



Andre Beneteau

Title: Northern Light

Northern Light House, Solar Decathlon, Washington, DC ♦ 2005d

Of Light, Enlightenment and Innovation

Reflections on Sarah Hall's Solar Glass

Ursula M. Franklin C.C. FRSC

Colour, light and art have brought joy and inspiration to people throughout the ages. There is something both real and unreal about light and colour. They are both tangible and distant, familiar and mysterious. Light and colour are constant companions of body and soul. They constitute a many-faceted door to the mind, and the artist's use of these elements has often reflected their own society's best understanding of the natural world.

While in recent decades electrically generated light sources have stimulated artistic imagination, it is only now that the new scientific insight — that light can generate electricity — has been translated into a new and unique artistic offering. Sarah Hall's new windows illuminate, but they also *create* light.

Because of my own background in the study of modern and ancient materials/ technologies and my tenure as Director of the University of Toronto's Museum Studies Program, I want to stress the importance of Sarah Hall's work in the historic context of her craftsmanship.

Through the ages, it has been the outstanding artisans who explored and innovated the use and scope of materials. They have led their respective societies in understanding and accepting new processes and novel approaches to materials and techniques. From their experimentations with, say, beads and glazes, dyes and coatings, beauty as well as new forms and uses have emerged.

Among all the artisan's materials, glass may be the most unyielding and unforgiving, imposing its rigid constraints on the craft and its practitioners. The use of glass art in windows has, as well, to conform to the building's overall architectural requirements, while the wishes of sponsors or donors may further limit the artist's freedom.

Yet, rather than feel cornered by such constraints, Sarah Hall opened herself willingly to a further and unique extension of her craft: the inclusion of photovoltaic cells in her windows' overall design and purpose. She was willing to learn and experiment, moving into quite uncharted terrain.

While her reaction is very much in keeping with the craft's historical response to new technical opportunities — such as depositing of metal films or incorporation of inert material — Sarah Hall is, to the best of my knowledge, the only Canadian artist who has taken this step of active collaboration with electrical engineers.

The first public installation at Regent College, UBC, in addition to the Solar Decathlon prototype, will, I am sure, be regarded in the future as seminal installations, showing how in the hands of a masterful artisan the craft can incorporate the oldest and the newest knowledge in a beautiful and functional work. Incorporating photovoltaic cells, her installations bestow a double gift. What more can we wish for?

Ursula Martius Franklin, CC OOnt FRSC (1921–2016), was a German-Canadian metallurgist, research physicist, author, and educator who taught at the University of Toronto for more than 40 years. She was the author of *The Real World of Technology*, based on her 1989 Massey Lectures; *The Ursula Franklin Reader: Pacifism as a Map*, a collection of her papers, interviews, and talks; and *Ursula Franklin Speaks: Thoughts and Afterthoughts*, containing 22 of her speeches and five interviews between 1986 and 2012. Franklin was a practicing Quaker. She wrote and spoke extensively about the futility of war and the connection between peace and social justice. In 2012, she was inducted into the Canadian Science and Engineering Hall of Fame. A Toronto high school, Ursula Franklin Academy, has been named in her honour.

