

Boundary|Time|Surface: Art and geology meet in Gros Morne National Park, NL, Canada.
SYDNEY LANCASTER¹, JOHN W.F. WALDRON².

¹*Harcourt House Artist Run Centre, Edmonton AB T5K1M7 Canada*
<sydney.lancaster@gmail.com>

²*Department of Earth & Atmospheric Sciences, University of Alberta, ESB 1-26, Edmonton AB*
T6G2E3 Canada

Earth Art works range in scope from major permanent interventions in the landscape to less intrusive, ephemeral site-specific installations constructed from local materials. For example, The North American tradition of Land Art, exemplified by the work of Robert Smithson and James Turrell, includes major permanent installations in the landscape. In contrast, European practice of Environmental Art, including the work of Andy Goldsworthy and Richard Long, has favoured less intrusive, more ephemeral site-specific installations constructed of materials from the local environment, combining elements of both sculpture and performance. Both rely upon photographs, text, or video as the only lasting record of the works' existence. Despite this range of intervention, these works share a tradition of art-making in which the artwork responds directly to its environs.

Similarly, Earth Scientists are responsible for interventions in the landscape, both physical and conceptual. In Earth science, the systems of the geologic timescale - Cambrian, Ordovician, etc. - were established by 19th century geological pioneers, who believed them to represent natural chapters in Earth history. As a result the boundaries between the periods, originally set at major unconformities and facies changes, were the sites of many controversies. Since the mid-20th century, stratigraphers have resolved ambiguities in the original definitions by defining stratotypes: sections of continuously deposited strata where a single horizon is chosen as a boundary. One such international stratotype, marking the Cambrian-Ordovician boundary, is defined at Green Point in Gros Morne National Park, Newfoundland.

Boundary|Time|Surface was an ephemeral sculptural installation constructed in 2014, with the support of Parks Canada and The Rooms (the provincial gallery of Newfoundland and Labrador). This artwork was a fence of 52 driftwood poles, 2-3 m tall, positioned precisely along the boundary stratotype horizon at Green Point. It extended across a 150 m wave-cut platform from sea cliffs to the low-water mark, separating Ordovician from Cambrian strata. The installation was hand-built (with volunteer assistance) on June 22, on the falling tide, and was dismantled by wave action and the incoming flood tide. The cycle of construction and destruction was documented in video and with time-lapse still photography.

This project provided viewers an opportunity to contemplate the brevity of human experience relative to the enormity of geologic time, and the fragile, arbitrary nature of human-defined boundaries of all types. Exhibitions of the installation documentation are envisaged, which will provide opportunities for direct interaction with still and video images of the work, both as aesthetic objects and as sources of information regarding the geological and human history of the site.