

Institution: University of Sunderland		
Unit of Assessment: 32		
Title of case study: Impact of the National Glass Centre on culture, creative practice, education and public understanding		
Period when the underpinning research was undertaken: 2000-2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Peter Davies	Professor	1998-2012
Kevin Petrie	Professor	2000-present
Jeffrey Sarmiento	Reader	2006-2020
Erin Dickson	PhD Student, Technician	2011-2017
Colin Rennie	Senior Lecturer	2004-present
Inge Panneels	Senior Lecturer	2006-2019
James Maskrey	Senior Technician	2001-present
Julia Stephenson	Head of Arts	2012-present
Period when the claimed impact occurred: 1 August 2013 to 31 December 2020		
Is this case study continued from a case study submitted in 2014? N		
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>The National Glass Centre (NGC) at the University of Sunderland is an internationally recognised centre of excellence in glass-making. At once a research facility, gallery and museum, in the assessment period the NGC engaged over 1.37 million public visitors and 38,000 workshop participants with a body of research produced by professors, lecturers, fellows, visiting scholars and research students. Through the NGC, glass research has influenced culture and encouraged participation, stimulated creativity and international artistic practice through 57 residencies and 50 commissions, created opportunities for artists to exhibit and sell their work, and provided learning for people of all ages. Its continued success preserves the rich history of its location, and of glass itself.</p>		
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>The National Glass Centre at the University of Sunderland advances the field of glass through practice-based and practice-led research. Drawing on links to ecclesiastical, industrial and artistic glass in the North East, National Glass Centre Research (formerly the Institute for International Research in Glass) is an institute internationally recognised for its research, teaching, production, exhibition and facilities for glass making. As befits a National Centre with an international reach, the Centre's research constantly explores methods of practice that expand traditional approaches to glass, focusing especially on creative research and the application of conceptual thinking and facture. The research undertaken is frequently cross disciplinary and absorbs influences from artists as well as glass makers in helping to establish new ways of defining the practice. Research undertaken by current and former members of the glass research institutes, though expansive, encompasses four key research modes: approaches to commissioning; collaboration with researchers in the sciences; producing epic artworks; and innovation.</p> <p>Adopting a 'reach-in'/'reach-out' approach, researchers engage with visiting artists to work creatively and experiment with the material. In <i>Glass North East</i> [R1], <u>Davies</u> presents an overview of contemporary glass in the region and includes information on practice, production and commissioning. <u>Davies</u> and <u>Petrie</u> co-curated <i>Kith and Kin</i> [R2], an exhibition which featured innovative glass and ceramic production and the 'familial' relationship of research.</p> <p>Collaboration with researchers in the sciences is a reciprocal approach to developing new content for creative practice, as well as a way of visualising scientific data and ideas through artisanal making and digital craft processes in a way that statistics and graphs cannot. <u>Rennie's</u> response to one of five important scientific breakthroughs in molecular biology was a sculptural glass representation of ATP synthase [R3]. Interpreting the work of medieval scholar Roberg Grosseteste, scientists, historians and artists from the Universities of Oxford, Durham and Sunderland explored his theories on light and colour.</p>		

Production of epic artworks is a distinctive activity within NGC Research. Maskrey's long career as an artist and master glassblower led to the realisation of Magdalene Odundo's *Transition II* [R4], the important British artist's largest work to date. In this work Maskrey adapted the form of an Egyptian ear adornment into an installation involving 1001 handmade blown glass elements. Sarmiento printed a cultural terrain captured within the *Liverpool Map* [R5], a multi-layered glass sculpture commissioned by the Museum of Liverpool and details the cultural terrain of the 2008 Capital of Culture. *Emotional Leak* (Sarmiento and Dickson) [R6] is a joint effort between PhD student and staff researcher to realize a monumental scale object in waterjet cut glass. The resulting artwork has toured to London and Venice, where it was exhibited at Glasstress at Venice Biennale. These works exemplify the Unit's **innovation with glass**, showcasing its specialisms in waterjet cutting, and blending glass with print, an innovation is also explored in Petrie's practice-led work in *Glass and Print* [R7].

3. References to the research (indicative maximum of six references)

By necessity a limited number of references are provided here, and are chosen to exemplify the four research modes described above.

- R1 Davies, Peter (2007) *Glass North East*. Art Editions North.
- R2 Davies, Peter and Petrie, Kevin (2011) *Kith and Kin I and II*
- R3 Sarmiento, Jeffrey and Dickson, Erin (2011) *Emotional Leak*
- R4 Rennie, Colin (2007) *ATP Synthase-Design 4 Science Exhibition*.
- R5 Panneels, Inge and Sarmiento, Jeffrey (2011) *Liverpool Map*
- R6 Maskrey, James and Odundo, Magdalene (2015), *Transition II*
- R7 Petrie, Kevin (2005) *Glass and Print*. A&C Black Publishers Ltd.

Quality indicators

Research by the Institute for International Research in Glass and National Glass Centre Research is been supported by competitively-won grants, prizes and commissions. Grants include AHRC, Leverhulme and RCUK Academic Fellowships (Cutler, Sarmiento, Petrie, Chaseling). Since 2009 the NGC has partnered with Northumbria University to deliver the AHRC Northumbria-Sunderland Doctoral Training Centre. Research equipment and facilities have been supported by UK Government, the European Commission and national agencies including Arts Council England.

R3 was submitted to REF2013. Selected for the Venice Biennale 2015.

R4 was submitted to RAE2008. Commissioned for the *Design 4 Science* Exhibition. Toured to Manchester Museum of Science and the Nobel Museum. Acquired by the Medical Museion, Copenhagen. *Nature* wrote about **R4**: "Wandering around the well-known protein and virus models that resulted, one much more recent piece stands out: a dizzying ghost of a protein molecule mounted in a block of glass." (*Nature*, 2008 452:155)

R5 was submitted to REF2013. Commissioned and acquired by the Museum of Liverpool.

4. Details of the impact (indicative maximum 750 words)

Each year over 200,000 people visit the National Glass Centre (NGC) to explore the physical and creative potential of glass. The NGC prompts visitors to ask the same fundamental question that underpins its research: what can glass do? Research-led exhibitions, workshops and demonstrations enable visitors to answer this question. The Chief Executive of Arts Council England notes the Centre's success in putting its research at the centre of visitors' experiences, saying that the unit's "*practice-based research ... can be seen within the NGC'S exhibition programme, artist commissions, facilities and technical support, critical writing and permanent collection*," adding that the NGC is "*an internationally recognised centre of excellence in glassmaking*", in which visitors "*can see work that is amongst the best anywhere in the world*" [S1]. The NGC enables the public and artists to benefit from the expansive body of research produced within the building. The nature of the impact of this research is broad, affecting culture, participation, creative practice, education and heritage. Its reputation as a world leader in glass research buoys the NGC's success as a cultural attraction, and by consequence sustains this impact.

Impact on culture and participation

The NGC is an inclusive institution that charges no fees for entry or exhibitions, and it was visited by 1.37 million people during the assessment period, supporting delivery of DCMS's policy that everyone should be able to access and participate in the arts. Research underpins the entire range of the Centre's activities, and the significance of its impact is reflected in both the volume and diversity of the cultural opportunities it offers:

- An exhibition programme operating in five gallery spaces [S2] The Unit's research shapes the programme, through curation (exhibitions are principally curated by Stephenson), inclusion of researchers' work such as the **epic artworks** *Emotional Leak* by Sarmiento and Dickson [R4]) and *Transition II*, by the world-renowned ceramicist Magdalene Odundo with Maskrey [R6]). Each year 200,000-230,000 people visit the NGC, almost equivalent to the population of Sunderland [S3]. Arts Council England's Chief Executive commends the NGC's commitment to integrating research and exhibition in this way, saying that as well as giving the public the opportunity to engage with the work of the academic team, it "*provides an important platform for the research at an internationally-recognised centre of excellence in glassmaking*" [S1].
- A learning and engagement programme [S2] that showcases the physical and creative potential of glass and encourages the public to consider their own creative potential by asking, like NGC researchers, "what can glass do?", and "what can I do with glass?". Workshops draw on the unit's research in **glassblowing** (e.g. Rennie) in annual Christmas bauble-making workshops (1,100 paying participants in 2018) and **innovation with glass** and print (e.g. Petrie) in the Screen Printing on Glass course. During the assessment period, workshops attracted 37,970 paying participants [S3]. Thrice-daily studio demonstrations of the unit's **hot glass tradition** (e.g. Rennie) have been watched by 192,759 people since 2015 [S3]. The programme reaches a diverse audience, providing creative opportunities for babies, children, teens and adults.
- Creative opportunities aimed at boosting health and wellbeing for those with disabilities and long-term medical conditions, drawing broadly on the Centre's research. Creative Age is a weekly arts programme for people living with dementia and their carers. Time for Tea is partnership between the NGC, Sunderland Veterans in Crisis and the University's Helen McCardle Nursing and Care Research Institute. Since 2020 it has offered glassmaking and ceramics workshops for 51 veterans experiencing mental health crises and their families, culminating in a public exhibition. A participant living with PTSD described its impact: "*As well as accomplishing something by making something, I was accomplishing something by being able to talk to people. [This is important because] I spend most of my time in my bedroom. I don't come out much, so I don't mix socially. It made a big change.*" [S4]
- A tradition of cultural connections through reciprocal partnerships with major prestigious institutions. Work by researchers Rennie, Maskrey and Palova are part of the V&A's permanent collection [S5], and the NGC regularly displays work on loan from the V&A. This reciprocity creates impressive reach; during the assessment period the V&A's 27 million visitors from around the world had the opportunity to see the Centre's work [S6]. Just as the partnership showcases the Centre's excellence in glass art in the capital, it also brings creative artefacts from beyond the region to the community.

Impact on creative practice and practitioners

NGC research on **approaches to commissioning glass** supports artists' creativity, artistic practice and livelihoods on a global scale. It underpins a residency programme for emerging and established artists (57 in the assessment period). The programme is unique in providing access not only to world-leading facilities but to the knowledge and technical expertise of researchers in the unit [R1, S1, S7]. While some artists already work with glass, researchers support others in experimenting with glass for the first time - such as ceramicist Richard Slee, who worked with Maskrey to produce *Stadium* (subsequently acquired by the V&A [S5]). Resident artists have come from Mexico, Denmark and the USA, and include emerging and established artists, such as William Tillyer (2014) and Bruce McLean (2013)

[S3]. The NGC facilities and the unit's expertise are also used by UK businesses and artists outside the residency programme to extend the range of their creative expression [S2].

Residencies, commissions, exhibition sales and retail sales support artists financially. During the assessment period, Stephenson commissioned 50 artists - including 8 emerging artists - to create new work in the NGC, of which 35 were then purchased on Stephenson's advice

[S3]. The Chief Executive of Arts Council England commends this acquisition programme, describing it as "*an important legacy; a permanent resource for the people of Sunderland, the wider public and researchers nationally and internationally*" [S1]. Exhibiting artists benefit from exposure of their work to potential collectors in a prestigious venue, as well as from the NGC's retail operation. The NGC sells work by 30 different artists each month, generating income of £262,306 (after VAT and commission) for artists between August 2014 and July 2018 [S3].

Impact on education

NGC research permeates its schools' learning programme, which uses glass to help young people explore STEAM (science, technology, engineering, art and maths) subjects. Since 2016 11,016 pupils have taken part in NGC workshops underpinned by research on hot glass, fused glass, waterjet cutting and printing on glass. In parallel, since 2018 Stephenson has led DesignLab Nation, a programme for secondary-level pupils and D&T teachers in partnership with the V&A to inspire the next generation of professional designers, makers and innovators. Pupils are given a brief and, through research in the V&A and NGC collections and practical workshops with NGC researchers, produce a creative response for display in the Centre. 49 pupils from three Sunderland schools have participated in the programme, and 34 D&T teachers completed the CPD programme drawing on Petrie's printing and sandcasting on glass research. The programme evaluation showed that it increased students' interest in a career in the creative industries, and boosted their confidence in their art and design skills. For many, it was the first time they had visited the NGC [S8].

Impact on heritage

The continuing success of NGC preserves the cultural, creative, industrial and historical importance of its location, the site where glass was first introduced in England, adjacent to St Peter's church (part of the twin monastery of Wearmouth-Jarrow, where Bede wrote *The Ecclesiastical History of the English People*). The twin monastery, nominated for UNESCO World Heritage Site status, is home to the oldest known stained-glass in the country and its riverfront location puts it close to the former centre of the city's glass industry. The NGC, which houses a museum of glass history, emphasises the historical and cultural significance of this important site and material.

5. Sources to corroborate the impact (indicative maximum of 10 references)

S1 Statement of support from Chief Executive, Arts Council England

S2 National Glass Centre website ([main site](#), [research pages](#))

S3 Database of visitor numbers, learning and engagement participants, demonstration audiences, retail sales, residences, commissions and acquisitions

S4 Transcript of interview with Time for Tea participant

S5 Links to work acquired by the V&A produced by NGC researchers and artists in residence

S6 [V&A annual reports](#)

S7 Stephenson, Julia (2019) NGC 21. Art Editions North

S8 [DesignLab Nation report](#)