The image is a digital artwork. It depicts a room with walls and a floor made of a grid of small, colorful squares, creating a checkered pattern. The walls are primarily blue and green on the left, and red and orange on the right. The floor is a mix of blue, purple, and red. In the center of the room, a large, pixelated face is visible, rendered in shades of blue and white. The face has a neutral expression. Above the face, the text "Art of the Electronic Age" is written in a bold, white, sans-serif font on a black background. Below the face, the name "Frank Popper" is written in a similar font on a black background.

# Art of the Electronic Age

Frank Popper

*Title page*

Rockne Krebs *The Green Hypotenuse* (1983)

A green line drawn into the vista of the L.A. Basin from the top of Mount Wilson to the CalTech campus, one mile down and seven miles away in Pasadena. Curated by Jay Belloli and sponsored by CalTech.

Translated from the French by Bernard Hemingway

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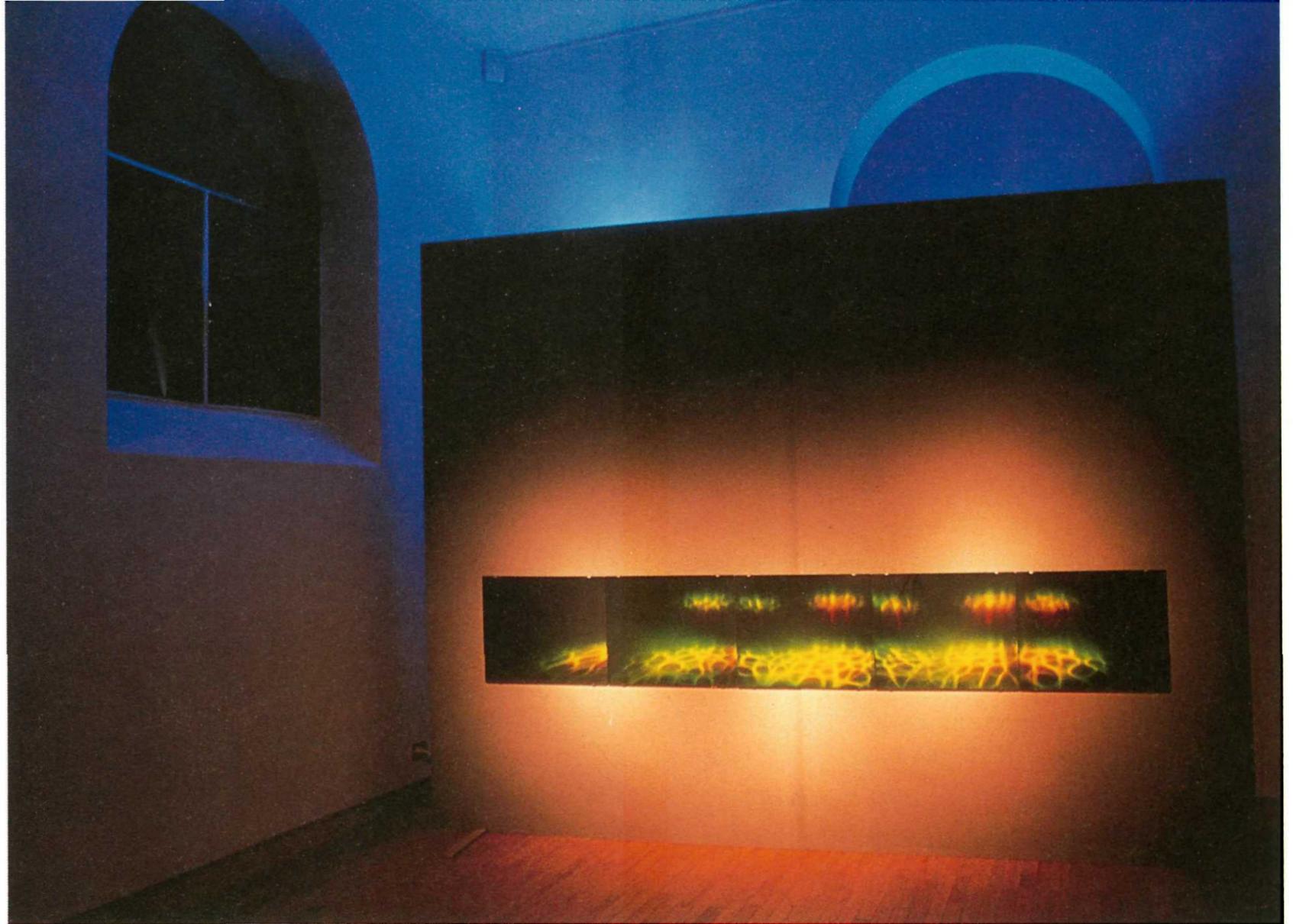


coming from chemicals, swell or shrink the emulsion. Otherwise all the colours would be red, the colour of the laser. The works with speckle effects use reticulated patterns of coloured light based on this particular side-effect of laser light called 'laser speckle'. This occurs more or less naturally whenever a laser beam lights up an object, but the artist can change the size of the pattern, use a combination of speckle patterns and pure spectral colours in order to mimic natural and biological processes, or create a new synthetic patterning. In a work called *Coal Seam*, stretched-out speckles appear to be flames; and in another, entitled *Water Stretch*, they emulate the flowing of water.

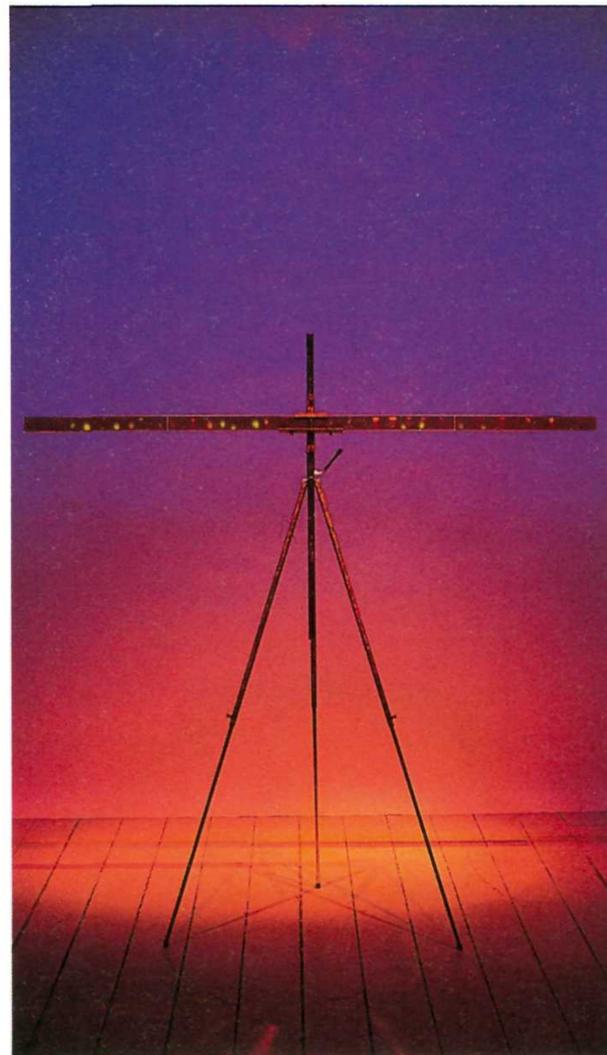
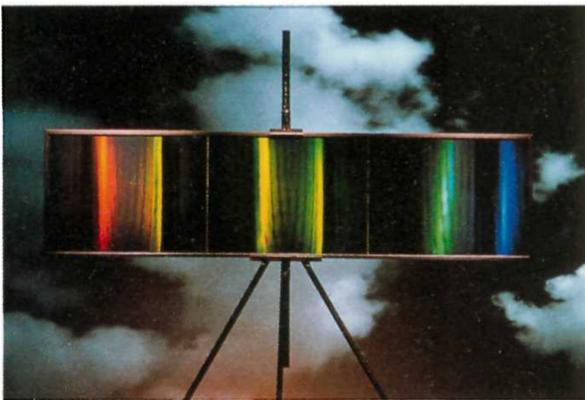
After a residency as artists at the Royal Greenwich Observatory in 1986 and 1988, Wenyon and Gamble produced some remarkable holographic installations in line with their aim of presenting an image of a universe of their own making. For example, *Zodiac* is a thin strip of clear glass through which the viewer sees an infinite field of red 'stars'. They want the viewer's experience to be like looking through a narrow 'letter-box' aperture; a larger space appears behind, up, and beyond the edges of the glass. This work is completed by an electric

**67**  
The studio of **Michael Wenyon** and **Susan Gamble** at the Royal Greenwich Observatory, London, 1987

In 1980, the optical engineer Michael Wenyon and the artist Susan Gamble created the holography facility at Goldsmith's College in London, the first workshop in Europe dedicated to exploring the artistic applications of holography. In 1983 they began their active artistic partnership and produced a number of long horizontal double-plate holograms presented on an easel, often with speckled effects. The colours in these holograms,



68–70  
**Michael Wenyon and  
 Susan Gamble**  
*Stella Maris* (1989); *The  
 Fringes at the Shadows of the  
 Knives* (1987); *Zone One*  
 (1989)



dimmer system alternating slowly to fade the lights between the red hologram and the blue background, mimicking the effects of stars appearing in a twilight sky.

This piece is the first part of a larger installation incorporating many thin horizontal holographic elements, shown under the title of *The Heavens* at the Karlsruhe Media Festival in Germany in 1989. Wenyon and Gamble's purpose is to explore, as in an actual living theatrical performance, the properties of the hologram, since it seems to be a moving image of light with a kind of life of its own, and not a static pictorial image. They look on the history of astronomy as a model for interpreting the secrets of the cosmos. They wish to imitate this fact on an artistic level by creating their own abstract patterns of light, to be decoded through an 'optical reading'.

Two recent series of large-scale holograms, *Stella Maris* and *Radii* (both 1989), are based on these artistic intentions. In *Stella Maris* Wenyon and Gamble create a simple receding space made out of optical caustics – an

inherent property of light that can be seen, for example, as a pattern under water. *Radii* presents the experience of light at the end of a tunnel and recalls looking at a distant light through a telescope.

Although Wenyon and Gamble are, in the first place, interested in capturing light as a concrete phenomenon presented through the hologram in its original optical state, on a more poetic level they see the optical devices and the space they create as a visual expression of the current interest of science in the chaotic qualities of the universe.<sup>10</sup>

