

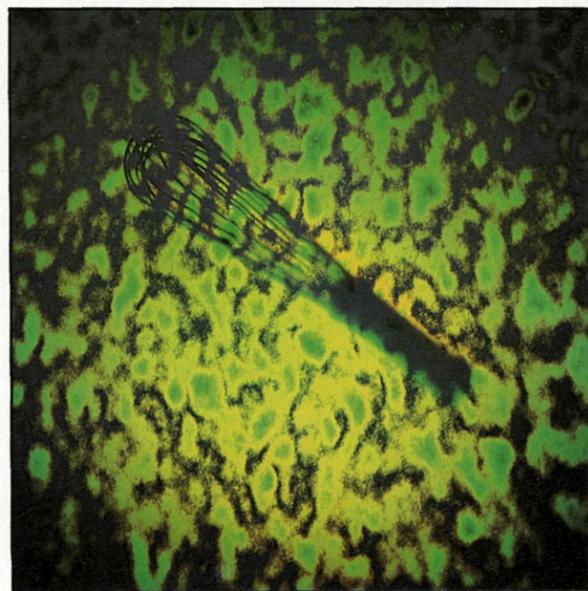
## HOLOGRAPHY

Until 15 September 1984 the Glynn Vivian Art Gallery in Swansea is home for a travelling exhibition by **Michael Wenyon and Susan Gamble**, entitled **'New Holograms'**. The holograms on show — some thirty — are not new merely in the sense of being shown for the first time: they are a good deal larger than usual, and many of them involve completely new techniques.

The Goldsmiths' College holography workshop was originally designed and built by Michael Wenyon in 1980 under the auspices of the Calouste Gulbenkian Foundation and the Rockefeller Foundation, and during its two years of operation he and Susan Gamble taught holography to more than twenty artists. When the project came to an end the two formed a partnership to rent the accommodation to use as their own studio. Last year a travelling exhibition by Wenyon and Gamble, and four artists who had worked with them, toured art galleries in the UK, visiting such places as Belfast, Newcastle, Cardiff, Wolverhampton and Birkenhead. It is to be hoped that this new exhibition will reach an equally wide audience.

It is a constant source of surprise that, when we think there are no new techniques left to be exploited in holography, someone comes up with a brand-new idea, such as the three-dimensional shadowgrams associated with Rick Silbermann or John Kaufman's multicolour reflection work. Wenyon and Gamble have combined both of these techniques and added a new one of their own based on laser speckle. Using an optical device to magnify the speckle they have been able to produce textural effects varying from the appearance of a grainy photograph to large reticular patterns which can simulate the effect of heat, as in the double-plate 300 x 800mm 'Coal Seam' which with its reds and violets gives the impression of a flickering 1950s simulated-coal electric fire, or the stippled

*Triptych by Michael Wenyon and Susan Gamble, 1984: 'The Chemical Change: A Whisk'; 'The Chemical Change: An Egg'; 'The Chemical Change: A Pan'. (Originals 300 x 400mm holograms in opal Perspex frame. Photographs by Susan Gamble.)*



light of an underwater scene, as in 'Water Stretch', with its shadow-images of sea creatures.

The thing that first impresses the visitor to this exhibition is the brightness of the images and the brilliance of their colours. It is only comparatively recently that artists have learned to control the colours in a reflection hologram; Wenyon and Gamble have adopted the technique of differential swelling, and the result is colours of dazzling butterfly-wing brilliance, to which these photographic illustrations can do only partial justice. Perhaps the most immediately arresting of the exhibits is 'The Chemical Change', the triptych of 300 x 400mm holograms based on shadows of kitchen objects with swirls of intense textured colour shown above.

Household objects form the theme of a number of the exhibits. In another triptych the theme is the progressive

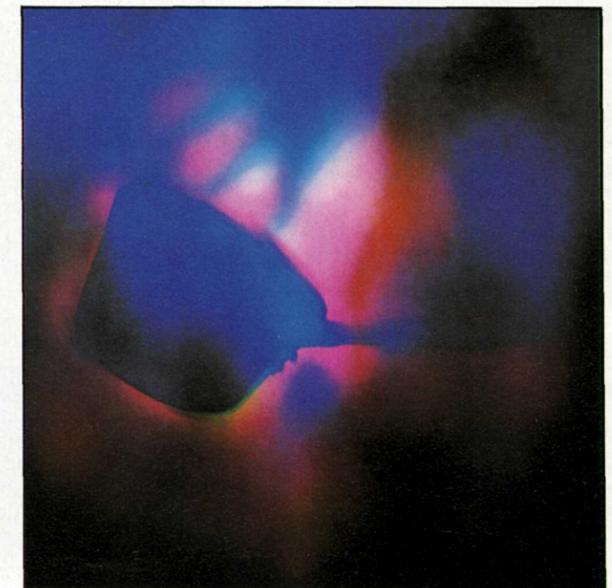
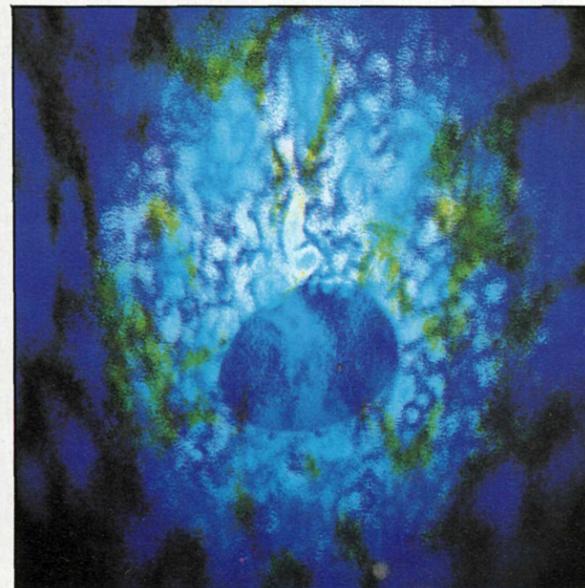
disintegration of a cleaning brush into a butterfly-like image. Yet another triptych has the shape of an early altarpiece, with a large plate flanked by two narrow ones; its theme is a shadowy saucepan seen as an elusive silhouette, the side-pieces having vague wavy images. Wenyon and Gamble have used the double-plate format to provide symmetry in two 300 x 800mm pieces, 'Propeller' and 'Expander', both of which feature a strange object (which, on examination, turns out to be an egg-whisk), backlit and seen through a turbulent coloured haze.

Several of the exhibits exploit what might be called the black-hole technique. It is, of course, not possible to make an ordinary hologram of a person (or part of a person, say a hand) with a continuous-wave laser (you can do it with a pulsed laser, but they are very expensive, and the technique is not easy), as any movement during the exposure totally destroys the fringe structure which produces the image. However, this destruction is confined to the fringes which would have reconstructed the hand, the rest of the image — background, stationary objects etc — being unaffected. This 'anti-hologram' appears as a three-dimensional silhouette within the image space; the idea was first used in creative holography by Margaret Benyon. Provided the 'sitter' remains reasonably still during the exposure the silhouette will be quite sharp, and can be a very effective piece of imagery. 'Calculating Space' is a pair of holographic miniatures set back-to-back in the centre space of an opal acrylic setsquare. On one side is a



*'Painting Glass, 1982' by Susan Gamble.*

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in profile (Michael), the two hands held apart to indicate space; on the other side is a cyan background with a silhouette of Michael operating a pocket calculator. The illuminating spots are themselves coloured.

Another completely new technique has been used in 'The Logos', a large two-colour reflection hologram: the main image is a pair of hands in silhouette, simulating a dog's profile in front of a spotlight yellow-green background. As the viewer moves from left to right the 'ears' wiggle and the 'jaw' opens and closes. The warm air currents above the hands can also be seen to be moving. Michael was unwilling to explain how the animation was achieved, as it is still under development; he did say that he and Susan had worked on the production of the hologram every day for a month.

A group of large (500 x 600mm) holograms represents part of a set commissioned by Royal Doulton China at the end of 1983 on 'magic' themes. One of these is on sawing a plate in half. Another is a balancing trick: a china poodle supporting an eggcup supporting a cream jug supporting a saucer edge supporting a china teapot balanced upside down on its lid. A third is a vanishing trick: a mouse sitting in a teacup disappears as the viewpoint moves upwards. A fourth represents the nursery rhyme 'Hey Diddle Diddle', with a creamer jug in the shape of a cow jumping over the moon. More china cows on the ground come into view, backlit, as the viewpoint is moved to the left.

'Our Beach', displayed in a separate alcove, is one image which contains

some element of social comment. This is a realistic image, the subject being pebbles and beach detritus — drink cans, a cigarette packet, a discarded pair of sunglasses bearing a greasy thumbprint. Above this scene dangles a pair of feet wearing flipflop sandals, in silhouette. The large acrylic frame carries engravings of sea creatures.

The first holographic image Michael Wenyon made at Goldsmiths' was the now celebrated pair of spectacles. Since then he has made a number of variations on the theme, and two of these are on view alongside the original. 'Second Look' is deceptive: from a distance it looks like a plain rectangle of light, but as the viewer approaches it is seen that the rectangle is several inches behind the plate, and a pair of spectacles is peering in from the left side of the space. In 'Display Spot' the spectacles sit, folded, on a glass plate, illuminated by a spotlight as they might be in an optician's window.

There are several transmission holograms by Susan Gamble on display. One, an early experiment, is simply of a 6 x 6cm black-and-white negative fixed to the plate with four grubby pieces of Sellotape. Hardly to be described as aesthetically exciting, this piece is nevertheless interesting in that one would have expected the negative to have produced a positive image; but in holography the concept of 'positive' or 'negative' does not apply, for the image is the replica of the object. Susan has extended the technique in 'Cultured Vest', a much larger contact-print hologram, this time of a string vest. Changing the viewpoint results in shifting moiré patterns against the

background spectrum. A 4 x 5in hologram bears two images of a woman's shoe: from above, the shoe appears to be facing the viewer, from below it faces away. A fourth hologram, 'Painting Glass', consists of brilliantly-coloured smears and splashes on a plain background, which change in hue with a change in viewpoint. A paintbrush is dimly seen behind the glass.

The exhibitors have hung and illuminated the show themselves, and have made a first-class job of it. Reflection holograms repay careful illumination: a few degrees difference in the angle of incidence can make all the difference between a weak image and a good image, or between a good image and a brilliant one; transmission holograms are even more demanding in their requirements. A number of the spots have been filtered, and this not only adds to the dramatic effect, but often has a beneficial effect on the definition of the image; it would be a thing if this practice were more common.

Altogether, this was an excellent exhibition, and I hope that Wenyon and Gamble will be able to find as many galleries to display it in as they did with their previous exhibition; I also hope they will be as lucky with the quality of exhibition accommodation as they have been at the Glynn Vivian Gallery. After the exhibition closes in Swansea it will have a short stay at the Autumn Arts Festival at the Harris Brush factory in Bromsgrove. From 28 October until 2 December it will be at the Cooper Gallery, Barnsley. Further venues will be announced later.

**GRAHAM SAXBY**