

# Holography course for artists

## ARTS ALERT

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From the side view the tall-stemmed glass is obviously broken, the bowl sliced by jarring angles. From the centre it appears amazingly whole, still three-dimensional and red-tinted. The visual trick is the result of holography, and this particular image is the work of an American, Rick Silberman, recently on display at the unique, new Holographic Arts Workshop, Goldsmiths' College in South London.

The Gulbenkian Foundation has contributed a total of £14,850 to the Workshop. Lesser sums have come from the Rockefeller Foundation and the Arts Council of Great Britain.

A visit to the Workshop demonstrates that holography is still an exciting novelty. It has matured from the early work of Margaret Benyon of the Fine Art Department at Nottingham University a decade ago (she now lives in Australia). The art is now almost a standard attraction at large Olympia and Earl's Court shows, though still at the innovation stage. Controlling and mixing colours, for example, remains difficult — most of the images are 'monochromatic'.

One of the pioneers, who has helped to set up the Workshop is Mike Wenyon, a 24 year old Anglo-American and author of *Understanding Holography*, published two years ago. Although he came to this medium via science, the prime aim of the Workshop is to spread expertise amongst artists through short courses. The students come from backgrounds of sculpture, painting and photography for one day introductory sessions (about £35) learning in a 'hands off' way (without practical making of holograms). They are told how the system works and its short history, the various possibilities and problems.

More serious students can spend an extra four days doing the practicalities through intensive instruction. The cost is about £200 and there are likely to be from two to four students. The fees (so far there are no bursaries available) reflect the cost of holography. Basic equipment is not less than £2,000, and the Workshops' two 'tables' plus darkroom and fittings has taken the bill to around £6,000.

The larger table (2 x 3.6 metres) is a concrete slab with a marble surface floating on rubber inner tubes. The smaller one (2.1 x 1.6 metres) is a 2½ ton box of sand supported in the same way.

In making holograms, the helium-neon laser beam — a needle thin strand of red light — is bounced off mirrors, expanded by lenses, and split into two separate

beams. One travels to the subject, the other to the glass photographic plate which records the hologram. The end product appears as a microscopic pattern on the glass plate. Because the two beams have to meet and spread with perfect co-ordination, this method can only create still-lives — and painstakingly at that.

Mike Wenyon describes the progressive and potential activities of holographers by explaining some of the ideas he is currently working on. 'I'm making a hologram of the inside of a mask and making it appear like the outside by exploiting a holographic "flipping" process. Another piece has the patterns of lines formed in silhouette. Only gradually are they recognised for what they are — coat hangers. A pair of NHS spectacles with clear frames floats in space in another work. I like the idea of walking up to it, wanting to put your head there. I suppose it is a trick, a bit cheap, but we are at the stage film was at 60 years ago.'

Rick Silberman, who has already established an international reputation for his holograms, similarly sees himself as an illusionist, playing on ideas of imagery: his work is expected to be on show again in London in the autumn. Meanwhile, Mike Wenyon believes that 'portraits promise excitement. They require pulsed lasers, which are expensive — the equivalent of flash guns.

'It would also be fun to put a laser in the back of a truck and make holograms by night in the countryside — but that would cost £100,000'.

The Workshop is concentrating on the artistic value of holography, but that cannot be entirely separated from practical purposes. For instance, the Central Electricity Generating Board's Marchwood Engineering Laboratory will use this technique to provide records of used nuclear fuel containers and examine them for cracks. The holograms will be made in a radio active environment, removed and examined by an inspector using a microscope to look at the image in detail.

The Workshops' staff are keeping close touch with developments. Their achievement in opening the department is the result of two years of preparations and fund raising, largely inspired by Paul Walton, a reader in communications in the School of Art and Design. Also on the staff is Paul Taylor, a photographer who has taught fine art students.

*Details from the Workshop's mailing address: Millard Buildings, Cormont Road, Camberwell, London SE5.*