

Part 1 : Project Proposal Application

To be completed by the lead proposed supervisor(s) and non-HE partner organisation.



Arts and
Humanities
Research Council

SECTION 1: PROJECT PROPOSAL AND CASE FOR SUPPORT

Proposed Project Title:	Glass: In Search of Creative Environmental Histories		
Project Summary: <i>(Maximum 100 words)</i>	Most glass is composed of sand and salt, with additional minerals as modifying agents. Its rich material origins, as well as its complex environmental and social histories, are obscured by its seeming transparency. A partnership between the National Glass Centre (NGC), Sunderland University, and Durham University, this project explores glass's unique material qualities and intersecting histories, while drawing lessons toward sustainable futures. Advancing research agendas in the arts, humanities and social sciences, this project provides the student with rigorous training in historical and social research, along with a unique opportunity to exhibit their artwork and shape public knowledge.		
Name of Non-HE Partner Organisation:	National Glass Centre, Sunderland		
Name of Contact at non-HE Partner Organisation:	Julia Stephenson	Email Address:	julia.stephenson@sunderland.ac.uk
Primary AHRC Subject Area:	Cultural Geography		▼
Secondary AHRC Subject Area (if Interdisciplinary):	Fine Art: History, Theory and Practice		▼
Does the project Include a creative practice component?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
If you have listed two subject areas above, do you consider the project to be interdisciplinary?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>

If Yes, please briefly state why:

(Maximum 100 words):

Glass has yet to be considered as a creative intersection of environmental and social forces. This is partly because such research requires intellectual positioning in historical research, social sciences, as well as knowledge of glass materiality. Moreover, practical glass-making skills and engagement with this creative process offer unique insights into the tactile and environmental components that are harder to grasp or convey through academic research alone. This collaboration between Durham's Geography Department, Centre for Visual Arts and Culture, Sunderland's Glass and Ceramics Department and National Glass Centre, brings together these scholarly and practical agendas, combining world-leading scholarly resources with a leading UK glass-making facility and cultural institution.

Please provide full details of the proposal and make your case for support below:

(Maximum 750 words)

Glass is everywhere: In objects and architecture, communication devices and advanced digital technologies. Once it is refined through industrial processes, all traces of its material history are seemingly lost to a clear and translucent substance. Consequently, little attention is currently paid to the worlds embedded and transformed in the making of glass.

Yet obscuring the materiality of glass comes at a cost. Glass urgently needs to address its unsustainable energy consumption and interrogate its complicity in extractivist economies, to be able to move toward a decarbonised future. This challenge requires technical innovation as well as a repositioning of raw materials - research which is currently being undertaken by industry, or for industry, with the purpose of mass production (e.g. Deng et al. 2019).

A more holistic understanding of glass is needed to ensure progress is not only practical and economical, but sustainable and inclusive. This project offers new understanding of socio-political and environmental concerns through the glass object. A novel engagement with the materiality of glass and its composition will consider glass not as a singular, static object or surface, but as a series of unfolding events where elements, species and worlds come together. While extensive literatures explore glass as an aesthetic object or utilitarian material, this study will consider glass conceptually and artistically as a tool to explore and reimagine environmental histories and socio-political relations.

—Research Questions—

Bridging cultural geography, visual culture and artistic practice, this project marks a significant shift in the analysis of glass. It develops “glass thinking” as an intellectual process and art practice. By examining historical glass recipes, and with potential for experimenting with glass batch formulations, the project will trace the cultural histories stored in the raw materials, their mobilities and geographies. The project expands existing work on the cultural histories of resources (e.g. Bridge & Le Billon 2012; Eskilson, 2018) and the ontological turn in the humanities and social sciences (Bennett, 2010; Latour 1993; Haraway 2003), by focusing specifically on the material ontology and history of glass.

Since pre-industrial use of botanicals and algae in fuelling furnaces and in the making of chemical compounds, the making of glass is rooted in place, in natural environments and human interaction. Contemporary mining of silica sand, metals and rare earth minerals for industrial glass production further highlight the environmental and social toll of these processes. Foregrounding these histories through creative practice addresses a scholarly gap, but also constitutes an urgent intervention in current debates over environmental crises and the potential to engage differently in the material world.

The precise focus of the research will be a matter for discussion with the student, but central questions are:

- Can creative experimentations with glassmaking generate new knowledge of environmental history and socio-political relations?
- What do pre-industrial practices of glassmaking reveal about glass’ overlooked histories?
- How can practices of art-making expand interdisciplinary efforts to move toward decarbonized futures?

The project seeks new forms of embodied storytelling, following the precise ingredients in the glass object. Unlike scientific formula it will explore a creative use of the glass recipe, which fuses narrative and art practice. The project proposes that glass is a conduit for stories, a conductor and mediator of information.

—Research Methods—

Creative practice is at the heart of this project, developing glass-based research through a series of sculptures-as-case-studies. While the form and composition of each sculpture will be up to the student to determine—with technical support from the supervisory team and NGC technicians—each will involve research of archival texts, studying site-specific geology, ecology and methods of material processing. Historical research will be supplemented by analysis of contemporary environmental and social-political contexts, for example through interviews with regional experts, local communities, scientists and cultural practitioners.

The project strongly encourages a grounded, place based approach to the research process. We specifically emphasise research in the Northeast, seeking to highlight the region’s social, industrial and environmental histories. Depending on future travel restrictions, additional research may include international sites to explore early glass composition (e.g. in Acre, Tyre, Qantir, Tell el-Amarna), but these will be determined in consultation between the student and the supervisory team.

Outputs from the project will include a research dissertation and series of glass sculptures for gallery exhibition in collaboration with NGC, accompanied by a public engagement programme. Outcomes from the research will also inform and influence a proposed reorganisation of the NGC permanent display covering glass in Sunderland since 674AD

Please provide details of any resources and facilities, including details of any high cost equipment, fieldwork, training, etc., that may be required to complete the project successfully, and where you will seek these resources (e.g. NBCDTP; partner resources; departmental/school funds). Please include estimated costs:

(Maximum 200 words)

At Durham, the student will have access to academic methods training offered within the Geography Department, by the Centre for Visual Arts and Culture and the Centre for Academic Development. Fieldwork will be based primarily in the North of England requiring no significant expenditure. If needed, funds for any additional, international travel (c. £3000) will be sought from internal university grants and external resources like the Royal Geographical Society.

Sunderland's Glass and Ceramics Department will provide glass making facilities at cost that can be covered by internal funding (e.g. Durham Geography's Research Development Fund). NGC will offer an exhibition space and public engagement resources. This also includes NGC staff time working on exhibition development and delivery, marketing, promotion and public engagement.

The allocated budget for an NGC Gallery exhibition is estimated at £30,000 and £5000 for the NGC Balcony space. Both spaces are linked with NGC's educational activities, which are additionally funded. The NGC exhibition and educational activity budgets will be supported by Durham Geography's Research Development Fund. Combined, these will support the production of sculpture for exhibition as well as deliver an accompanying public engagement programme. NGC will also support the project's input into the reorganisation of its permanent display.

Please outline the arrangements for communication between the partner organisation and academic host organisation in regard of the project management and the monitoring of academic progress:

(Maximum 150 words)

Dr Noam Leshem will oversee the Durham/NGC/Glass & Ceramics partnership, in collaboration with NGC Head of Arts Julia Stephenson. In addition to regular academic supervisions (Leshem/Shaefer) and practice-oriented meetings at NGC (Stephenson/Rennie), there will also be formal meetings involving the entire supervisory team at set points in the project: the first after 3 months, and thereafter at 6 monthly intervals, with a short, written report including visuals submitted by the student in advance of each meeting, where a timetable will also be agreed for the next 6 months' work. Supervisors will also receive regular progress review documents produced by the department. At the latter stages of the project the student will produce a creative body of work, take a leading role in shaping an accompanying educational programme and produce a contemporary gallery exhibition overseen by Stephenson.

What benefits will accrue to the student and the partner organisation as a result of your collaboration?

(Maximum 300 words)

Involvement with academics in geography and visual culture, museum curators, glass practitioners, gallery learning specialists and technicians, will give the student direct experience of distinct practices and networks across the sciences and arts, as they produce a creative body of work and develop engagement activity to inform public knowledge. The student will also gain intellectual insights into environmental theory and debates around new materialism, art practice and contemporary museum operations. The student will gain experience in historical, environmental and socio-political research methods as well as practical skills in negotiating relationships with disparate communities and direct experience of glass materiality and art making for public dissemination.

NGC will benefit from the project through actively shaping public knowledge about social and environmental dynamics that are involved in the making of glass. It will also address the central challenges of glass's contemporary environmental impacts and the dramatic changes glassmaking might see in its production in coming decades. This will happen through a gallery exhibition of project outcomes as well as the student's research informing a proposed reorganisation of NGC's permanent display. Finally, the project also addresses NGC's EDI priorities, which include achieving a gender balance amongst the artists it works with, and supporting North-East based artists in their career development in particular.

NGC will strengthen its links to the community of Durham scholars in continuing to develop relationships between academic staff at the two universities building on earlier work on the Grosseteste project (in which Colin Rennie was also involved). In particular, NGC will be able to link to a dynamic programme of education and research at the Institute of Hazard Risk and Resilience (Geography) and the Centre for Visual Arts and Culture.

Please briefly state what financial (if any) or in-kind contribution the partner will be making over the duration of the award:

(Maximum 100 words)

NGC will allocate an exhibition budget for the NGC Gallery up to £30,000. The exhibition programme links with NGC's educational activities, which are additionally funded. The partnership offers a combination of in-kind and funded support, which includes academic and technical facilitation from Sunderland University's Glass and Ceramics staff as well as NGC staff time working on exhibition development and delivery, marketing and promotion, and public engagement. The proposed reorganisation of the NGC permanent display covering glass in Sunderland since 674AD will be sought externally by NGC.

Please describe the nature of the collaborative arrangement and the activities the student will be taking with the organisation:

(Maximum 300 words)

The project is modelled on the understanding that contemporary artists and makers increasingly collaborate with scientists across social and exact disciplines, and engage with communities to produce more comprehensive perspectives through their artwork. Equally, there is benefit to the sciences in a tactile, practice-based approach to material histories and their environments.

The academic rigour and supervisory expertise across Geography, Visual Culture and Glass offers the necessary support and critical foundations for the student's successful engagement with cultural histories and political landscapes on a regional and international level. Working between two institutions offers a unique opportunity to draw on a wide conceptual corpus, methodological toolkit, as well as specialist facilities. Specifically, this includes hot glass-making, raw material analysis and composition development that the student will be able to access through Sunderland's Glass and Ceramics department and the NGC.

In the first year the student will receive training in research methods at Durham University, inclusion in relevant research networks. Thereafter regular support from the supervisory team through the early stages of research and evaluation of the constituent parts coming together in the project. Introductory visits will be made to Sunderland's G&C and NGC during this period to familiarise the student with facilities and the museum's exhibition programme, collection, educational activities and workshop facilities.

By the second year the student will work independently, undertaking site-visits and developing both focused inquiry and creative response. A first-stage placement with Sunderland's G&C and NGC will take place mid-year, providing the student with time and support in the workshops to develop research through glass making.

In the last 18 months of the project, the student will undertake a second-stage placement with G&C and NGC and complete the creative part of the project (sculpture-as-case-studies) for exhibition in the galleries at NGC. This period will also see the student informing the delivery of a public programme around the exhibition as well as informing proposed reorganisation of the NGC permanent display covering glass in Sunderland since 674AD.

SECTION 2: SUPERVISION AND EXTERNAL ADVISORS

First Supervisor:	Dr Noam Leshem, Associate Professor	School/Department:	Department of Geography
		Email Address:	noam.leshem@durham.ac.uk
Second Supervisor:	Dr William Schaefer, Associate Professor	School/Department:	School of Modern Languages and Cultures
		Email Address:	william.schaefer@durham.ac.uk
Additional Advisor:	Julia Stephenson, Head of Arts	Organisation/Institution:	National Glass Centre, Sunderland
		Email Address:	julia.stephenson@sunderland.ac.uk
Additional Advisor:	Dr Colin Rennie, Senior Lecturer	Organisation/Institution:	Sunderland University
		Email Address:	colin.rennie@sunderland.ac.uk

Explain how the expertise of the supervisory team and external advisors will allow them to support the proposed project and the selected student:

(Maximum 500 words)

Dr Noam Leshem is an Associate Professor in Cultural and Political Geography at Durham University. His work addresses the broad intersections of cultural history and visual culture. Leshem has extensive fieldwork experience, with specific regional expertise in Middle East, North Africa and South America. He leads research teams that bring together scholars from across the humanities and social sciences. In 2019, Leshem's research on the cultural history of No Man's Land became the first-ever academic project to partner with Google Arts and Culture alongside some of the world's leading cultural institutions. Leshem has supervised 6 PhD students and over 40 MA dissertations, and has served as an external examiner in the UK, Israel and the US. His expertise will enhance the candidate's grounding in cultural geography, her methodological grounding in archival and field research, and provide guidance on practical aspects concerning potential research in the Middle East.

Dr William Schaefer is Associate Professor of Chinese and Visual Culture at Durham University. His work addresses Chinese visual culture within a global context, linking it with the geography of culture, philosophies of nature, and the environmental humanities. His current research project, Photographic Ecologies, explores how photography stages fundamental questions of the relations between culture and nature in the present moment of environmental crisis and mass displacement. Schaefer's essays have been published in leading journals of art and culture; his first book, Shadow Modernism, was shortlisted for the First Book Award of the Modernist Studies Association. He has co-supervised 6 PhDs and supervised 8 MAs at Durham, Berkeley, and Rochester (USA). Schaefer's supervision will support the project's broad concerns with the critical intersections of visual culture and environmental critique. His work will further enhance the theoretical foundations of the project and its links to contemporary debates in visual arts and culture studies.

Julia Stephenson has worked at National Glass Centre as Head of Arts for the last nine years. During this time, she has established a formal collection of international Studio Glass, delivered a series of temporary exhibitions and supported wide ranging residency and public engagement programmes. Julia comes from the North East of England and held multiple positions at leading cultural institutions in the region. Julia will work with the student to develop the sculptural work and will closely advise on the curatorial dimensions of the project.

Colin Rennie is a Senior Lecturer in Glass at the University of Sunderland. His expertise in Glass blowing and manufacture has been built over 25 years as a practicing artist and glassmaker. Rennie has exhibited internationally and was Shortlisted for the Toyama glass prize Japan 2018 and the Jerwood prize 2003. Rennie's research investigates the blending of traditional glassmaking techniques and skills with Digital 3D modelling and virtual sculpture. Rennie has supervised 2 PHD thesis as DS has one current PhD and 3 students as Co-Supervisor. In addition to essential technical support in hot-glass processes, Rennie will enhance the student's links to applied and fine art debates and widen access to local and international practitioner networks.

SECTION 3: RESEARCH ENVIRONMENT

Please provide details about the research environment the selected student will be joining and its suitability:

(Maximum 500 words)

Durham Geography Postgraduates are members of a vibrant researcher community interacting with staff, postdoctoral researchers and international visitors. Postgraduate students are invited to regularly present and discuss their work in a range of research events, including 'work-in-progress' meetings that offer informal, supportive occasions for the discussion of embryonic work. All colleagues benefit from a welcoming and inclusive research environment, recognised through the Department's Athena SWAN bronze award for promoting women in academia.

The student will be affiliated with the Economy-and-Culture (E&C) and Geographies-of-Life (GoL) research clusters. Both host fortnightly events (workshops/seminars/reading groups) during term time. There are a range of substantive and theoretical connections between the project and the work of the clusters. In relation to E&C research cluster, the student's research on material and environmental history of glass links to other work on cultural histories of natural resources (Prof. Bridge, Dr Schmidt) and political struggles surrounding extraction (Dr. Anthias). Their work also connects with a range of work in GoL, which focus on the technological mediation of human and non-human life (Dr Johnson, Dr Lehman), and research on the sensory, experiential, dynamics of human life (Dr Colls, Prof Atkinson).

Outside the department, the student will benefit from the School of Modern Languages and Cultures (MLAC) research focus on visual culture and environmental humanities. The School regularly offers postgraduate modules such as Technology, and the Re-making of "Nature", while the Centre for Culture and Ecology, currently directed from MLAC, organises lectures, workshops, and reading groups that bring together scholars in the humanities, social sciences, and the sciences.

At National Glass Centre the student will be affiliated with a cultural institution known for its world-class glass exhibitions and production facilities, which operates alongside University of Sunderland's Glass and Ceramics Department, providing a strong cohort of researchers, glass practitioners, visiting artists, specialist masterclasses and technical tutorials. Much of the building is open to the public and NGC is home to a wealth of activity relating to the teaching, production, display and promotion of glass. NGC has a number of gallery spaces for temporary exhibitions, the display of their collection of international Studio Glass, and a permanent exhibition explaining the rich history of glass in Sunderland since 674AD. The building also houses Northern Gallery for Contemporary Art which generates a fascinating dialogue between contemporary art and glass. NGC facilitates projects with internationally renowned artists and the artistic programme operates on an international level creating dialogue with global organisations.

Dr Noam Leshem,
Associate Professor
Department of Geography
Durham University

By email

29 October 2021

Dear Noam

Collaborative Doctoral Award

I would like to take this opportunity to express my support for the proposed project, *Glass: In Search of Creative Environmental Histories*.

It is essential for National Glass Centre to support research with links to sustainability and this proposal offers a highly creative and considered approach to this subject. As such, I can confirm our intention to support the proposed project and the chosen applicant as described in the application. Specifically, we are committed to providing supervisory support to the student and ensuring resources are in place to see the successful execution of this project.

Having had the opportunity to work with Durham University on the Grosseteste project I would welcome the chance to do so again. I believe that we all gain a great deal by combining knowledge and understanding from different fields to consider a shared area of interest.

I hope that we are able to take forward this opportunity to work together.

Yours sincerely,

Julia Stephenson
Head of Arts – National Glass Centre