



**Exhibition Press Release - for immediate release**

**Frozen Relic: Arctic Works by ScanLAB Projects**

12 January – 9 February 2013

AA Gallery, 36 Bedford Square, London, WC1B 3ES, UK

**Private View** Friday 11 January 2013, 6.30pm – 8:30pm

Open to the public from Saturday 12 January to Saturday 9 February 2013

**Opening Times** Monday to Friday 10am – 7pm; Saturday 10am – 3pm

**Lecture:** ScanLAB Projects: Experiments in Observation & Capture. Matt Shaw and Will Trossell of ScanLAB, Wednesday 23 January, 6:00pm, Lecture Hall

**Symposium:** Frozen Relic & Other Absent Landscapes. Saturday 2 February 2013, 12:00 – 4:00pm, Lecture Hall

*Frozen Relic* is a replica of a lost landscape. Working with Greenpeace and Cambridge University aboard the Icebreaker 'The Arctic Sunrise' ScanLAB documented a series of ice floes in the Fram Strait, northwest of Svalbard, Norway using millimetre-perfect 3D-scanning technology. During the course of two expeditions to the Arctic the team captured a total of 26 floes in forensic detail, mapping their surfaces precisely, analysing core samples of the ice and tracing their drift through the ice pack.

For the first time *Frozen Relic* temporarily recreates this landscape in its natural material – frozen saltwater. Each piece is a digitally fabricated scale replica of the original ice floe which was 3D-scanned from above and documented using underwater sonar from below. The completed digital survey model is used to guide a CNC machine which carves the moulds in which each replica is cast.

Visitors entering the gallery find themselves in a darkened room; the suspended ice floes glow in an icy archipelago. The sound of dripping water fills the air. Like the fragile environment they are born from, these exhibits are disappearing. Every day they will completely melt into the drip trays below, being refrozen and rehung for the following day. As the installation melts, it leaves only the supporting structure which itself accurately represents the scientific data that remains of this captured ice floe. Left with only their forensic records ScanLAB speculate on this disappearing landscape for which architects may only ever design digitally or posthumously.

**Stamukha:**

One of the individual ice floes captured, a Stamukha, is an extremely rare and infrequently studied piece of sea ice amongst the thousands of other Arctic floes. These colossal floes are formed in the Siberian sea. Their comparative bulk causes Stamukhi to beach in the shallow Siberian river estuaries during summer months. Here water from the rivers flows over their surface, sculpting the floe and freezing in sediments, giving these 10-20m high structures an uncharacteristic brown hue. This makes Stamukhi appear strangely terrestrial once they rejoin the Arctic ice pack and drift amongst the pure blue-white landscape of frozen sea ice.

**Arne's Floe:**

Another individual floe, named after the ship's ice pilot, was documented at exactly

17:01:07hrs on the 16th September as it drifted at 79 22.558 N, 003 04.611 W on the edge of the Arctic Ice Pack. This tiny piece of ice, approximately the size of a netball court, was captured in a single scan. Arne's Floe no longer exists. Shortly after leaving the floe by helicopter, this tiny piece of ice, cracked in two. Located close to the southern edge of the ice pack this area is subject to a battering from surrounding floes, melt from the warm Atlantic waters and the comparatively warm summer temperatures at 79 degrees north. Like all of the Arctic ice floes, Arne's Floe is part of a dynamic and turbulent landscape, broken, reformed, merged, melted, moved and ultimately disappearing.

Supported by The Architectural Association, Greenpeace, University of Cambridge and UCL.

### **Cambridge University, Department of Applied Mathematics and Theoretical Physics (DAMTP)**

Expeditions like the ones undertaken by the Polar Ocean Physics group and ScanLAB Projects these past few years are the backbone of the theoretical modelling done at DAMTP. An ice floe constructed out of equations on paper is only as good as the assumptions made about its average size and shape. Obtaining highly resolved maps of the surface of floes, to bring back home and study in the comfort of an office, is essential for calibration of theoretical models.

### **ScanLAB @ UCL, Bartlett School of Architecture, UCL**

ScanLAB @ UCL is the research and teaching arm of ScanLAB Projects. As part of the Bartlett Media Hub and with close alliances to the CadCam Facilities and Digital Manufacturing Centre, the work of ScanLAB @ UCL questions how large-scale 3D scanning will affect the way we design, fabricate and analyse future architectures. ScanLAB @ UCL supports design education across the School of Architecture while pursuing specific projects and ideas through workshops and live projects.

### **Greenpeace International**

Around two million people have so far put their name to a Greenpeace campaign to save the Arctic. Greenpeace, along with all those who have signed up, are calling for the Arctic to be an internationally protected region, where oil drilling and unsustainable fishing are banned.

The oil company Shell attempted to begin drilling in the Arctic earlier this year. There are fears that, if Shell eventually strike oil, an Arctic rush will be sparked and the push to carve up the region will accelerate.

As part of this campaign, Greenpeace have voyaged to the Arctic several times in recent years. The environmental group have taken scientists on board their ships in a bid to increase our understanding of the threats facing the region.

Sara Ayech, a Greenpeace campaigner who visited the Arctic this year, said:

'The Arctic is a wonderful and fragile place, which must be protected. This exciting piece of work will bring a bit of the Arctic to London, and in a way that hopefully thousands of people will experience. But the recreation of these icebergs won't just look spectacular, it will also help our understanding of a threatened habitat.'

**Images:**

A selection of press images can be downloaded from:

[www.aaschool.ac.uk/Downloads/press\\_releases/press\\_images/scanlab.zip](http://www.aaschool.ac.uk/Downloads/press_releases/press_images/scanlab.zip)

Nick Cobbing's photographs of the expedition will be on show in the AA Front Members' Room.

For further details please contact:

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[www.scanlabprojects.co.uk](http://www.scanlabprojects.co.uk)

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Press Release Ends

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