Design Museum unveils display of design research that rethinks our relationship with the sun

21 June – 24 September 2024
the Design Museum

PRESS IMAGES

- **Free display opening tomorrow presents thought-provoking research on how design can help address the climate emergency**
- **Research included in *Solar* display covers the heat of the internet, the changing scents of plants, the architecture of the conservatory and the contested restoration of Scotland's peatland bogs**
- **Display continues the museum's flagship *Design Researchers in Residence* series, part of the Future Observatory programme in partnership with the Arts and Humanities Research Council (AHRC)**

The Design Museum tomorrow opens *Solar*, a free-to-visit display that showcases innovative design research responding to the climate crisis.

The thought-provoking display looks at ideas surrounding the climate emergency on the theme of 'solar', exploring the role of design in our relationship with the heat and light of the sun.

The display brings together the work of four researchers — April Barrett, Eliza Collin, Jamie Gatty Irving and Freya Spencer-Wood — to offer new insights on how the sun shapes our landscapes, our homes and our communication in the context of the climate emergency.

Their research takes us from the dark and wet landscapes of northern Scotland to the hot interior of an Irish data centre; it traces microscopic interactions between flowers and their pollinators, and the movement of the sun across the quiet garden extensions of the Surrey suburbs.

The Design Researchers in Residence programme is the Design Museum's annual programme that supports a group of design-led thinkers to spend a year at the museum developing responses to the climate emergency. The programme is curated by George Kafka and forms part of the Design Museum's Future Observatory initiative launched in partnership with AHRC, part of UK Research and Innovation (UKRI).

The display – which runs from 21 June to 24 September 2024 – sees each of the 2023/24 residents reveal concepts from one year of funded research. Tasked with responding to the theme of 'solar', each resident has explored ways in which design can influence our rapidly changing relationship with the heat and light of the sun.

April Barret explores the ways in which waste heat produced by data centres can be harnessed and redistributed. Data centres are responsible for nearly 1% of all energy-related greenhouse gas emissions, an amount close to the entire aviation industry. An illustrative map and short film will introduce visitors to a town on the outskirts of Dublin where the local community have appropriated the waste heat of a data centre to heat public buildings. April will also present a speculative proposal for a community-run warm bank fuelled by data centre waste heat, for people who cannot afford to warm their homes, hinting at a future in which data centres might augment rather than deplete the resources of a community. April's display will demonstrate the potential of waste heat as power through her 'Data Do-Nothing Machine', inspired by the Eames' proposal for a Solar Do-Nothing Machine; visitors will be able to interact with an iPad, generating heat that in turn moves a structure above it.

Eliza Collin investigates the science of scent, working with perfumers and scientists to track how climate breakdown is altering the smells emitted by plants and flowers. A shift in scent can render a plant unrecognisable to its pollinators, placing it at risk of extinction. Visitors will be able to smell perfumes made from Harebell and Jasmine plants that have been placed under varying states of environmental stress. Illustrated by artefacts, videos and photographs from her fieldwork and collaborators, visitors will learn about the process of simulating the extreme climate changes needed to produce such samples. Her display also features an array of commissioned botanical drawings that imagine how the forms of plants and flowers might adapt to survive climate change. Eliza's research extends into the Design Museum's Dame Sylvia Crowe Garden, where she has planted a plot that will be monitored by museum volunteers over the coming years to observe the impact of environmental change on their scent as well as the reaction of pollinators.

Jamie Gatty Irving challenges the traditional design of the conservatory, a quintessential feature of the British landscape. Proposing that conservatories in their current format are energy drains ill-equipped to adapt to the changeable British seasons, he instead suggests a new model that could reduce the energy, cost, and environmental impact involved in heating a home. Working with Atmos Lab and using new thermodynamic research, Jamie has developed a design that optimises the energy potential of the conservatory, with new adaptations enabling the heating or cooling of the home in relation to the seasons. Visitors to the display will be able to literally step into Jamie's design proposal; he has extended the residency studio with a 1:1 conservatory integrating these adaptations, designed to maximise its solar potential.

Freya Spencer-Wood explores the contested peatland bogs of the Flow Country in Northern Scotland. Peatland bogs are wetland landscapes that play a vital role in the fight against global heating; when in good health, they can store as much carbon dioxide as forests. Ownership of these landscapes, however, determines their use. Freya will introduce visitors to the various stakeholders laying claim to this land, drawing upon queer theory to consider the role of class and gender in shaping their perspectives. As well as spatial analysis maps that illustrate the concentration of land ownership across Scotland, the display also introduces visitors to those who

work closely with these landscapes through fieldwork video interviews. Her display will centre around a film installation which examines the process of 'bog breathing', the gradual movement of the surface of a peatland bog, and hints at the magical tales that animate these landscapes, such as the will-o'-the-wisp.

George Kafka, Future Observatory Curator at the Design Museum, said: "Despite the miserable British summer, global temperatures continue to rise: this May was the hottest ever recorded. With this in mind, *Solar* contributes to the urgent need for researchers to reconsider how we live, work and design with the heat and light of the sun. This year's cohort of Desgin Researchers in Residence valiantly explore the changes and challenges wrought by global heating through projects that will change how visitors understand their homes, their gardens, their phones and even themselves."

Justin McGuirk, Director of Future Observatory at the Design Museum, said: "This residency programme offers a rare opportunity to develop a piece of research and present it to the museum's visitors. And that is no small feat: to explore original, potentially complex terrain and to communicate it clearly to a broad public. As ever, this year's residents have embraced that challenge, with four brilliantly unpredictable takes on 'solar'. They embody the commitment of both Future Observatory and the Design Museum to support emerging designers as they grapple with the climate crisis."

The Design Researchers in Residence programme supports emerging design thinkers at the start of their careers to spend a year developing a new research project in response to a theme. It builds upon the Design Museum's flagship Designers in Residence programme which supported emerging designers between 2007–2020. Residency alumni include Asif Khan, Adam Nathaniel Furman, Jade Folawiyo and Lawrence Lek. Design Researchers in Residence is part of Future Observatory, the museum's national research programme for the green transition, based at and coordinated by The Design Museum and supported by the Arts and Humanities Research Council, part of UK Research and Innovation.

Solar is accompanied by a limited-edition print publication edited by George Kafka with Lila Boschet and designed by Amandine Forest-Aguié. It features essays, interviews, photos and drawings which expand on the residents' research findings and process. A digital version is available at futureobservatory.org/research/library.

-Ends-

Notes to Editor

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Info
Design Researchers in Residence: Solar
21 June – 24 September 2024
Location: Residency Studio, 2nd floor

the DESIGN MUSEUM

Tickets: Free (no booking required)

About Future Observatory:
Future Observatory is the Design Museum's national research programme for the green transition. Based at the museum, it is coordinated in partnership with the Arts and Humanities Research Council (AHRC), which is part of UK Research and Innovation (UKRI). Acting as both a coordinating hub for a nationwide programme, as well as a research department within the museum, Future Observatory curates exhibitions, programmes events and funds and publishes new research, all with the aim of championing new design thinking on environmental issues.

FUTURE OBSERVATORY

About Arts and Humanities Research Council:
The Arts and Humanities Research Council (AHRC), part of UK Research and Innovation, funds internationally outstanding independent researchers across the whole range of the arts and humanities: history, archaeology, digital content, philosophy, languages and literature, design, heritage, area studies, the creative and performing arts, and much more. The quality and range of research supported by AHRC works for the good of UK society and culture and contributes both to UK economic success and to the culture and welfare of societies across the globe. ahrc.ukri.org

UKRI Arts and Humanities Research Council

About the Design Museum:
The Design Museum is a multifaceted museum, an ever-changing space for the public, industry and education to come together and explore new ideas. A registered charity, the museum's innovative exhibitions, partnerships, research and learning programmes evidence how design can enable this planet and its inhabitants to thrive. Our landmark building in Kensington is the centre of our national network and a global hub for the transformative potential of design.

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Researchers Bios:

April Barrett is a Canadian design anthropologist based in Edinburgh. She has a background as a community manager in the videogame industry as well as a bachelor's degree in Anthropology from McGill University. A recent graduate of the Design for Change master's programme at the University of Edinburgh, she developed an expertise in data infrastructure through her MA thesis which looked at the colonial nature of data centre expansion in Scotland. April brings her ethnographic methods to the design and digital culture space and has a particular interest in alternatives to Big Tech.

Eliza Collin is a designer and researcher with an MA in Material Futures from Central Saint Martins. Her practice spans disciplines and species, using design to build networks and interventions exploring varied and proactive futures. Her previous work has focused on water, working on projects with Policy Lab, the BlueCity Rainwater Hackathon, the Gemene Grond residency, the British Council and WET ZONES with Fondazione Studio Rizoma.

Jamie Gatty Irving is an architect and researcher. He is the co-founder of the design and research practice Entropic Group and is a Lecturer in Architecture at Kingston School of Art. He has contributed to critiques and residencies at the Architectural Association, University of Cambridge and ETH Zurich. His work explores how cultural, ecological and building systems come together.

Freya Spencer-Wood is a designer, educator and researcher. She completed an MSc in Architecture from TU Delft in 2019 (gaining a distinction and Best Graduate award) and is an Associate Lecturer at the Royal College of Art and Central Saint Martins. Previously she has worked at the V&A design studio, We Made That, East and JA Projects. In her interdisciplinary practice, Freya brings a spatial expertise to questions of land ownership, ecological justice and queer identity.