Author: Mark Smout of Smout Allen Research Output 3: Landmarks

Co-Author: Laura Allen

Output Type: Design

**Competition Design Entry for Building:** Four Design Proposals respond to the East of England Development Agency brief for *Landmarks for the East of England* 

Date: 2004

Design shown in Touring Group Exhibition with associated Catalogue: Panorama Projects, Landmarks, 2004: Norwich (9 September 2004), Cambridge (16 September 2004), Chelmsford (15 October 2004) and Ipswich (3 February 2005) with more specific gallery details here: http://www.landmarkeast.org.uk; Panorama Projects, Royal Academy Summer Exhibition, London, 2005

Four architectural proposals respond to the EEDA brief for *Landmarks* for the East of England, exploring:

- (1) The utilization of the immediate nature of the site and local environment.
- (2) The use of panorama/diorama/camera obscura as techniques by which the landscape is perceived as a spectacle.

## Questions/Aims/Objectives

Can one exploit the conditions that physically and perceptually shape the landscape to augment architecture and bring to it a sense of nature and environment illuminated? These proposals aim to satisfy the requirements of the competition and integrate the 'natural' landscape with local land use – farming and tourism – into an architectural intervention, while also exploring current notions of the architectural landmark as an icon for a region.

### Contexts

The project exists in the design research context of architectural competitions and conceptual proposals, in particular technical investigations involving sustainability, climate change, alternative energy, dynamic landscape management and landscape retention schemes.

### Methods

The exploratory design process involves testing through hand-held prototypes and investigative studies of the local environment. The process of design for mutable 'natural' landscapes requires the development of a new working methodology that is as adaptable and varied as the landscape it investigates.

#### Dissemination/Esteem

Models exhibited as *Panorama Projects, Landmarks*, Landmark East Competition, 2004, a national touring exhibition with catalogue.

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Discussed and documented in Laura Allen and Mark Smout 'Restless Landscapes', conference paper, 'In The Making', Copenhagen. Catalogue and internet publication, 2005, and Smout Allen, *Augmented Landscapes*, Pamphlet Architecture 28 (New York: Princeton Architectural Press, 2007).

### Authorship

As part of the joint architectural practice Smout Allen, Allen and Smout both contribute equally to the research.



Image 1 Dunstable Downs.

## **General Description**

Four architectural proposals respond to the EEDA brief for the open competition *Landmarks for the East of England*, exploring:

- (1) The utilization of the immediate nature of the site and local environment.
- (2) The use of panorama/diorama/camera obscura as techniques by which the landscape is perceived as a spectacle.

The East of England is an expansive place. The distant horizon and awe-inspiring voluminous sky of this region's climate have inspired artists and holidaymakers alike. The notion that a single landmark can represent the rich and varied environments of Norfolk, Suffolk, Cambridgeshire, Bedfordshire and Essex is unrealistic if one assumes that it should touch and be valued by the people and landscapes that define it. We proposed four landmarks in four distinct regions brought together by their association to, and relationship with, the landscape. Each is designed to augment the existing landscape, enhancing the latent qualities of the site, and exposing its distinctive character, its history and its future.

**Dunstable Downs Kite Farm** (image 1) The chalk escarpment and gently rolling topography of Bedfordshire's Dunstable Downs create thermal currents that rise from the plain, attracting numerous aeronautical enthusiasts to the region. This is the site for a flock of wind 'kites'. Each kite records its movement as it swoops – its relationship with the sky and the horizon.

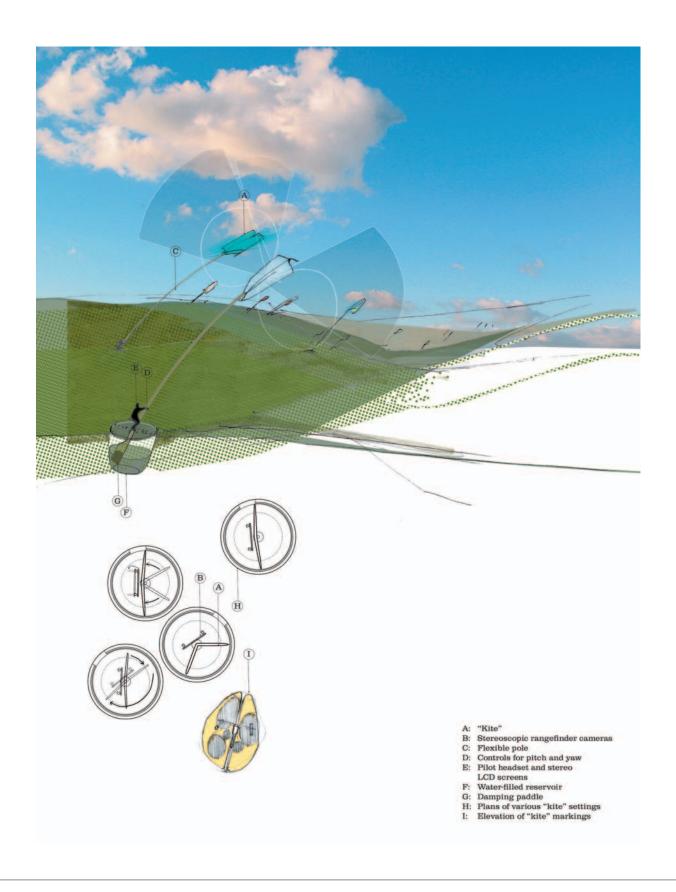


Image 2 The flock of 'kites' and plan diagrams of the 'trimming of the sails'.

The kites occupy a vertiginous space, the territory of the sky, reacting to currents of air flowing across the landscape. Each one is connected to the ground by a flexible pole. They are anchored to a pivoting base that is mounted in a water-filled reservoir to limit and slow movement. A pair of cameras mounted on each kite relays stereoscopic live images to the pilot's viewpoint, providing a three-dimensional panorama from the perspective of the kite. As the horizon appears to hover and glide, the pilot achieves the sensation of flying. (image 2)





Image 3 (above)
Ariel image of the Cambridgeshire
Fens shows the original route
of the river before the land was
reclaimed and divided into a grid
of levees and drains.

Image 4 (below)
Forty Foot River or Vermuyden's
Drain near Chatteris, Cambridge,
extends eleven miles in a straight
line, giving the impression of
reaching the horizon.

Fenland Obscura: (image 03) The fen landscape is governed by the straight lines of man-made marks visible across the flat plain. Roads, railways, and rivers run parallel and perpendicular to each other, often raised above the ground level. Drainage ditches and dykes that cut into the black ground at regular intervals demarcate field boundaries. (image 04) The Fenland Obscura landmark echoes this pattern of levees and drains, replacing them with bathing water, ponds and iced surfaces. It also acknowledges the growth of scientific industries in the region, utilizing sustainable environmental technologies to enhance the nature of the site. A central platform houses a camera obscura, which observes both the array of channels and the landscape beyond. (images 5–6)

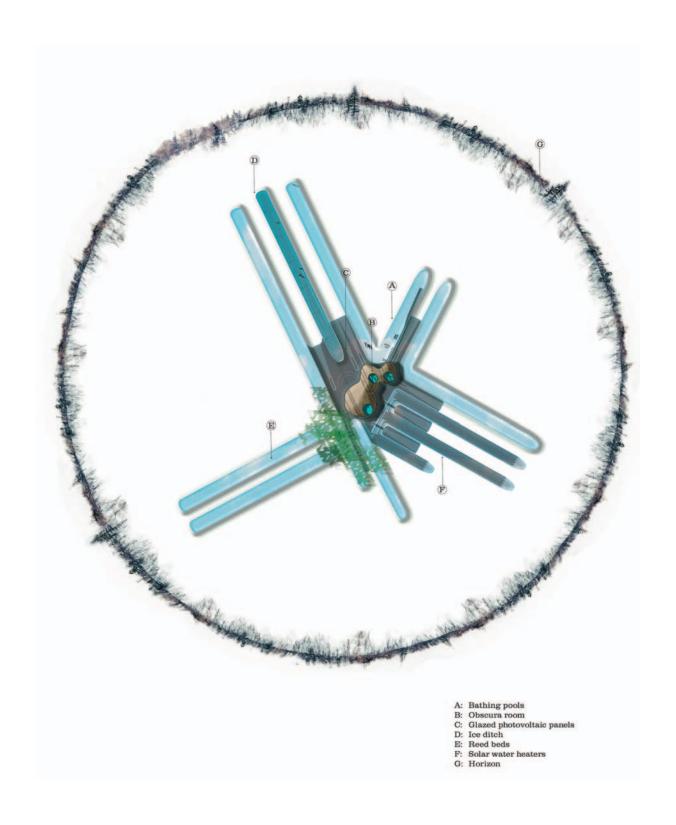


Image 5 Obscura plan: the fenland obscura layout is derived by 'pulling back' the levee from the distant horizon to form a pleated array of water channels.



Image 6 Obscura site section.

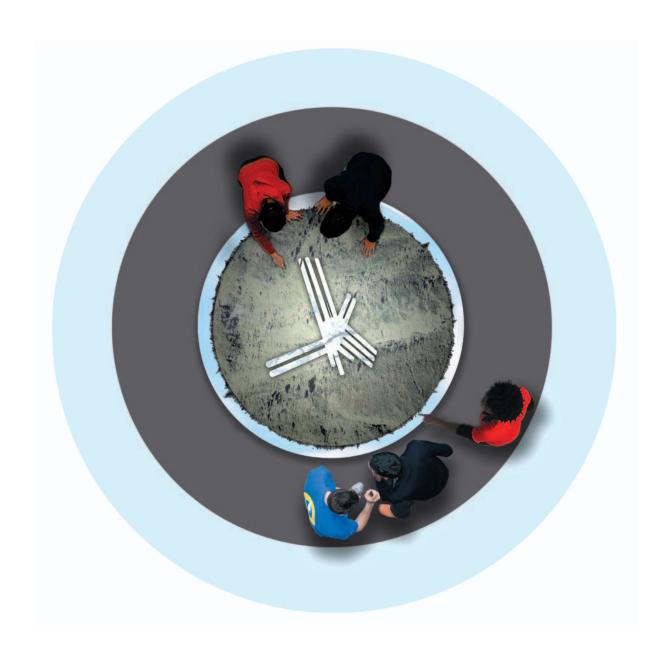


Image 7
Enhancing the physical with the digital: the camera obscura receives a 360° view of the landmark and its landscape. Its reflective surfaces of glass, ice and water appear as a mirror to the sky. This is particularly apparent when looking through the camera obscura from above.

The obscura digitally projects the panoramic image onto a table that is enabled with interactive gesture-recognition software. When touched, the image is annotated with contextual information such as geography, geology, meteorology, history or commerce. In addition, a touch of the image selects a hue and the wall of the obscura room is washed with light – a spectrum of ever-changing colours. (image 7)



Image 8 The salt marsh estuary edges of Essex are crossed by wooden gang planks raised off the mud on stilts .

A Market in the Marshes: (image 8) The estuaries of Essex form a liquid edge to the county. This fragile boundary, which extends and retracts with the ebb and flow of the tide, reinforces the connection between the sea and the land. The proposal responds to current thinking on the 'managed realignment' of the coast, removing hard sea defences such as sea walls and embankments that prevent the natural landward movement of the salt marshes, and allowing the land to be flooded by the incoming tide. Returning land to salt marsh encourages brackish vegetation and establishes the flood plain as an environmental buffer. A shallow plate is inserted into the intertidal zone, lying low on the horizon. The plate beds into the mud flats, with its extremities in the retreating tide and reaching up to the higher grass-land beyond. (images 9–11)

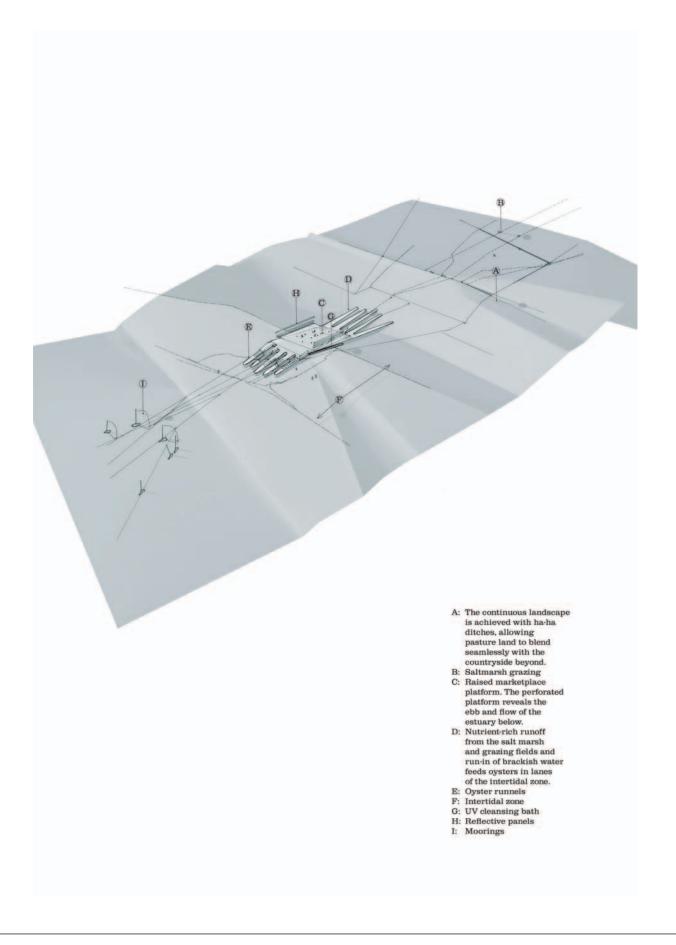
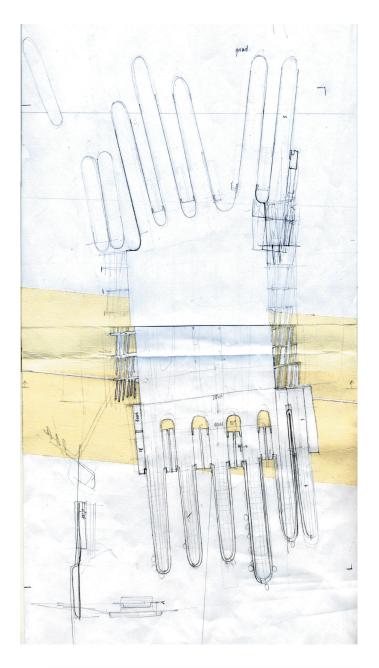


Image 9

Three territories are formed: oyster lanes fed by nutrient-rich runoff from the salt marsh and high tide, grazing land, and a market. The panorama is framed and partially concealed by a tilted reflective edge to the marketplace, which reaches out endlessly between the sea and sky.



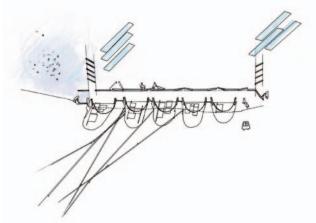


Image 10-11 Sketch plan and diagrammatic section: At twilight clouds of moths form a shimmering halo to the market platform. The moths are attracted to the oyster farm's UV treatment baths. Reflective panels that accentuate the extended horizon of the marsh bring a continuous 'skyscape' into the market.



Image 12 Maram grassed dunes and deep beaches of Norfolk.

**Dunes and Drifts:** (image 12) England's North Norfolk coast is a shifting landscape of sea and sand. Longshore drift and strong prevailing winds have shaped a region of expansive beaches, dunes and crumbling cliffs – a landscape of currents and contours, sandbanks and quicksands, erosion and deposition.

The landmark inhabits a marginal territory with one foot on land and the other in the water. The shallow and fluctuating horizon of the sea is occupied by a string of 'drift markers' that react to and demonstrate the motions of the sea and wind. A top limb is designed to glint like white horses on the waves, while a lower limb acts as a rudder in the current. (images 13–14)

The dunes are occupied by a net of tubs that become partially buried in the sand and reveal the endlessly shifting form of the dune landscape. Each tub marks out the transitory seasonal territory of the holidaymaker. The tubs are just big enough to accommodate paraphernalia for a day trip to the British seaside: a deck chair, cricket bat, picnic rug and hut for shelter. (image 15)

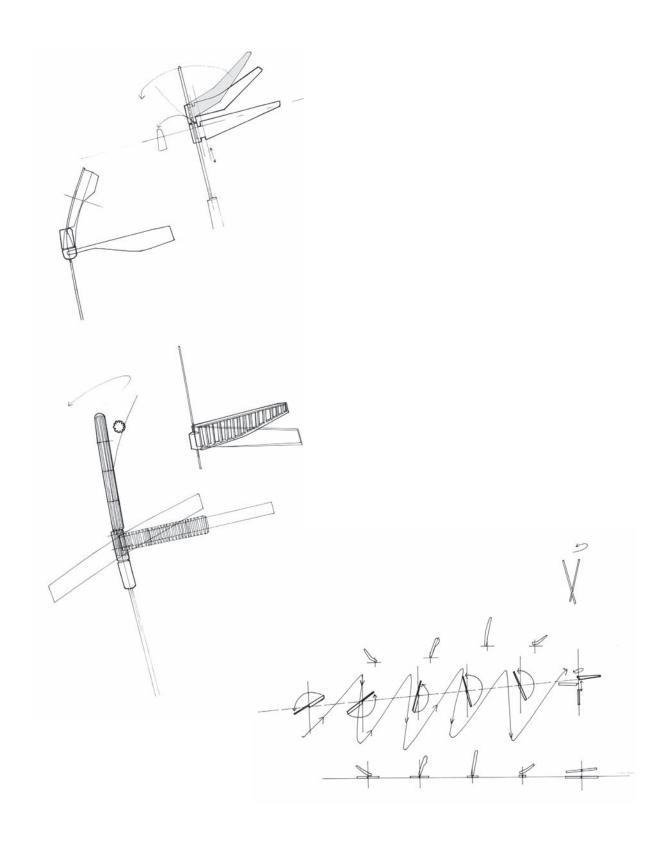


Image 13 (left) Drift markers.

Image 14 (right) Drift markers respond to the ebb and flow of longshore drift.

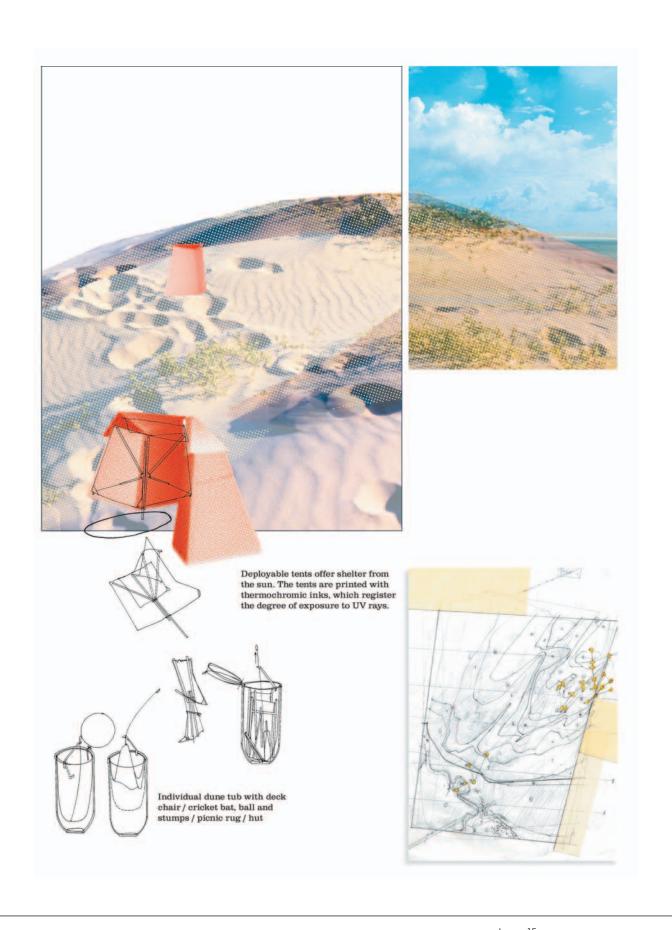


Image 15
The ever-shifting topography of the dune is occupied by a net of tubs that act as beach huts for holiday makers.

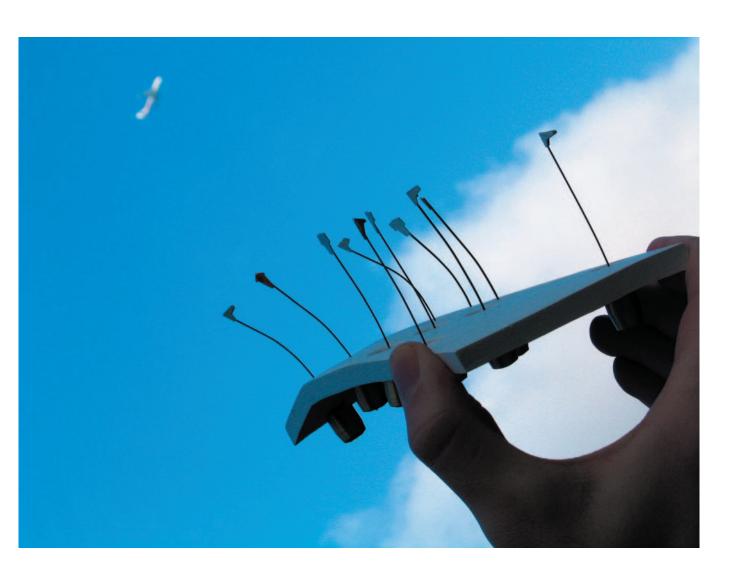


Image 16 Hand-held model.

# Questions/Aims/Objectives

Can one exploit the conditions that physically and perceptually shape the landscape to augment architecture and bring to it a sense of nature and environment illuminated?

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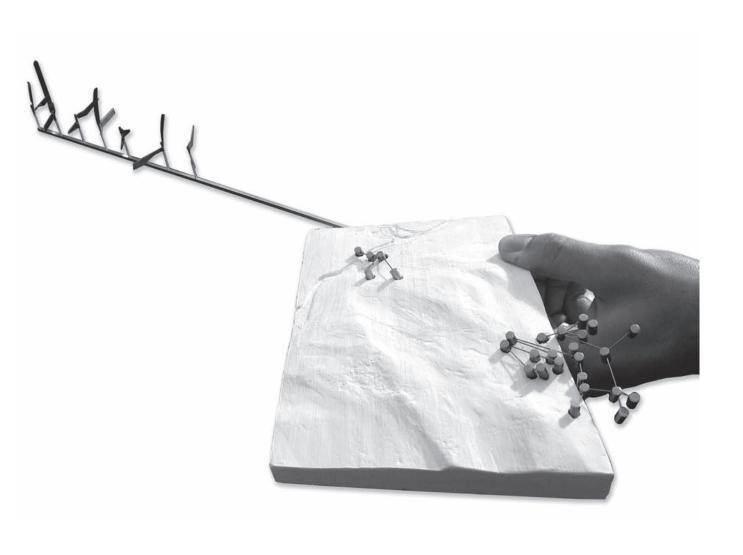


Image 17 Hand-held model.

## Contexts

These projects can be located in the general context of architectural design research in particular architectural competitions and conceptual proposals, specifically with respect to technical investigations involving sustainability, climate change, alternative energy, dynamic landscape management and landscape retention schemes.

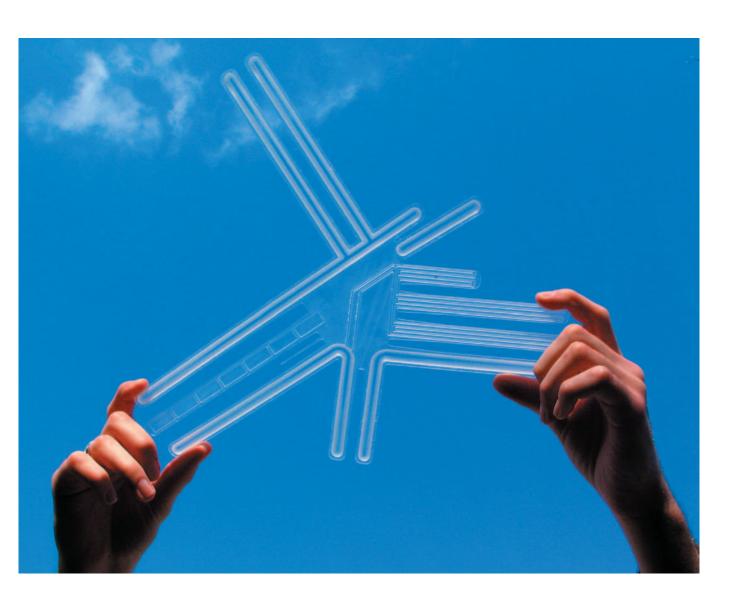


Image 18 Hand-held model.

### Methods

The process of design for mutable 'natural' landscapes requires the development of a new working methodology that is as adaptable and varied as the landscape it investigates. The exploratory design process involves testing through investigative studies of the local environment and the production of prototypes which although of a similar scale to one another are not scaled in the traditional sense; each is designed to be held in the palm of the hand or explored by being held up to the sky. This allows them to be viewed at the scale of an object or within the scale of the horizon. (images 16–23)

Technical devices that work with environmental systems and notions of sustainability are employed. The landmarks are designed to have a low impact on the local ecologies, for example, the salt marsh landmark encourages the regeneration of salt grazing territories. The ephemeral character of the landscape and the dynamic forces in these marginal territories are augmented to create a sense of nature illuminated.

The design team has links with consultants within the University and externally in the art and architectural community. A senior consultant from a leading-edge science and technology consultancy in Cambridgeshire has assisted this proposal.



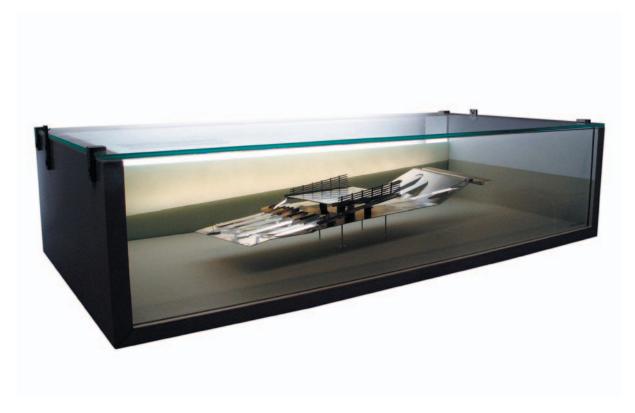






Image 19–22 Each model is mounted in a box that is backlit and mirrored to indicate the panoramic gaze and reflected skies, and the repetition of elements of the design.

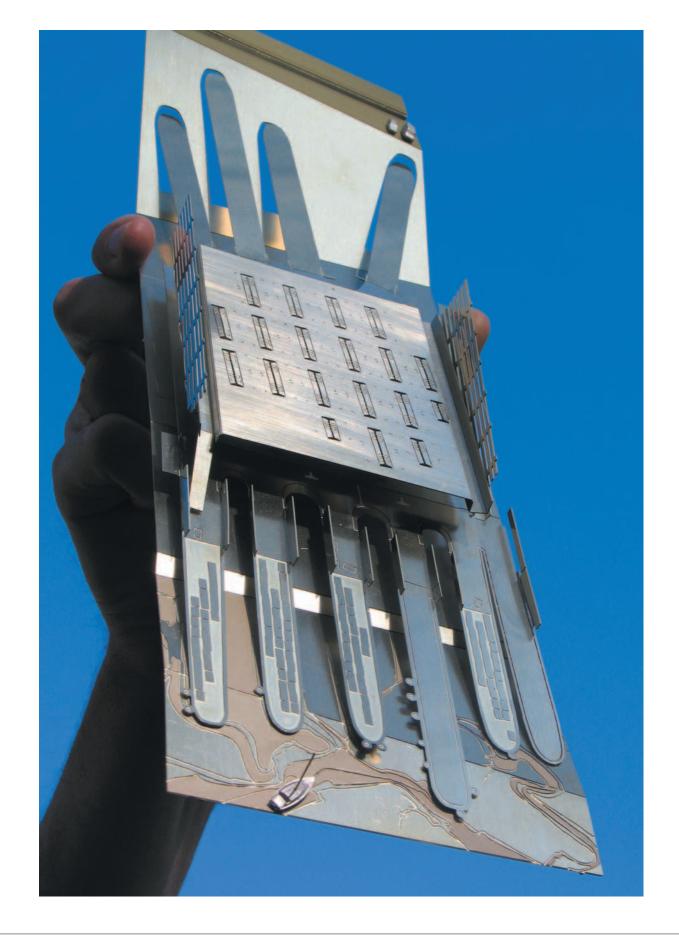


Image 23 Hand-held model.

## Dissemination/Esteem

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Exhibited in joint exhibition with John Smout RCA, *Augmented Landscapes*, the Royal Cambrian Academy, Conwy, Wales, 2007.

## Appendix 1: Related Articles by Smout Allen

Discussed and documented in Laura Allen and Mark Smout, 'Restless Landscapes', conference paper, 'In The Making', Copenhagen. Catalogue and internet publication, 2005. [see Laura Allen: Research Output 1]

Discussed and documented in Smout Allen, *Augmented Landscapes*, Pamphlet Architecture 28 (New York: Princeton Architectural Press, 2007). [see Mark Smout: Research Output 4]

