Exhibition Reviews

Yes! The World is Round: A Closer Look at Early Globes, Maps and Scientific Instruments. STEWART MUSEUM. Montreal, Quebec. 1 May 2000–30 March 2001.

Within cartographic circles, globes are somewhat of an enigma. Although their history extends far into antiquity, and although their production has been taken up in many western countries, researchers have generally not given globes the same consideration as antique maps, plans, and charts. Despite the excellent globe inventories prepared over the last few years by Richard Dunn, Helen Wallis, Elly Dekker, and Peter van der Krogt, there is still no authoritative work on these scientific instruments. For instance, we still know very little about the evolution of globes from luxury items to classroom objects, or about their role in helping to shape Renaissance Europe's understanding of the earth and cosmos.

As part of its exhibition programming for the new millennium, the Stewart Museum in Montreal has undertaken an ambitious effort to address this imbalance with *Yes! The World is Round*. Featuring some fifty antique globes from its rich collection – a collection with no parallel in Canada – the exhibition chronicles Europe's understanding of the earth and its place in the universe over a four-hundred-year period. Although the globes are amazing in themselves, the exhibition also features nearly one hundred other items – armillary spheres, planetaria, atlases, maps, books, survey instruments, and works of fine art – which help to place the globes within the context of early European science and the communication of this science to the public. The end result demonstrates the important role that globes played as scientific instruments and as educational tools.

The Stewart Museum is situated in an early nineteenth-century British fort on St. Helen's Island in Montreal harbour. The area reserved for exhibitions lies in a refurbished stone arsenal that embraces three sides of the fort's parade ground. Not surprisingly, the arsenal's rooms were originally built to

withstand heavy bombardments, and consequently are long and narrow with massive archways. In less capable hands, this arrangement would have been too restrictive, but under the guidance of curators Edward Dahl and Jean-François Gauvin, *Yes! The World is Round* uses the linear layout to full advantage. The long narrow rooms of the arsenal are divided into four groupings, each of which considers early globe production in separate areas of Europe: the Netherlands, England and Germany, France, and Italy. Within each of these geographical groupings, the approach is more or less chronological. It is a simple but an effective solution to the linear arrangement of the room; passing through the narrow exhibition and watching Europe's knowledge of the world take shape, a visitor cannot help but equate the experience to the passing of time.

The opening piece is the fifty-one-centimetre terrestrial globe made in 1492 by Martin Behaim (since the original never leaves Nuremberg, the globe is a facsimile, but it is the only facsimile used in the exhibition). Behaim took nearly two years to design and construct his globe: the core is made from paper and plaster, and the continents and oceans have been hand-painted onto a parchment covering. Behaim had strong ties to Portuguese merchants who traded up and down the Atlantic coast (he married the daughter of a Portuguese governor in the Azores), and he must have used these connections to develop his geographical knowledge (his knowledge of more distant Asian shores is obviously based on Ptolemy's *Geographica*). For Behaim, the waters separating Europe and Asia were wide open. Since he had not heard news of the discoveries made earlier in the year by Columbus, he believed the western ocean offered no obstacles – other than distance – to the riches of the far east.

The Behaim globe is the oldest known terrestrial globe still in existence, and because its geography is so completely different from our understanding of Europe's belief in a flat earth, it is thought provoking if nothing else. Behaim's globe is living proof that European scientists were very much aware of the earth's curvature, and had even measured it to come up with a reasonable estimate of the earth's diameter. Seeing this globe for the first time, I now realize why early Europeans were so thoroughly confused about the discoveries made by Columbus (they initially believed that he had landed in an archipelago that included Japan). I also realize now that Europe's belief in a flat earth is a myth rooted in the fantasies of early nineteenth-century historians (see Jeffrey B. Russell, *Inventing the Flat Earth: Columbus and Modern Historians*, Westport, 1997).

Yes! The World is Round is a feast for the eye and the mind. From the Netherlands, for example, the exhibition features a pair of terrestrial and celestial globes made in the mid-seventeenth century by the Blaeu family (globes were usually constructed and sold in pairs). After studying astronomy in Denmark under the renowned Tycho Brahe, Willem Blaeu moved to Amsterdam and opened a shop that specialized in the production of maps, atlases, and scientific instruments, including globes. Blaeu's attention to detail, design, and craftsman-

ship quickly earned him a reputation as the greatest globe maker of his time. His son Joan upheld this reputation and helped to extend the Blaeu dynasty to well over a century. The two sixty-eight-centimetre globes featured in the exhibition are thought to be the largest pair produced by the Blaeu family, and are widely recognized as their most exquisite achievement.

Other regal masterpieces in the exhibition remind us of a "who's who" in the history of cartography. For example, from Italy there is a 108–centimetre globe by the Franciscan Vincenzo Maria Coronelli who was widely hailed as one of the greatest globe makers outside of the Netherlands. From France there is a pair of celestial and terrestrial globes by Guillaume Delisle who was recognized for the scientific vigor that he brought to map compilation. And, from Germany there is a unique, late sixteenth-century globe clock made by Johann Reinhold of Augsburg.

Any of these pieces would have required a considerable investment by Europe's aristocracy, and would have provided its owner with a powerful visual statement of his education, wealth, and power. Judging from the artwork that accompanies the exhibition, the aristocracy obviously recognized the social role of globes and admired them as much for their aesthetic qualities as their scientific interest. But is this dual role unique to globes alone? Were other scientific instruments treated in the same way? Surely the social role assumed by globes requires further investigation.

Fortunately, the exhibition does not limit itself to the grandiose and spectacular. Almost as much emphasis is placed on "educational" globes such as the English "pocket globes" of the late eighteenth and early nineteenth centuries. These miniature globes generally consisted of an eight-centimetre sphere (although one pocket globe in the exhibition measures only four centimetres) which was made from wood or pasteboard and was covered with printed gores. The globe was usually carried in a small wooden box which contained printed gores of the celestial sphere pasted to the inside. In contrast to the richly detailed globes of Blaeu and Delisle, the amount of geographical information featured on pocket globes is, naturally, limited. However, it is this limitation that makes them so fascinating because it provides us with some idea of those aspects of the geographical sciences that were considered basic to the needs of youth.

Yes! The World is Round is a visual treasury, but a visual treasury with a mission. The curators have obvious empathy for these somewhat neglected artifacts of art and science, and they have set out to show the rest of us their value. Their mission has been noble, and it has been successful. Clearly, antique globes still have an educational role to play. It is now up to the rest of us to recognize this role and explore the fascinating world of globes to its fullest potential.

Jeffrey S. Murray National Archives of Canada