

The Language of Light



IN ANCIENT TIMES, PEOPLE would erect steles to help them find their way or to mark significant events. These were often made of stone, with inscriptions carved into them. Markers of this kind remaining today serve as sources of significant information about the stories and beliefs of cultures that have preceded our own.

When Sarah Hall reflects on her *Lux Nova* project, she thinks of it in much the same way. "It is a contemporary stele — it has a deep resonance with the wayfinding steles from ancient times."

Lux Nova is an extraordinary stained glass installation located on the campus of Regent College in Vancouver, on Canada's West Coast. It is the central element in a forty-foot glass tower that rises above Regent's underground theological library. At first glance, the viewer is drawn in by the design's aesthetics and the interesting architecture. But there are many intricate layers to this project, each revealing something about the ongoing process of theological reflection in a contemporary setting.

The tower itself is called the *True North/Lux Nova*. It was designed to provide natural ventilation for the library below, thereby reducing the need to rely on electricity. The library's mechanical system is based on the concept of a radiant heating and cooling system. Regent was intentional in making these choices as part of their

SOLAR PROJECTS 26







Lux Nova, various views of the wind tower at Regent College, Vancouver, BC ♦ 2007 c

theological understanding that we are meant to be caretakers of God's creation.

Much like the North Star offers orientation for those trying to find a way forward, *Lux Nova* reveals a new way to think about green technology. It was the first photovoltaic art glass installation in North America. Photovoltaic modules collect solar energy, which transform the glass façade into a clean, longlasting energy source that does not emit harmful greenhouse gases. In this installation, solar energy collected during the day is used at night to illuminate the tower and surrounding park with a changing LED light display.

Remarkably, the photovoltaic glass is only the first layer in this innovative work. Hall describes the layers of glass as being "like pages in a book." The second layer of *Lux Nova* is made up of a series of twelve crosses that pattern the glass from bottom to top. Hall intentionally used a Greek cross so the general public would not immediately think in stereotypical terms about Christianity. Similarly, she hopes that the number twelve will open itself up for interpretation: twelve disciples, twelve tasks of Hercules, twelve tribes of Israel, twelve months in a year, etc. The coloured crosses embedded in this layer of glass are made from dichroic glass, which is most commonly used for windshields on spacecraft!

The third layer of the work led Hall on a memorable journey. The theological setting and heavenward orientation of the tower reminded her of the Lord's Prayer. As she thought about the prayer's beauty and universal qualities, she decided to integrate it into the design. However, she wanted to incorporate it in Aramaic, since that was the language it was first spoken in. She contacted a Chaldean church since it is one of the historic Christian communities of the Middle East that has preserved the use of the Aramaic language. She set up a meeting with a Chaldean Archbishop who ended up singing the prayer for her in Aramaic during their conversation. Hall describes that moment as one that will remain with her for a long time. He transcribed the text for her, which became the source she used to etch the letters into the glass.

The final layer in the piece is a waterfall of coloured light, flowing in blues, violets and whites. Hall found that these colours particularly suited the West Coast environment. "The light is really different in Vancouver," she says, describing it as a "silvery kind of light."

Hall's affinity with light and colour led her to decide to study the art of creating stained glass. She enrolled in the Architectural Glass Program at Swansea College of Arts in Wales, and graduated

Overleaf:
Detail, Lux Gloria,
one of 54
trapezoid panels
for the solar
installation,
Cathedral of
the Holy Family,
Saskatoon, SK
\$\display2011a\$



Top: Detail, Lux Gloria, showing painted glass, solar cells and dichroic glass cross, Cathedral of the Holy Family, Saskatoon, SK \$2011a

Bottom:
Installation and
wiring of the
54 art glass panels
with embedded
solar cells,
Cathedral of
the Holy Family,
Saskatoon, SK
\$\phi\$ 2011 a

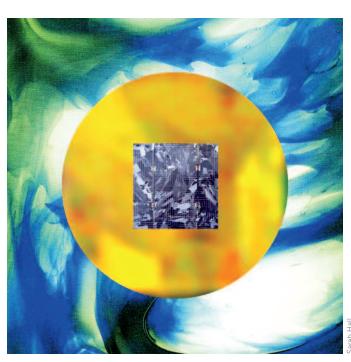


Wilhelm

Top: Installation crew with one of the solar art glass panels, Cathedral of the Holy Family, Saskatoon, SK

Bottom: Sarah's interior glass fixture which monitors and displays the amount of solar energy collected, Cathedral of the Holy Family, Saskatoon, SK \$2011a





with her Diploma in Architectural Glass from the City and Guilds of London Institute. After apprenticing with glass master Lawrence Lee, Hall spent a year in Jerusalem studying gold-leaf and Middle Eastern techniques. She opened her own studio in Toronto in 1980, and as her projects increased in size, she initiated a working relationship with the fabrication studio Glasmalerei Peters in Paderborn, Germany. She has come to rely on the support and creativity she finds there and describes this collaboration as one that always brings inspiration. In fact, it was during one

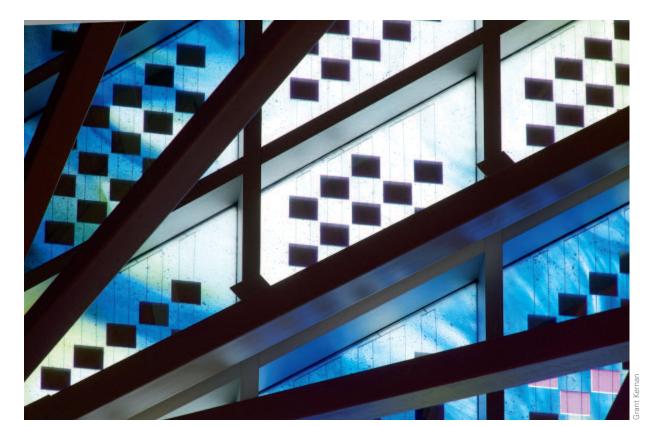
of her visits to Germany where she first discovered the use of photovoltaic light and began to investigate possibilities for using it in her own work.

She has created over one thousand stained glass art installations for sanctuaries, embassies and public spaces across North America, winning numerous awards for these works. For Hall, every setting has a language of its own. She examines every building carefully — along with its interplay with light — to understand how her work will interact with the space. When working with a worship setting, she does not ask what kind of colours or pictures they want. Instead, she asks them to describe their spirituality. In listening to the resulting stories, Hall always discovers a hidden "gem" that gives her a place to start from. In turn, her clients often refer to the process of working with Hall — and the finished stained glass installation — as having a deep spiritual significance.

The Cathedral of the Holy Family in Saskatoon, Saskatchewan, in Canada is an example of this process. The congregation contacted Hall as soon as they began planning for a new building. She listened carefully as members and clergy spoke their dreams in the middle of an empty field where their future church would be built, and was struck by their desire to create a sanctuary that would authentically reflect the land and people there. Hall was drawn to the beauty of the prairie sky and the cheerfulness and trust in community that she experienced among the people she met. These specific contextual elements formed the beginning point for Hall's creative work, and resulted in *Lux Gloria*: a magnificent series of five windows and an outstanding solar art glass installation that, together with an impressive architectural design, have been called the "Chartres of the prairies."

The architecture of the building is based on an ascending spiral of trusses and the overall shape suggests a tent. The windows form a visual story, each proclaiming a different theme: creation, covenant, incarnation, resurrection and glory. The colour and placement of each window corresponds to the specific quality of light from each direction. The three south facing trapezoidal windows gather energy during the day through solar cells for use at night. Laminations of dichroic glass inside these windows reflect shimmering crosses that move through the sanctuary with the passage of the sun. Collectively, these elements form an invitation for the community to gather and remember the particularity of their identity and call in the wider context of God's creation. Much like the stele, this "tent of meeting" provides a place of orientation at a time when many feel like nomads in the midst of the chaos of twenty-first century life.

When Hall first visited the site, she photographed the local landscape extensively. From these photographs, she was able to incorporate site-specific images such as a grove of elm trees from



Detail, Lux Gloria, interior view from the organ loft, Cathedral of the Holy Family, Saskatoon, SK \$2011a

the building site and a nearby river into her designs. She also incorporated a representation of Northern Lights into the design of the photovoltaic windows, so that these would be visible at night. The recognizable elements in these windows become direct reminders that incarnation did not occur only in one time or place. It is ongoing. *Lux Gloria* proclaims that God is here, *now*, among us, in all the known familiarities and specifics of daily life.

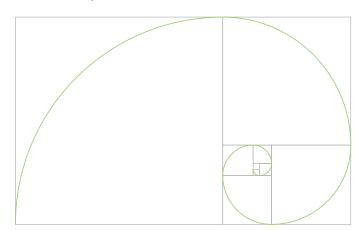
Hall's spirituality is at the core of her artistry. As a Quaker, she notes, "For us, faith is not rooted in sacraments or scripture. There is no fixed catechism. We believe in the possibility of direct, personal experiences of God and shape our lives and work as a testimony to this inward experience." This is mirrored in her art. She says, "The power of stained glass comes from the colour and movement of light itself." For Hall, colour and light have inherent transformative qualities, so she approaches her artwork in a manner that is neither static nor literal.

It is interesting to note the strong language of light central to the Quaker tradition. To pray for someone is to "hold them in the light." George Fox, the founder of the Quakers, referred to the Holy Spirit as an "infinite ocean of light and love." They also use the concept of "Inner Light" to refer to the presence of God within a person. No doubt, Hall's fascination with light has also been informed by these elements.

Hall describes the innovative work she has done with solar cells in this way: "When I finally saw light being collected from the sun, it felt great. I knew it demonstrated that we don't have to depend on, exploit or invade countries where oil and gas are found for our energy." Her hope is that projects such as these will help bring about change. "When people see an alternative energy

source, they don't necessarily get excited. But when beauty and technology come together, it has the potential to inspire and bring about wonderful possibilities."

The marriage of beauty and technology. Installations that are the first of their kind. Places where theology, technology, ecology and creativity meet. Sarah Hall is a deeply spiritual visionary who brings all these elements together through her own willingness to let the light inform, inspire, and transform her. She is fluent in the language of light. As steles for our own time, there is no doubt that *Lux Nova* and *Lux Gloria* will shine a light to help us all find our way forward.



Keri K. Wehlander is an author, hymn lyricist, and retreat leader living in British Columbia. Spirituality and the arts are the primary focus of her work in both Canada and the U.S. Keri's writings have been included in various anthologies in both North America and Europe.

The Language of Light by Keri K. Wehlander, reprinted with permission from *das Münster*, Issue 68, 2015.

265

SOLAR PROJECTS