

Northumbria University, Newcastle.
Art and Design: History, Practice and Theory. UoA 32.



**Northumbria
University**
NEWCASTLE

A NECESSARY DARKNESS



Exploring how site-related public artwork can engage a large and diverse audience with questions concerning the changing status of darkness in the contemporary world.

Type of output:
Other -
Public Artwork

by
Rona Lee

Front cover - installed artwork,
NEMO Science Museum,
Oosterdok, Amsterdam.
Photo credit:
Marcus Koppen Photography

CONTENTS

SUMMARY	4
INTRODUCTION	5
TIMELINE	6
RESEARCH CHALLENGE	7
CONTEXT	8-9
METHODS & PROCESSES	10-11
DISSEMINATION	12-13
REFERENCES AND ACKNOWLEDGMENTS	14

SUMMARY

A Necessary Darkness (AND) was a 9-minute moving image sequence, commissioned by the Amsterdam Light Festival (ALF) and projected onto the Dutch Museum of Science, Amsterdam between December 2017 and January 2018.

Recently light festivals have grown significantly in volume, scale and popularity, generating interest in their capacity to support urban regeneration, foster community and contribute to place-making initiatives (see Jiwa, S and Coco-Stefaniak, A 2009). In parallel, works like Ryoji Ikeda's *Spectra* (2014) evidence increased engagement by artists with the use of light as medium within public space.

Concurrently, rising levels of light pollution, centred upon the affluent first world, constitute an escalating global environmental and health risk. This dichotomy between the perceived benefits of events such as ALF and the alienating impact of increasing levels of artificial light upon the cyclical rhythms of nature and our bodies was central to Lee's conceptualisation of *AND*.

Responding to the festival theme of Existentialism, two research imperatives shaped the realisation of *AND*, the first being to poetically re-invoke, for a large and diverse audience, the metaphysical importance of darkness, and the second to mobilise lightless-ness as means to engage critically with light festivals as a context. Technically the challenge was to achieve a means of projecting blackness. Lee has previously experimented with the casting of shadows onto projection surfaces as a strategy to critically disrupt hegemonic economies of viewing and the dualisms that underpin them. For *AND* she rendered the beam of a lighthouse negative, turning it into a source of darkness

simultaneously manifesting an uncanny disturbance of the associations of light with progress and lighthouses with safety.

Dissemination:

Continuous screening 30 November 2017 - 21 January 2018
Osterdok, Amsterdam. Via the festival's website, dedicated publication and social media.

Chapter in [From the Lighthouse: Interdisciplinary Reflections on Light](#)

INTRODUCTION

AND was a virtual reality video-mapped light projection on to the Renzo Piano-designed (NEMO) Science Museum in the port area of Amsterdam. It was installed between 30 November 2017 and 21 January 2018 and ran daily from dusk to midnight for 83 days. The looped footage featured a sweeping lighthouse beam rendered in negative (thereby producing a shaft of darkness) presented against a changing background of cloud, star, moon and sun formations. *AND* was selected from over 750 international submissions to be one of 20 artworks commissioned by the Amsterdam Light Festival for Edition #6: 2017 - 2018.

Selection committee:

Beatrix Ruf – Director, Stedelijk Museum,
Kobus Kuipers - Professor Nanophotonics, Delft University
Liu Gang - Curator
Lennart Booij – Director Amsterdam Light Festival

Budget: The budget for the creation and exhibition of *AND* was 47,000 euros

Project Partners: Amsterdam Light Festival, Dutch Museum of Science

Compositing /3D modelling: Sam Wilkins

Technical Installation: [Univate \(NL\)](http://Univate(NL))

To view video documentation of exhibited work,
see <https://vimeo.com/247013048>

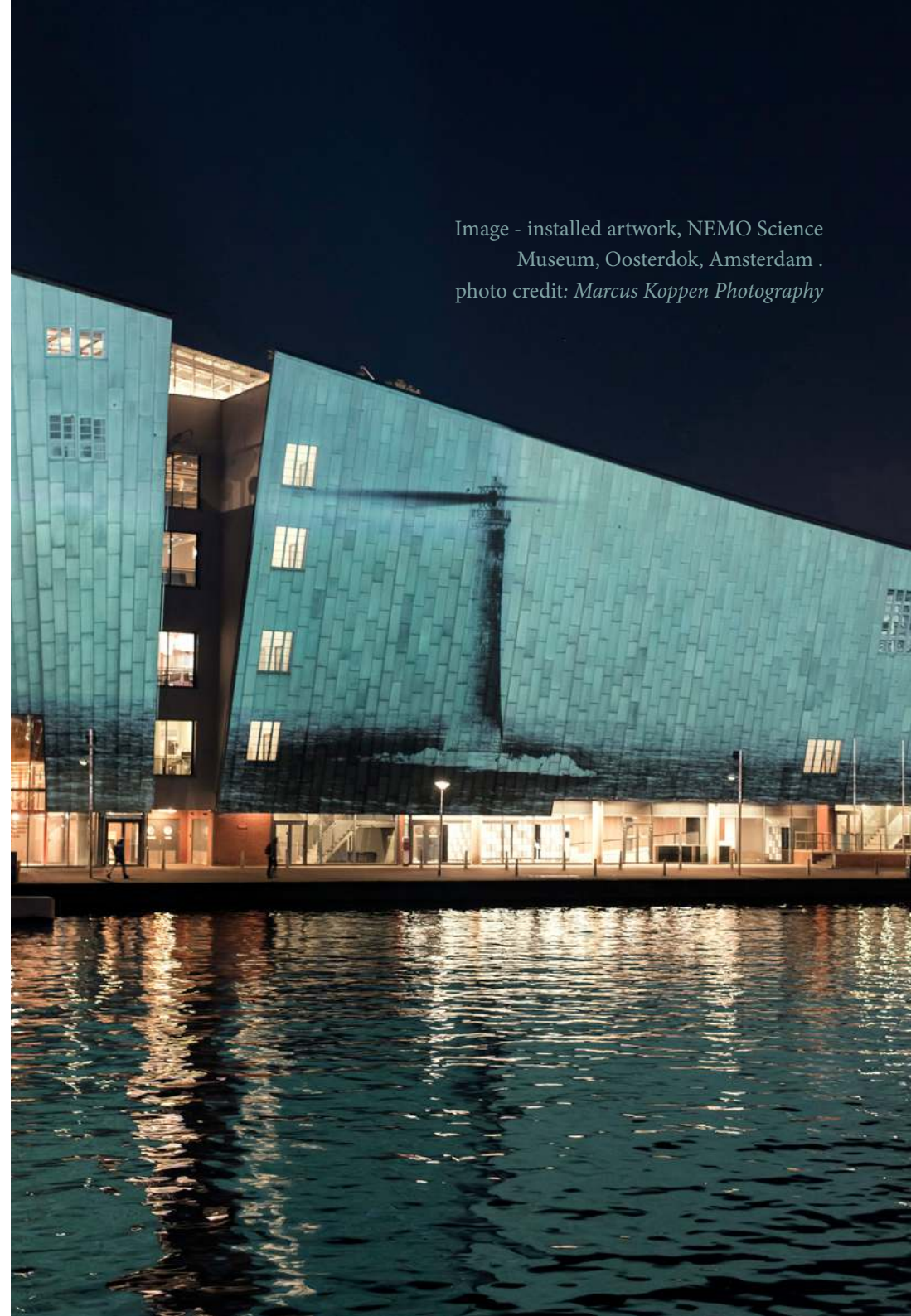


Image - installed artwork, NEMO Science Museum, Oosterdok, Amsterdam .
photo credit: *Marcus Koppen Photography*

TIMELINE

2017	2017	2017	2017	2017	2018
<p>JAN 3 Call for concepts opens Amsterdam Light Festival 2017-2018 edition #6 <i>Existentialism</i>.</p> <p>JAN 3-31 Lee develops outline proposal.</p> <p>JAN 31 Deadline submission round 1 - curatorial selection.</p> <p>FEB 17 Notification of selection for round 2 - international jury selection.</p> <p>FEB 17 - MAR 17 Development of proposal, including budget, technical specification and preferred location of artwork, (Lee) Initial tenders from Univate, Beams Systems and Insight Lighting.</p>	<p>MAR 17 Deadline for submission to round 2 - international jury selection.</p> <p>APRIL 4 Jury selection announced 20 artists selected from 750 submissions from 56 countries.</p> <p>APRIL 18-21 Visit to Amsterdam for 'kick-off' meeting, presentation of project, boat tour of city to view potential locations, meeting with production and technical companies (Lee/ALF).</p> <p>APRIL 21- MAY 22 Univate contracted, initial footage developed, selection of NEMO as projection site (Lee, Univate, ALF).</p>	<p>MAY 23-24 On site test of initial footage (ALF, Lee, Univate).</p> <p>JUNE 24 Proposal finalised, contract agreed.</p> <p>AUGUST CAD Plans of facade of Nemo building obtained. Liaison with city authorities / science museum over switching off of streetlights in the area, interior lights within the building, removal of flags etc (ALF) Composer contracted. Identification of images to be used to model lighthouse, creation of composite (Lee).</p>	<p>SEP 7-25 Initial model lighthouse content ready. Detail of model developed (windows, texture etc) (Wilkins).</p> <p>SEP 25 Virtual model of Nemo building and projector position created (Univate).</p> <p>OCT 2 Finalisation of area of Nemo to be projected on plus size of image (Wilkins/ Lee/Univate /ALF).</p> <p>OCT 6-16 Surrounding landscape/ base of lighthouse agreed (Wilkins/Lee) Base added to lighthouse (Wilkins) Sourcing and editing together of stock footage for 24-hour cycle of background events 'events' moon rise, moving clouds etc (Lee).</p>	<p>OCT 16-28 Detail of modelled moving image components waves etc drafted (Wilkins).</p> <p>NOV 6 Background events and motion/ timing of beam finalised, detail of model completed. Content available to Univate for mapping (Wilkins/Lee).</p> <p>NOV 24 Content finalised (Wilkins/ Lee/Univate).</p> <p>NOV 28 Completed installation on site (Univate /ALF/ Lee).</p> <p>NOV 29 Installation of portakabin, projector housings etc on site (Univate/ALF) / Lee to Amsterdam.</p> <p>NOV 30 Festival opens.</p>	<p>JAN 21 Festival closes.</p>

RESEARCH CHALLENGE

Arguably night is disappearing. Satellite images reveal a dense and never extinguished bloom of illumination expanding across the nocturnal map of the industrialised world, prompting legislative moves to protect darkness and giving rise to increasing debate about the bodily, environmental and economic impact of artificial light.

Set against this background *AND* explored how a site-related public artwork could engage a large and diverse audience with questions concerning the changing status of darkness in the contemporary world. Lee also set out to expand the critical and aesthetic parameters of artworks operating within the context of light festivals refining their emphasis on popular spectacle.



Front cover - installed artwork,
NEMO Science Museum,
Oosterdok, Amsterdam.
Photo credit:
Marcus Koppen Photography

CONTEXT

This project builds on Lee's long history of making contextually informed artworks, many of which have responded to coastal and maritime spaces (such as the encircling of a shadow, Newlyn Art Gallery, 2003).

Light festivals continue to grow in number and popularity internationally. While scholarship in the Humanities has explored their role in identity formation and place making (see Schulte-Roemer), little critical attention has been given within the Arts to such events as a curatorial and artistic context. Lee's work critically engages with such developments and can be read with reference to the legacies of artists such as Holzer and Wodiczko in testing the use of public light projection as a discursive medium, capable of engaging large non-arts audiences. Aesthetically and conceptually *AND* draws on histories of expanded cinema, such as the work of Guy Sherwin making a play between the function of the projection beam as a light source and the content of the projected image. In its discursive foregrounding of tenebrosity it is aligned to a nascent area of enquiry into the significance of darkness, discernible within the emerging cross disciplinary field of light studies (Dunn and Edensor 2021).



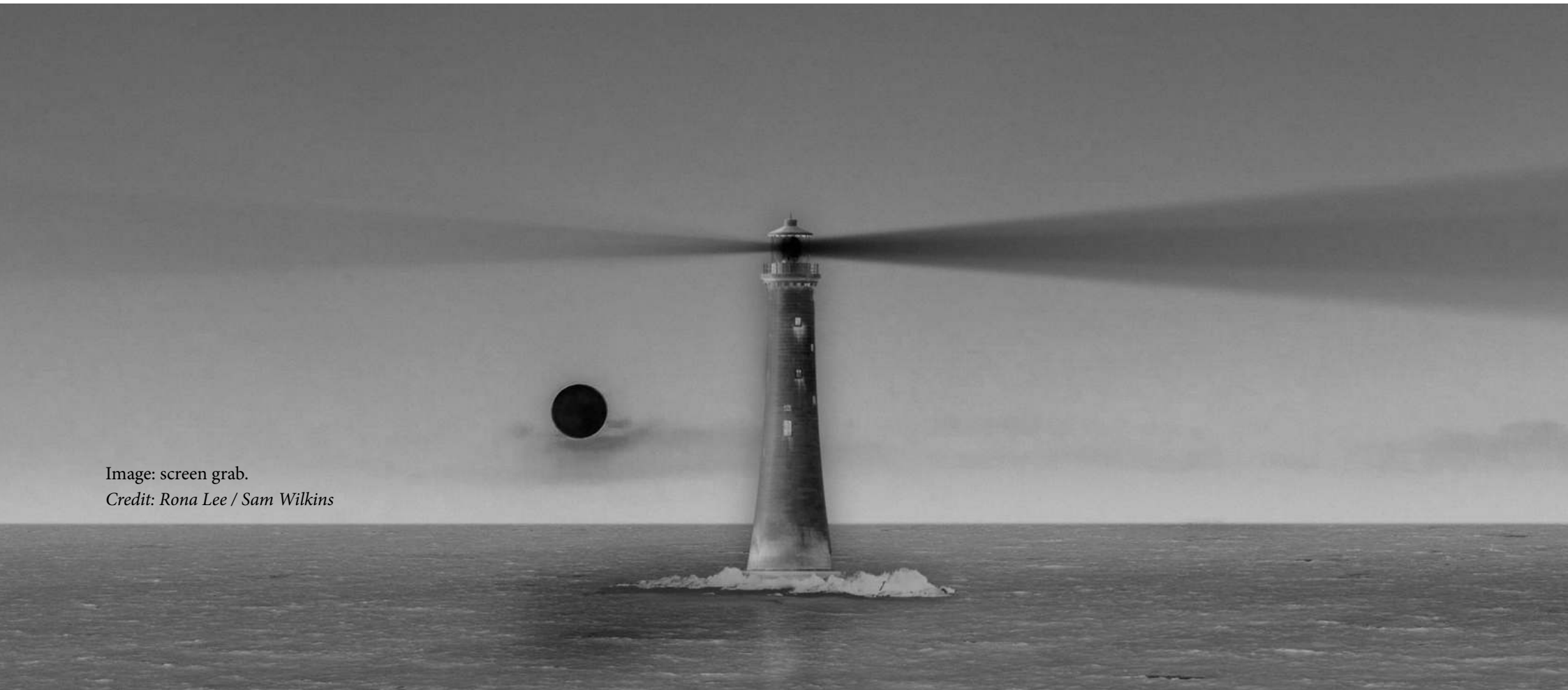
Above: screen grab.

Credit: Rona Lee / Sam Wilkins

Aesthetically
and conceptually
AND draws on histories
of expanded cinema.

Image: screen grab.

Credit: Rona Lee / Sam Wilkins



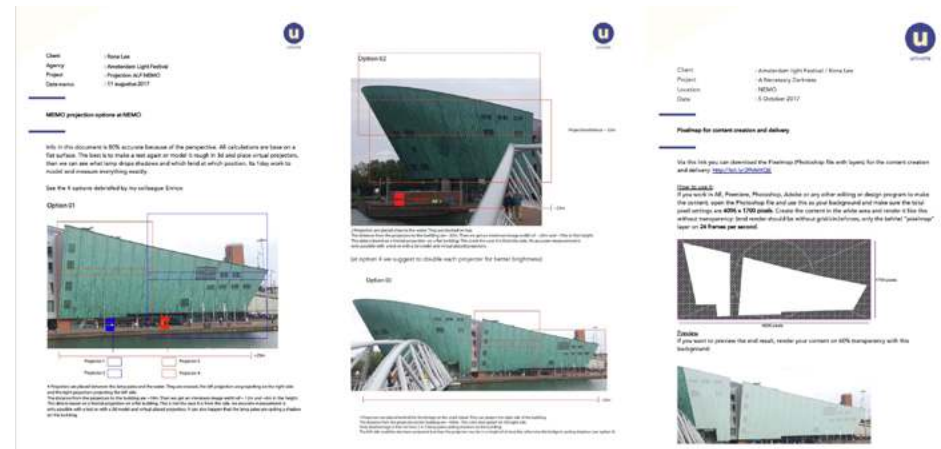
METHODS AND PROCESSES

Having been selected, the initial concept was developed through a process of site visits to a number of locations in order to ascertain the most suitable setting for the work and logistical meetings with different audio-visual companies. The budget / technical specifications were then revised accordingly. In May 2017, once Univate was appointed and NEMO chosen Lee generated initial footage to facilitate night projection tests on site. While the premise of the project and its emphasis on projecting darkness raised a number of challenges in terms of the readability of the image, these were resolved through a combination of different means, including the choice of the projection angle, adjustments to ambient lighting in the area and the decision to use computer generated imagery rather than drone footage.

Working with composer Sam Wilkins, Lee used VR 3D modelling software to generate a composite of the lighthouse and animate the projected sequence. This allowed for alterations such as the expansion of the beam at its peak so that it flooded the image and for changes to the rhythm of its rotation, which served to further heighten the unsettling quality of the footage. Made over a period of six months, the final version was arrived at through sourcing and combining numerous still images of actual lighthouses in order to achieve a suitable composite. Lee created the background skyscape by editing together multiple clips of stock footage to create a continuous day to night cycle, incorporating cloud movements, sun and moon rise and set, etc. Attention to matters of continuity was key to this process ensuring a coherent flow of events despite the original footage having been shot in diverse locations. Watkins then imported this footage using different layers to combine it with lighthouse model. An additional masque layer was used to obscure those parts of the image which fell outside of the projection area.

Univate worked with CAD drawings and architectural plans of the outside of NEMO, using specialized 'spatial augmented reality' software to pixel map its contours in order that it might function for projection purposes as a flat surface. During the festival three computer-controlled 15.000 ANSI lumen video projectors, each with a 2048x1080 short throw lens, were installed in an insulated portakabin on a pontoon bridge adjacent to the Museum for the purpose of the work.

To view a clip of project footage, see <https://vimeo.com/249526954>



Above: Technical drawings, Univate.



Right: working sketches
by Rona Lee.

DISSEMINATION

Estimated visitor numbers for the Amsterdam Light Festival in 2017-8 were [900,000](#) people. Adding to this number, the location of *AND* adjacent to Amsterdam Central Library, an area which itself sees a large volume of pedestrian and cycle traffic, made it visible from as far away as the Central Station which is one of the busiest areas of Amsterdam.

A video interview with Lee was hosted on the Science Museum website. The Amsterdam Light festival produced a free publication with a short reflection on each of the works exhibited, along with an individual webpage.

<https://amsterdamlightfestival.com/en/artworks/a-necessary-darkness>

Numerous other listings, reviews and social media sites featured the work including:

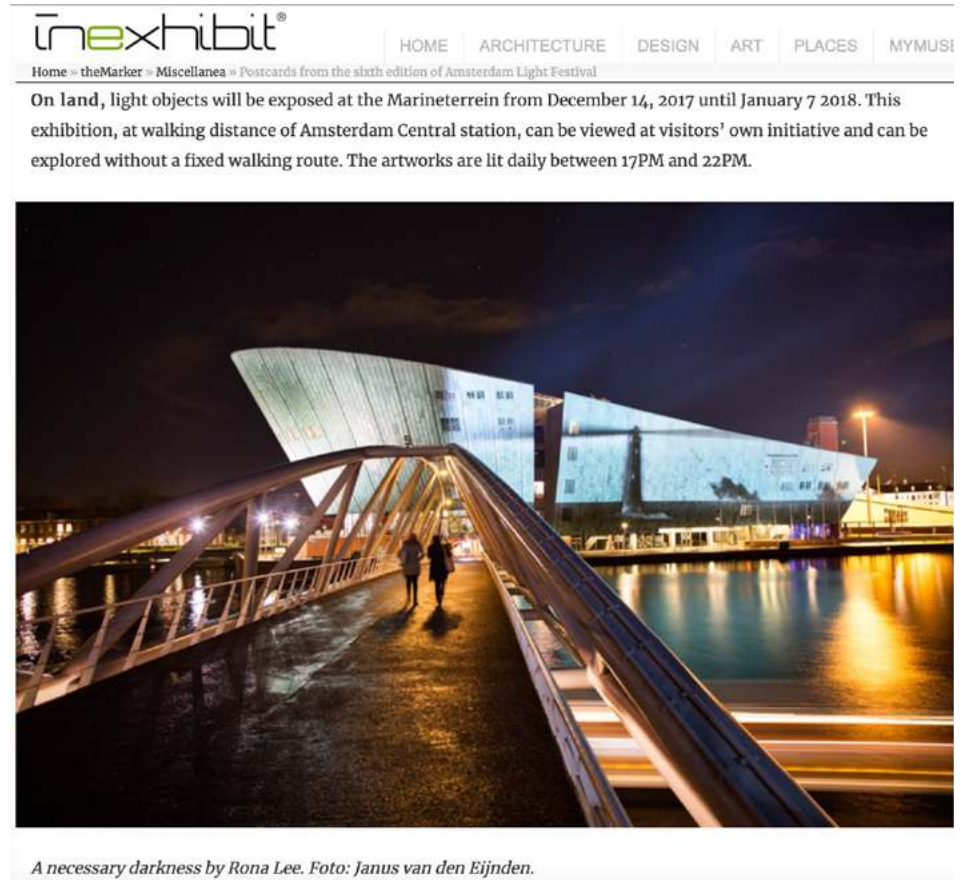
<https://seeallthis.com/blog/amsterdam-light-festival-10-highlights-win-een-rondvaart/>

<https://harrybywestcord.nl/uittips/festival/amsterdam-light/>

<http://d-unknown.nl/amsterdam-light-festival-2017-2018/>

<https://30smagazine.com/2018/01/05/weekend-tip-amsterdam-light-festival-canal-cruise/>

<https://www.inexhibit.com/marker/postcards-from-sixth-edition-of-amsterdam-light-festival/>



inexhibit[®] | HOME | ARCHITECTURE | DESIGN | ART | PLACES | MYMUSEUM

Home > theMarker > Miscellanea > Postcards from the sixth edition of Amsterdam Light Festival

On land, light objects will be exposed at the Marineterrein from December 14, 2017 until January 7 2018. This exhibition, at walking distance of Amsterdam Central station, can be viewed at visitors' own initiative and can be explored without a fixed walking route. The artworks are lit daily between 17PM and 22PM.

A necessary darkness by Rona Lee. Foto: Janus van den Eijnden.

Above: Screen grab InExhibit webmagazine.

Lee was invited on the basis of *AND* (alongside an earlier work the encircling of a shadow 2003) to write a short essay the encircling of a shadow – the house of light made dark for an interdisciplinary survey publication reflecting on the different material, social and philosophical spheres within which lighthouses operate. This was published as:

Lee, R. 2018. [‘The Encircling of a Shadow’ – the house of light made dark](#) in V Strang, T Edensor & J Puckering (eds), *From the Lighthouse: An Experiment in Interdisciplinary*. Taylor&Francis, pp. 233-235.



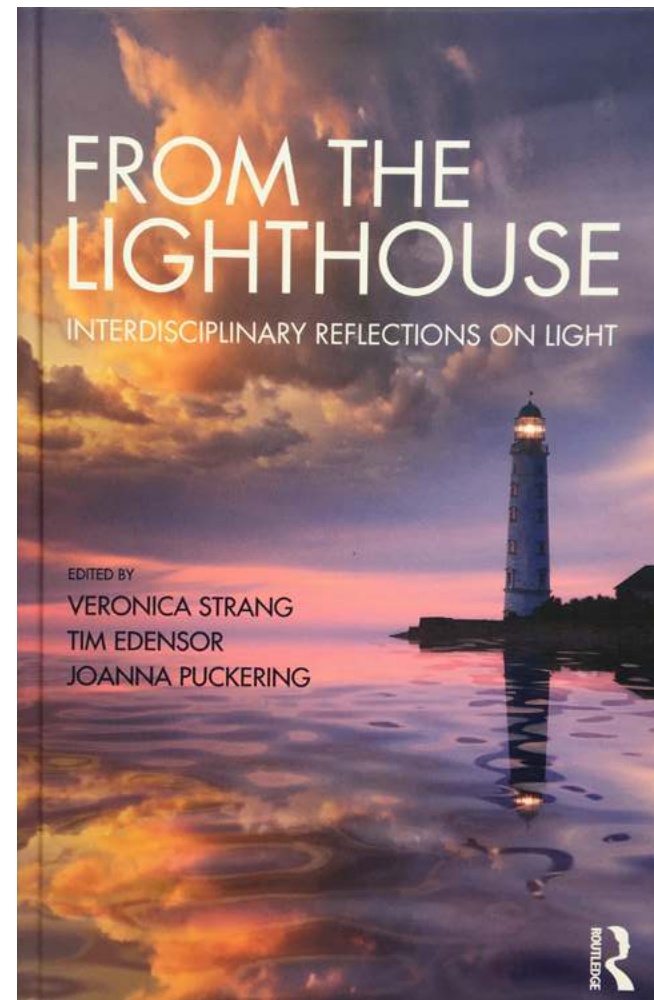
NEMO Science Museum
Gepubliceerd door Liecke Meutstege [?] · 12 januari · 🌐

Tijdens Amsterdam Light Festival is het kunstwerk 'A Necessary Darkness' te zien op het NEMO gebouw. Kunstenaar Rona Lee legt uit: "Het donker is ongelofelijk belangrijk als tegenhanger voor kunstmatig licht en lichtvervuiling. Maar het donker wordt ook sterk geassocieerd met dromen, het onbewuste en met het begrijpen van onszelf op een spirituele manier".

Benieuwd? Tot 21 januari is de projectie nog te zien tijdens het Amsterdam Light Festival.

Je video is populair in Noord-Holland Promotie niet beschikbaar

664 weergaven



Above: Book cover, credit Routledge.

Left: Screen grab NEMO

Science Museum twitter feed.

REFERENCES

Dunn, Nick and Edensor, Tim, eds. (2020). *Rethinking Darkness: Cultures, Histories, Practices. Ambiances, Atmospheres and Sensory Experiences of Spaces*. Routledge, London

Jiwa S and Coco-Stefaniak A. (2009). 'Light Night: an 'enlightening' place marketing experience.' *Journal of Place Management and Development*, 2(2): pp154-166

Ikeda Ryoji. (2014). *Spectra*, <https://vimeo.com/113083953>

ACKNOWLEDGMENTS

Amsterdam Light Festival.

Dutch Museum of Science.

Curatorial support Aart van Bolhuis.

Technical support Mattijn Boerkamp.

Compositing /3D modelling Sam Wilkins.

Technical Installation – Univate (NL).

Photography Marcus Koppen.

Back cover image:
Screen grab, still of
projected footage, including
image masque to fit
architecture.

Credit: Rona Lee / Sam Wilkins



Testing the use of public light projection as a discursive medium,
capable of engaging large non-arts audiences.

