Time and space through a pinhole

EXHIBITION

What connects ancient Greek temples in the town of Paestum in the south of Italy and the Effelsberg 100-m Radio Telescope in western Germany? Time! These apparently very different structures stand at the two ends of a temporal, technological and semiotic spectrum:

antiquity versus modernity, simplicity versus complexity, theology versus science. In *Turning Time*, eight new large-scale photographs by photographer Vera Lutter were exhibited in the Gagosian Gallery in London, UK, revealing a multifaceted treatise of time, space and light.

Vera Lutter is known for her pinholecamera photographs, produced by oversized camera obscura-type constructs. For the photographs presented in this exhibition, Lutter set up a shipping container opposite the Effelsberg Radio Telescope and over the course of a month photographed it by allowing light to enter through a single pinhole on the wall of the container and imprint the image of the telescope onto a sheet of photographic paper. Through this drawn-out process — with exposures ranging from hours to days — the impressive negative black and white likeness of the Effelsberg Radio Telescope (pictured) was created. During the exposure, the telescope continued scientific operations, moving as needed to peer into the depths of the radio Universe, which resulted in the apparently fragmented

and overlapping structure in the final photograph.

Through the juxtaposition of old and new, the temples and the telescope, Lutter comments on the progression of time using photographs that are themselves products of time, more so given the special way in which they were taken. Overlaid is the distorted sense of space created by the manipulation of light. The parallels are obvious with how a facility like the Effelsberg Radio Telescope receives light (albeit in much longer wavelengths than those handled by Lutter) and manipulates it to produce oftentimes biased — perhaps distorted — views of objects that are far away from us both in space and time.

The Effelsberg Radio Telescope, operated by the Max Planck Institute for Radio Astronomy, is the second largest steerable telescope in the world, inaugurated in 1972. As a stand-alone facility but also in tandem with radio telescopes across the globe, it has studied the radio emission from bodies in our Solar System, the early Universe and everything in between. Among its many notable discoveries, astronomers used the telescope to detect the first extragalactic water maser (in 1977) and the first millisecond pulsar (in 2010). However, Effelsberg may soon slip to third place on the largest steerable radio telescopes list, as recently the Chinese Academy of Sciences announced plans to build the world's largest steerable radio telescope in Xinjiang in northwest China. The Xingjiang Qitai Radio Telescope — QTT for short — will be ten metres larger in diameter than the Effelsberg Radio Telescope.



Credit: © ARS, NY and DACS, London 2018

The *Turning Time* exhibition was held in the Gagosian Gallery between 7 February and 14 April 2018. A solo exhibition of Vera Lutter's work opened in the Baldwin Gallery in Aspen, Colorado, USA, on 21 June. Vera Lutter's work can also be seen as part of the permanent collection of the Museum of Modern Art, the J. Paul Getty Museum and others.

Reviewed by Marios Karouzos

Published online: 3 July 2018 https://doi.org/10.1038/s41550-018-0518-9