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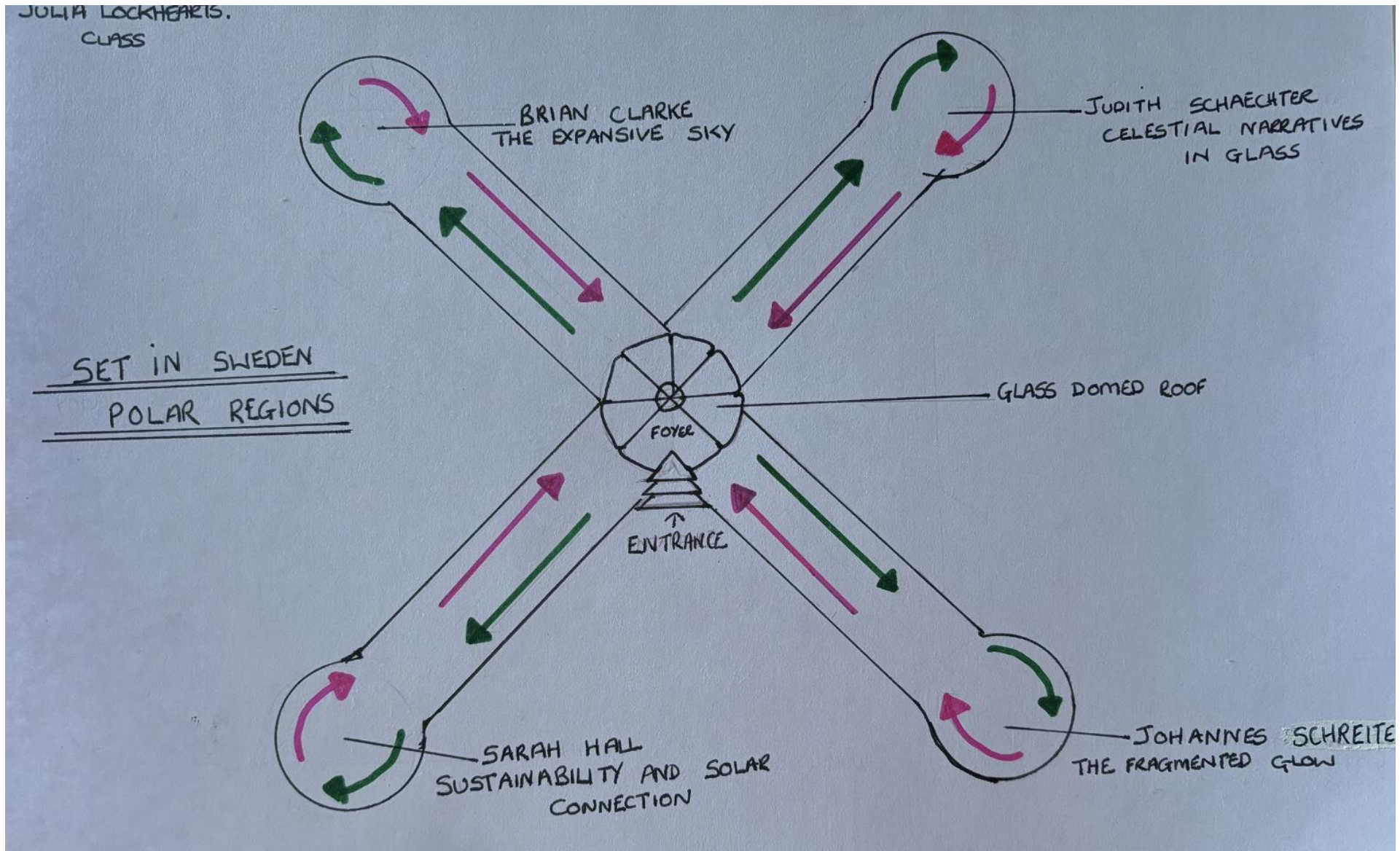


Fig1 plan of the cross-shaped building.

Introduction

The exhibition *Illuminating the Celestial* is held at the Cross Gallery Pavilion, a purpose-built, cross-shaped building with spherical gallery rooms inspired by the movement of light and cosmic navigation. The exhibition explores the thematic and material relationship between stained glass, the aurora borealis, and light as a metaphor for transformation, emotion, and innovation. It brings together four contemporary artists—Johannes Schreiter, Brian Clarke, Judith Schaechter, and Sarah Hall—whose work with stained glass engages directly with light as both subject and material. Using the aurora borealis as a conceptual and visual anchor, the exhibition is both aesthetic and scientific, spiritual and sustainable. An experience not to be missed.



Fig: Mackinac Bridge.

Illuminating the celestial .

Stained Glass, light and the Northern lights.

The aurora borealis, or “Northern Lights, are caused by charged solar particles colliding with gases in Earth’s atmosphere” producing vibrant displays of colour in polar skies (Lilensten and Blelly, 2019, p.92) These colours—green from oxygen at low altitudes, and violet from nitrogen—have been echoed by glassmakers for centuries (Kidson, 2014, p.71). The unpredictability and beauty of auroras offer a dynamic model for artists working with light, particularly in stained glass where colour, movement, and atmosphere shift depending on the angle, time of day, and architectural context (Gautier, 2020, p. 37)

As natural phenomena, the aurorae are liminal—they appear on the threshold between the cosmos and the Earth, seen but not touched. This echoes the stained glass medium, which occupies a liminal space between architecture and image, light and material (Stevens and Bell, 2002). In many cultures, auroras were viewed as spiritual omens or messages from ancestors—an emotional and mythological dimension also reflected in the symbolism of stained glass, particularly within sacred and commemorative spaces (Kidson, 2014; Schaechter, 2015).



Fig: Aurora Borealis

Cultural Significance

Various cultures have myths and legends surrounding the Northern Lights. For example, the Sámi people of Northern Scandinavia view the aurora as the souls of the departed (Valkonen, 2019). In contrast, some Native American tribes believed the lights were a sign of good fortune or a message from the spirit world (Kahn, 2018).

Recent studies indicate that climate change may affect the visibility of the Northern Lights. The increase in atmospheric pollution and changing weather patterns can obscure the view of this natural phenomenon (Kovacs, 2021). Moreover, the diminishing ice sheets in polar regions may alter the magnetic field dynamics, potentially impacting auroral activity (Smith, 2023, p 46)

The Exhibition Space: Architectural and Symbolic Design

The exhibition is housed in a cross-shaped pavilion with four corridors, each ending in a spherical “goldfish bowl” gallery. The cross plan reflects spiritual and cosmic orientations in religious architecture, while the spherical rooms symbolise completeness, transparency, and immersion (Kidson, 2014). Visitors are encouraged to walk through light as it bends, shifts, and reflects, echoing the movement and allowing a full-body sensory experience.

Each gallery is themed around one of the exhibiting artists and responds uniquely to their work with light. The layout reflects the four cardinal directions—north, south, east, and west—guiding the visitor through a compass of illumination (Gautier, 2020). The spherical spaces allow light to wrap around the viewer, as the aurora envelopes the horizon in its dance (National Geographic, 2021).

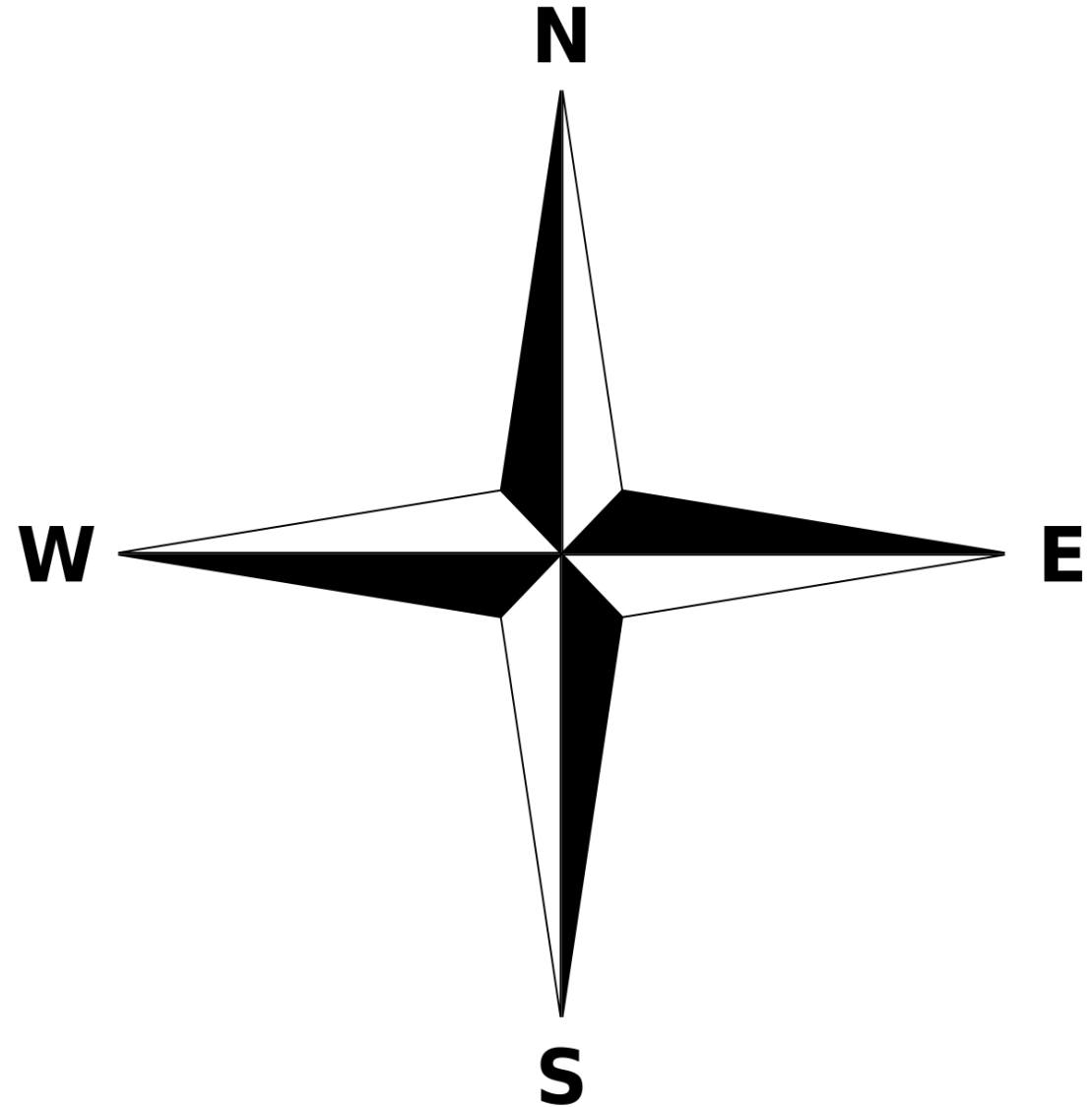


Fig: compass svg authors own image

Brian Clarke: Monumental Light and Colour

Brian Clarke's stained glass works often merge with architecture, creating entire environments of coloured light. In *Illuminating the Celestial*, Clarke's installation evokes the immersive sweep of auroral skies using monumental panels of rich colour and fluid design (Clarke, 2012). His ability to manipulate space through transparency and saturation mirrors the visual texture of the Northern Lights (National Geographic, 2021).

Clarke believes that stained glass should not be confined to ecclesiastical settings, but instead be integrated into public and domestic spaces as part of the living world (Clarke, 2012). His work explores how light affects mood and atmosphere, offering a modern reinterpretation of stained glass as a living art form.

Brian Clarke stained Glass Artist.



Fig Brian Clarke daffodils
2018



Fig Brian Clarkes vespers 2021



Fig: would without end Brian Clarke 2017

Johannes Schreiter: Fragmentation and Scientific Light

Johannes Schreiter's work is noted for its abstract, cerebral approach to stained glass. He uses fragmented compositions, scientific diagrams, and textual overlays to create pieces that mirror the scientific and metaphysical systems (Stevens and Bell, 2002, p.107) In this exhibition, his panels reflect the patterns of auroral movement: layered, mathematical, and unexpected.

Schreiter's style rejects narrative in favour of an analytical visual language. This aligns with the aurora's scientific structure—a complex interplay of physics and atmospheric chemistry (Lilensten and Blelly, 2019). His works suggest the limits of knowledge and perception, using glass as a metaphor for the thin boundary between what we can and cannot know.

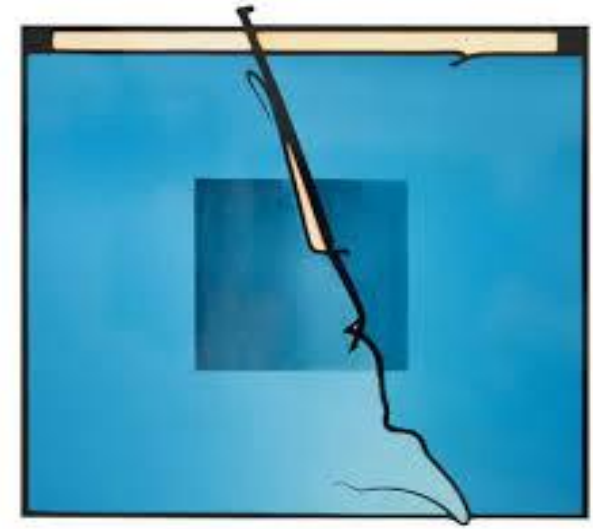


Fig: Christmas 1 Johannes Schreiter 1996



Fig: Christmas 2 Johannes Schreiter 1996



Fig : Two light windows 1980



Fig: Swansea collage of art



Fig: Vitreous Burnt Collage 1980

Judith Schaechter: Emotion, Narrative, and Light

Judith Schaechter's glasswork is highly personal, drawing on narrative, vulnerability, and emotion. Her luminous panels feature layered coloured glass, intricate imagery, and emotive figures, often engaging with themes of pain, beauty, and transformation (Schaechter, 2015). Schaechter's work parallels auroral interpretations from myth—spiritual messages, symbolic transitions, or emotional thresholds (Gautier, 2020; Kidson, 2014).

In this exhibition, her circular gallery installation reflects her use of intimate, encapsulated environments. Her manipulation of internal lighting—highlighting certain elements while obscuring others—mimics the ephemeral, shifting quality of auroras in the night sky. Her work reminds us that stained glass can be psychologically, not just visually, illuminating.

Sarah Hall: Sustainability, Solar Glass, and Future Light

Canadian artist Sarah Hall is a pioneer in environmental stained glass, she embeds solar panels and photovoltaic cells into her windows, allowing them to store energy and glow with their light after dark (Hall, 2018, p. 48)

Hall's integration of renewable energy speaks directly to the scientific mechanisms behind the aurora, offering a poetic and technological response to both celestial and earthly energies (Lilensten and Blelly, 2019).

Her spherical gallery installation explores the theme of self-sustaining light. Coloured panels generate power throughout the day, and are then used to illuminate interior sections by night—a conceptual echo of how the aurora is energised by solar radiation. Hall's work stands at the intersection of aesthetics, science, and activism, imagining how stained glass can serve the future (Hall, 2018; Clarke, 2012).

Conclusion

Illuminating the Celestial presents stained glass not as a relic of medieval craft but as a vibrant, evolving medium capable of responding to cosmic, emotional, and environmental phenomena. The aurora borealis, with its dancing waves of natural light, becomes both subject and metaphor. Through the work of Schreiter, Clarke, Schaechter, and Hall, light is transformed from a passive element to an active meaning-maker.

The Northern Lights remain a captivating subject of study due to their scientific, cultural, and environmental significance. As we face the challenges of climate change, understanding and preserving this phenomenon becomes increasingly important for future generations.

The architectural design of the cross-shaped pavilion along with the “goldfish bowl” rooms encourages visitors to not just view but to feel the experience of light. In combining science, art, and architecture, this exhibition invites reflection on our place in the cosmos—and the power of art to echo and enhance the mysteries above us.

Figure 1. Authors own diagram

Figure 2 Mackinac bridge, Wonger. Retrieved from: <https://www.delphiglass.com/>

Figure 3. Northern lights, Westend61. Retrieved from: <https://www.space.com/>

Figure 4. Authors own SVG

Figure 5. Daffodils, Brian Clarke. Retrieved from: <https://brianclarke.co.uk/>

Figure 6. Vespers, Brian Clarke. Retrieved from: <https://brianclarke.co.uk/>

Figure 7. would without end, Brian Clarke. Retrieved from: <https://brianclarke.co.uk>

Figure 8. **Christmas 1, Johannes Schreiter.** Retrieved from: <https://www.visitstainedglass.uk/>

Figure 9. **Christmas 2, Johannes Schreiter.** Retrieved from: <https://www.visitstainedglass.uk/>

Figure 10. **Two light window, Johannes Schreiter.** Retrieved from: <https://www.visitstainedglass.uk/>

Figure 11. **Swansea collage of art, Johannes Schreiter.** Retrieved from: <https://www.visitstainedglass.uk/>

Figure 12. **vitreous burns collage, Johannes Schreiter.** Retrieved from: <https://www.visitstainedglass.uk/>

Bibliography

Clarke, B. (2012) Brian Clarke: Life and Light. London: Heni Publishing.

Gautier, D. (2020) Aurora: In Search of the Northern Lights. London: Hodder & Stoughton.

Glen, J. (2010) 'Understanding the Aurora Borealis', Journal of Atmospheric Sciences, 67(8), pp. 1234-1245.

Hall, S. (2018) Solar Art Works: Integrating Photovoltaics with Stained Glass. Toronto: Art and Energy Press.

Kahn, A. (2018) 'The Mystical Beliefs of Native American Tribes Regarding the Northern Lights', Cultural Studies Review, 24(2), pp. 45-59.

Kidson, P. (2014) Stained Glass and the Medieval Imagination. Oxford: Oxford University Press.

Kovacs, P., Johnson, L. and Smith, D. (2021) 'Climate Change and Its Effects on Polar Light Visibility', Environmental Science Journal, 15(4), pp. 322-335.

Bibliography cond:

Lilensten, J. and Blelly, P. (2019) *Space Weather and Auroral Phenomena*. Cambridge: Cambridge University Press.

National Geographic (2021) What Causes the Northern Lights? [online] Available at: <https://www.nationalgeographic.com/science/article/northern-lights> [Accessed 10 Apr. 2025].

Schaechter, J. (2015) *Extraordinary Stained Glass: Emotional Narratives in Colour and Light*. New York: Art Window Press.

Stevens, M. and Bell, P. (2002) *Johannes Schreiter: The Art of Light*. Munich: Hirmer Publishers.

Siscoe, G., McPherson, R. and Russell, C. (2002) 'Solar Wind and the Aurora', *Space Science Reviews*, 101(1-2), pp. 121-129.
Kahn, A. (2018) 'The Mystical Beliefs of Native American Tribes Regarding the Northern Lights', *Cultural Studies Review*, 24(2), pp. 45-59.
'Ice Sheets and Magnetic Field Dynamics', *Geophysical Research Letters*, 50(1), pp. 112-118.

Valkonen, A. (2019) 'Perspectives on the Aurora Borealis', *Journal of Northern Studies*, 13(3), pp. 67-78.