including Berkhout and Wenyon & Gamble, could later build.

The New American Film and Video Series is made possible in part by grants from Manufacturers Hanover Corporation, Consolidated Edison Company of New York, Inc., George S. Kaufman and the Kaufman Astoria Studios, Inc., The Bohen Foundation, the John D. and Catherine T. MacArthur Foundation, The Reed Foundation, Inc., the Billy Rose Foundation, Inc., The Andy Warhol Foundation for the Visual Arts, Inc., the Film and Video Fellows of the Whitney Museum of American Art, Susan and Arthur Fleischer, Jr., Toby Horn and Richard Kandel, Nancy Brown Wellin, Barbara Wise, the New York State Council on the Arts, and the National Endowment for the Arts.

This exhibition includes two types of holograms: transmission and reflection. A transmission hologram is a glass plate (or piece of film) on which an image is recorded in a light-sensitive emulsion using laser light. The image is revealed by passing ordinary white light through the plate or film, and it appears in space both in front of and behind the surface. A reflection hologram is recorded by a similar process and reveals its three-dimensional image in space by reflecting light off the surface of the plate or film. All holograms are variations of these two basic types. In "New Directions in Holography," Rudie Berkhout presents white light transmission holograms while Wenyon & Gamble use the reflection method.

These artists approach holography from a formalist standpoint, engaged by the unique optical and perceptual aspects of the medium rather than by its ability to give the illusion of a solid object. And while Berkhout typically presents his finished holograms in a minimal, spare presentation, mounted on tripods or suspended from overhead, Wenyon & Gamble often extend the holographic image into real space through the use of site-specific architectural elements such as false walls, two-dimensional imagery created with slide projections, and/or theatrical lighting effects.

Rudie Berkhout was first introduced to holography in 1975 when he attended a now historic survey exhibition of holograms at New York City's International Center of Photography, organized by Rosemary Jackson and Jody Burns. Jackson later founded the Museum of Holography in New York to serve as a focal point for work in the field. Berkhout was immediately drawn to this new imaging process, finding in holography the "possibility of working with advanced technology outside a corporate structure and exploring it as an art medium. . . ."<sup>2</sup>

After initial investigations using representational subject matter, Berkhout experimented with abstract and geometric imagery. The holograms that resulted established him as one of the preeminent artists using holography. Not only has

he mastered the methods for creating his own holograms, but he has also developed new holographic processes, such as a multicolor technique, which he incorporated into his work and have influenced the work of other artists.

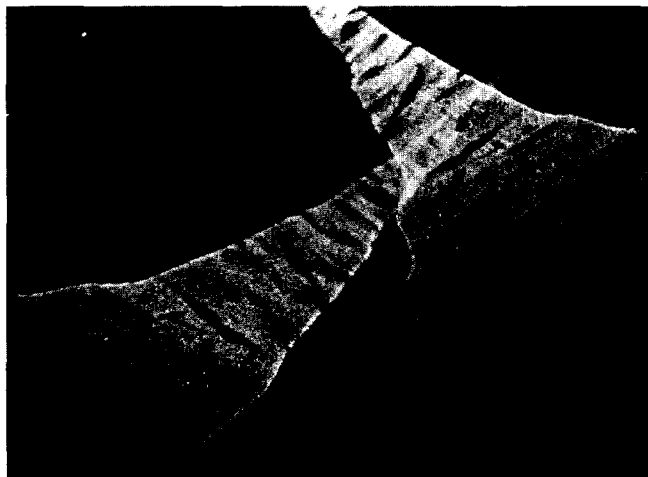
The six works comprising this selection span the past decade, tracing Berkhout's development from early images characterized by crisp forms and vivid hues to more recent ones whose subtle palette creates ethereal compositions. *Kuan Yin* and *Ukiyo* (both 1981) are intentionally direct in their concept and intense in their color. They express Berkhout's interest in "keeping the compositions simple . . . leaving enough space to invite viewers to wander in and contemplate 'unfamiliar realms.'"<sup>3</sup> These artificial, synthetic realms or spaces exist only as projections of light images. Their compositional elements seem to extend out into real space and even intrude on the viewer. Both *Kuan Yin*, named for the Chinese goddess of mercy and joy, and *Ukiyo*, or "floating world," express Berkhout's ongoing interest in Eastern philosophy, aesthetics, and mysticism.

The diptych entitled *The New Territories* (1984) abandons the purely geometric and non-objective compositions of these earlier holograms and derives its subject from the landscape. The title suggests not only the vast plains opening up before the viewer, but refers as well to the medium of holography itself. (The diptych configuration also recalls an early historical attempt at three-dimensional recording—stereographs.) *Transfer 339* (1987), a transitional work, uses two scroll-like bands that push forcefully through the hologram's surface, in some way recalling a landscape. In this sense, they function as paths or roads deep into the work's core. More mysterious and brooding than *The New Territories*, *Transfer 339* leaves behind the playfulness of its predecessor to take the viewer on what appears to be an unending journey.

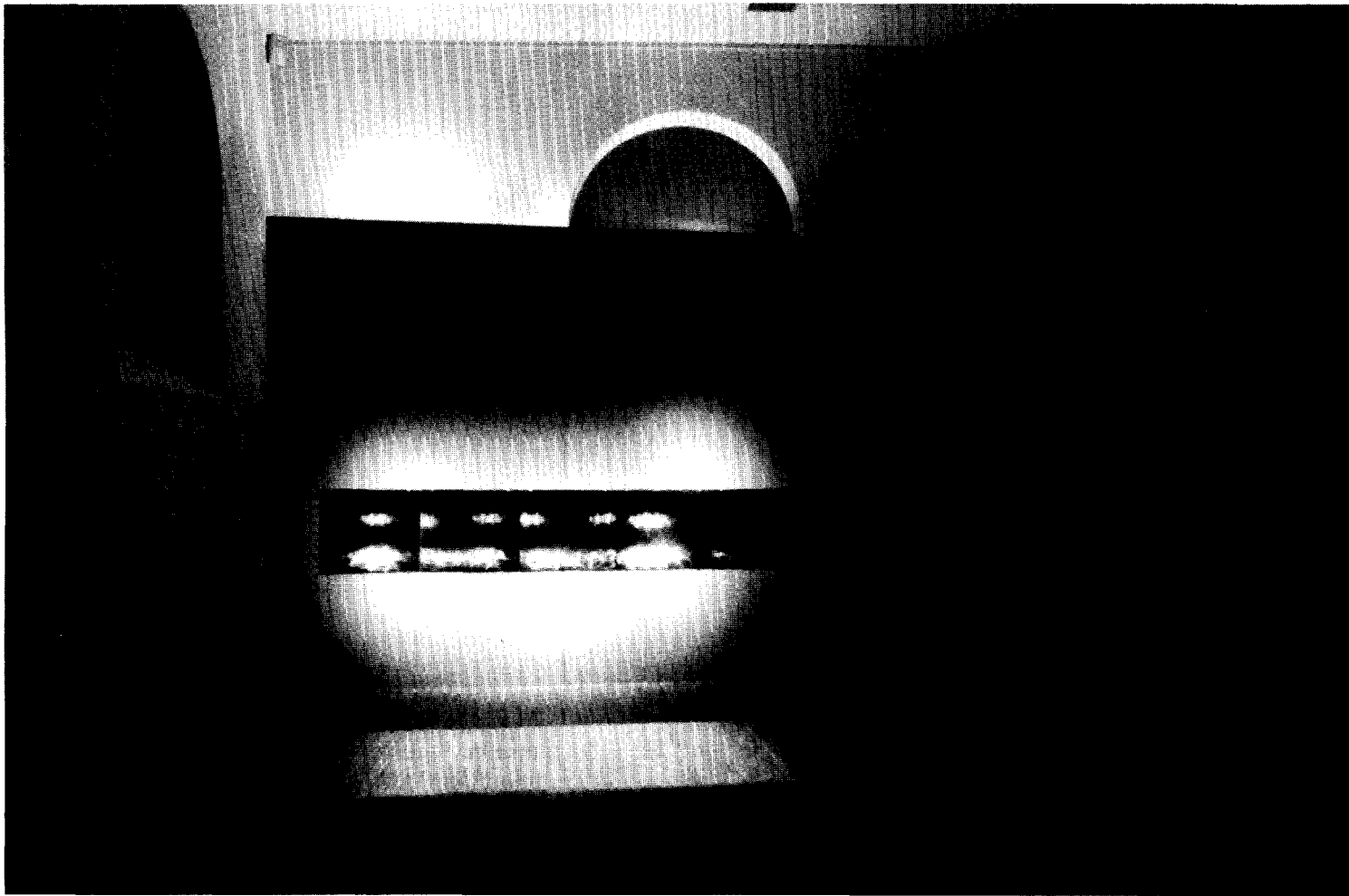
The two remaining works, *Primal Mix I* (1988) and *Breakthrough* (1990), illustrate Berkhout's shift back to more abstract imagery while still employing modulated color. No longer constrained by precise geometric forms or repeated



*Ukiyo* (1981), Rudie Berkhout.



*Transfer 339* (1987), Rudie Berkhout.



*Stella Maris* (1989–91), Wenyon & Gamble. Installation at Centre Nationale Art et Technologie, Reims, France.

elements, the imagery in these more recent works pushes at the physical constraints created by the perimeters of the holographic plate, and offers expansive, multilevel realities.

Susan Gamble and Michael Wenyon pursued holography individually prior to their first collaboration in 1983. In their recent body of works, which includes one on exhibition here, Wenyon & Gamble explore ideas involving the history of optics and its relationship to astronomy, ideas which developed during a 1987 residency at the Royal Greenwich Observatory in England.<sup>4</sup> In this series, simple, direct subjects take on enigmatic qualities when they are placed in an installation that includes elements ranging from slide projections of black-and-white photographic images to dramatic atmospheric effects produced with colored lights.

*Stella Maris* (1989–91) is among the final results of the Observatory residency. Like other installations from the series, including *Newton's Rings* (1987), *Airy's Discs* (1988), *The Heavens* (1989), and *Radii* (1989–91), this work examines several basic principles of optical phenomena similar to those examined by Sir Isaac Newton in the late seventeenth and early eighteenth centuries and Sir George Airy during

the Victorian era. To extend the concepts explored by the holographic imagery, the artists completed the installations in this series with other light-based materials, borrowing imagery and techniques from cinema and the theater; the finished installations can be read like stage sets or tableaux.

The imagery in *Stella Maris* reveals light patterns known as "caustics." Conceptually, *Stella Maris* and the related work *Radii* treat broader issues such as the subjective and relative versus the absolute, and contemporary scientific exploration versus a Victorian worldview.<sup>5</sup>

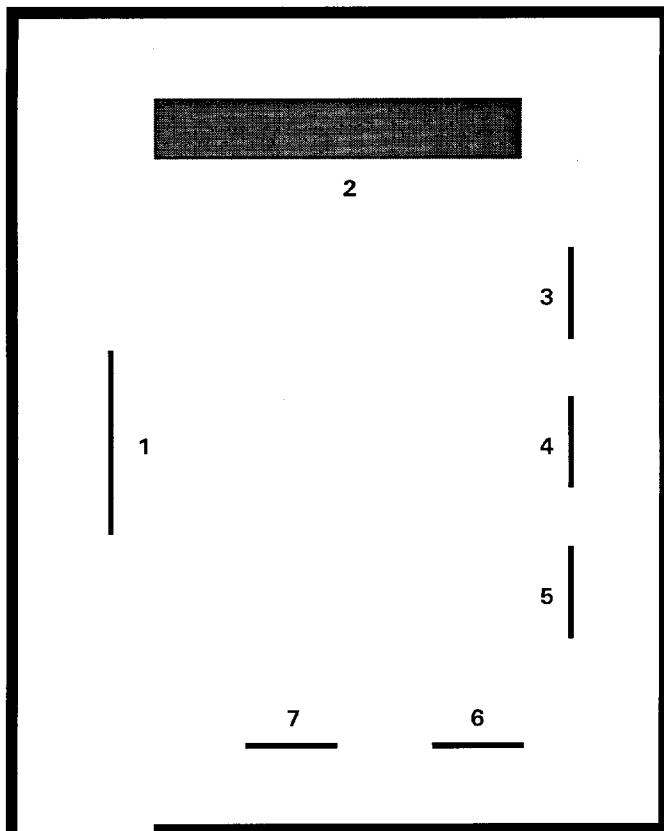
An important element of works from the Observatory series is their self-referential nature: they investigate ideas about the medium of holography itself, including its connections to the history of science, its physical manifestations, and its phenomenological aura. By grounding their subjects in the concepts of scientific study, Wenyon & Gamble cohesively link these ideas to the objects they create. Mounted on a freestanding wall, the holograms (in this case reflection holograms) appear as windows onto some other world. Although the wall's height, width, and depth are clearly visible and even calculable, the holograms transcend the

physical limitations of this space and reveal even larger, deeper images. Colored ambient light enhances their otherworldly qualities. Optics and its theories represent the source material used to make the holograms, but even without this knowledge the viewer gains a sense of wonder at the phenomena of our physical environment.

Artists will continue to create with new, non-traditional materials and processes. It is important to come to each work of art on its own terms rather than bring to it a preformed attitude. As the artists in "New Directions in Holography" demonstrate, the medium often requires re-learning how to look at a work of art. While we are typically trained to intellectually perceive the illusion of three dimen-

sions in two-dimensional works, holography allows the viewer to actually see three-dimensional space. We no longer need devices like foreshortening or reflected light to help us visualize depth and volume. Still, the inherent phenomenal nature of the medium often mystifies an art audience and increases the distance between the three-dimensional image and the viewer. Rudie Berkhout and Wenyon & Gamble attempt to decrease that distance by extending their holographic images into the gallery space and directly engaging the viewers.

René Paul Barilleaux  
Guest Curator



**New Directions in Holography Floor Plan**

1. Rudie Berkhout, *The New Territories*
2. Wenyon & Gamble, *Stella Maris*
3. Rudie Berkhout, *Transfer 339*
4. Rudie Berkhout, *Primal Mix I*
5. Rudie Berkhout, *Breakthrough*
6. Rudie Berkhout, *Kuan Yin*
7. Rudie Berkhout, *Ukiyo*

**Notes**

\*I would like to acknowledge the editorial assistance of Kathryn Howarth Ryan.

1. Rosemary Jackson, "In Perspective: A Thirty-Five Year Account of the Development of Holography (Part II)," *Holosphere*, 12 (Fall 1983), p. 13.
2. Rudie Berkhout, "Holography: Exploring a New Art Realm—Shaping Empty Space with Light," *Leonardo*, 22, nos. 3 and 4 (1989), p. 313.
3. *Ibid.*, p. 315.
4. Marc Piemontese, *Les artistes et la lumière*, exhibition catalogue (Reims, France: Centre National Art et Technologie, 1991), p. 44.
5. Wenyon & Gamble, *In the Optical Realm*, exhibition catalogue (Wolverhampton, England: Wolverhampton Art Gallery, forthcoming).

**Selected Bibliography**

- Barilleaux, René Paul, ed. *Holography (Re)Defined/Harriet Casdin-Silver: Thresholds* (exhibition catalogue). New York: Museum of Holography, 1984.
- Brill, Louis M., ed. *Holography as an Art Medium*, issue of *Leonardo*, 22, nos. 3 and 4 (1989).
- Casdin-Silver, Harriet. "Holographic Installations: Sculpting with Light." *Sculpture*, 10 (May-June 1991), pp. 50–55.
- International Congress on Art in Holography, Report*. Notre Dame, Indiana: Saint Mary's College, 1991.
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**Whitney Museum of American Art**

945 Madison Avenue  
New York, New York 10021

**Hours:** Tuesday 1:00–8:00  
Wednesday–Saturday 11:00–5:00  
Sunday 11:00–6:00

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