

At a Majestic Distance

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VISUAL ARTS
"PICK OF THE GALLERIES"

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On a rain-lashed afternoon last October, accompanied by a maelstrom of bagpipes and plangent Lappish singing, an unusual twinning agreement was signed by civic dignitaries in Fort William: that of two small mountaintop meteorological observatories on Scotland's Ben Nevis and Haldde Mountain in Northern Norway. It marked the first stage of London Fieldworks' Little Earth project.

A roofless shell and the rusted frames of some Victorian instrument racks are all that remain of the observatory on the summit of the Ben, abandoned since 1904. The Northern Lights Observatory at Haldde has fared scarcely better, being burnt down by the Nazis in the Second World War (though recently partially restored). Yet, during the 1890s and 1900s, two of the most significant physicists of their age - Kristian Birkeland and CTR Wilson - were working on each mountaintop.

Wilson (Scotland's only Nobel laureate) invented the "cloud chamber" - apparatus that made visible for the first time the tracks of subatomic particles. Birkeland made use of a "terrella" (a magnetised sphere representing a "little Earth") to demonstrate the effects of solar activity upon the Earth's geomagnetic field. The implications of Wilson and Birkeland's research resonate today in the ultra advanced field of space weather science; each scientist made his inspirational breakthrough during his days in the mountains, directly observing natural phenomena in the old-fashioned way.

Bruce Gilchrist and Jo Joelson (the art partnership that forms London Fieldworks) describe Little Earth as a reflection on "how the 'last of the natural philosophers' became the first of the 'big scientists'". Reconfiguring the Romantic nature idyll, Little Earth's latest manifestation is a video installation at the old Wapping Power Station, featuring collaborative components from the author James Flint, the composer Dugal McKinnon, the architect Ed Holloway and Leicester University's Radio and Space Plasma Physics Group.

It's certainly cold enough to evoke an arctic observatory in the cavernous dark of Wapping's sunken boiler room. In the centre of the room, rising up from a circular platform, is a beautiful, tall metalwork structure, suggestive of a remote-sensing weather satellite - an elegant spindle of aluminium struts and taut wires girdled by four large, flat panels (joined to form a seamless suspended cube).

The videowork has been shot from four perspectives, each screened simultaneously on the the four outward faces of the cube, allowing the viewer to walk around the structure and experience the work differently each time. The looped, 21 minute video begins and ends in the starry blackness of the cosmos, in silence. Then, transmitted from somewhere in the far-flung reaches of the universe, come the fictional voices of the two scientists. Although they never met in life, as dispersed energy they reflect upon their earthly lives' work, in a poetic meditation on science, space and time. The images, meanwhile, move from swooping mountain-top views to fictive reconstructions of the scientists in their huts with their instruments; then out to the giant receiving dish of a modern ultra-high frequency radio telescope; and an animated sequence of the Earth enmeshed within its magnetic field lines, which trail off into the solar system.

At times, the sound seems a little swamped by the space, but the piece never loses its charge. The most entrancing segment takes a single hurricane lamp glowing outside the Ben Nevis observatory and multiplies it until the screens are dotted with swarming lights, leaving their speeding orange trails against the night- sky like a stream of charged particles hitting the Earth's magnetosphere.

London Fieldworks' previous installations (such as Gastarbyter, Syzygy and Polaria) have all been immersive interactive environments. Little Earth, however, keeps the viewer on the outside looking in - reflecting, perhaps, on the growing distance between scientists and the phenomena they study.