

**communiqué /press release****For immediate release****TOYS THAT TEACH  
A CCA Tradition: An Exhibition of Architectural Toys and Games**

**Montréal, 15 December 1992** -- The architectural toy typically looks to the world of "real" buildings, reproducing columns, arches, and windows in miniature form. However, there is another class of toys inspired not by human objects, but by the elementary forms of geometry found in nature: cubes and spheres, cones and cylinders, rods and prisms. No other architectural toys have as rich a variety of uses; these toys serve not only for building but also for mathematical exercises, drawing instruction, and even lessons in coordination and movement. This year, the Canadian Centre for Architecture dedicates its annual exhibition of construction toys to those based on elemental geometry.

The most important apostle of geometric toys was the great German educator Friedrich Fröbel (1782-1852), the creator of the kindergarten. While studying mineralogy in Berlin, Fröbel became convinced that the geometric principles found in crystals permeate all of nature, forming what he termed "the fundamental unity of the universe." Steeped in both German romanticism and Enlightenment ideas about rational education, he united in his kindergarten curriculum wide-ranging ideas about pedagogy, geometry, and the natural world. His principal vehicle of instruction was a series of increasingly complex geometric toys, or "gifts," beginning with a sphere, then progressing to cubes and cylinders and, finally, to materials for parquetry, weaving, and paper folding. There was no artificial division into subjects. Gymnastics, mathematics, instruction, and play were all integrated into a seamless, indivisible fabric, as the gifts were incorporated into song, dance, and motion exercises.

The Canadian Centre for Architecture presents a selection of Fröbel's gifts that depict the full hierarchy of his curriculum. At the same time, a range of other nineteenth-century geometric toys are shown which indicate how extensively he influenced his contemporaries. An intriguing example of this is a series of 1890's workbooks from a private school in Vermont consisting of superbly delicate paper-folding exercises by

student teachers all derived from Fröbel. Most astonishing is an apparently solid wooden sphere, which, when the leather strap binding it is loosened, opens into eight hinged sections, each of which unfolds into ever smaller wedges; used for the teaching of geometry, its intricate engineering is a striking contrast to Fröbel's simple forms.

On the occasion of **Toys That Teach**, the CCA will publish its third annual catalogue of construction toys from its collection. The exhibition is curated by Michael J. Lewis, CCA Historiographer. It will open on 16 December 1992, and will close on 25 April 1993. The exhibition is sponsored by Hydro-Québec. The acquisition of the CCA Collection of Architectural Toys and Games was made possible through the generous support of Bell Québec.

Play sessions will accompany this exhibition throughout its presentation. These sessions will give the opportunity for families to play with geometric toys similar to those seen in the exhibition. The activities of the play sessions will be inspired by Friedrich Fröbel's teaching techniques and philosophy and will engage children and their parents in a playful learning experience.