

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Great Plains Research: A Journal of Natural and
Social Sciences

Great Plains Studies, Center for

May 1997

Review of *Grain Elevators* by Lisa Mahar-Keplinger

Robert Duncan

University of Nebraska - Lincoln, rduncan1@unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/greatplainsresearch>



Part of the [Other International and Area Studies Commons](#)

Duncan, Robert, "Review of *Grain Elevators* by Lisa Mahar-Keplinger" (1997). *Great Plains Research: A Journal of Natural and Social Sciences*. 330.

<https://digitalcommons.unl.edu/greatplainsresearch/330>

This Article is brought to you for free and open access by the Great Plains Studies, Center for at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Great Plains Research: A Journal of Natural and Social Sciences by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Grain Elevators. Lisa Mahar-Keplinger with foreword by Aldo Rossi. New York: Princeton Architectural Press, 1993. 85 pp. Photos, illustrations, and bibliography. (ISBN 1-878271-35-0).

In his rhapsodic introduction to this volume, in which he speaks of the grain elevators of the Midwest as “timeless cathedrals,” Aldo Rossi quite accurately describes the power of these familiar icons. To artists, as Mahar-Keplinger notes, the elevator as an essentially industrial object has been transformed because of its intimate connections “with the land and the cycles of nature.” While Le Corbusier saw the elevator as a universal building form, American artists such as Demuth and Sheeler saw it as a uniquely American object.

Recent American photographers have been fascinated with the way of life represented by the elevator. Because of their size, scale and longevity grain elevators have become symbolic landmarks in the rural and urban setting. The author has attempted to analyze both rural and urban styles typologically in terms of their constructional systems.

Beginning with wood construction each elevator is first identified using black and white photographs. From these excellent photographs proportional elevational drawings are constructed which generate elevations, cross and longitudinal sections and finally axonometric pictorials. A sense of the interior geometry and layout is illustrated in the various bin plans provided for each set of elevator drawings. These diagrammatic drawings provide a great amount of information which can be used to compare various types of construction. They are an important nucleus of the book and describe orthographically the interior and exterior framing systems used in each type of construction.

The author diagrams and analyzes other construction materials in a similar manner. While westerners built wood, brick, tile and steel elevators, each had their limitations. Brick was not always available, tile construction was often structurally unstable, and steel, while considered the most promising, proved to be a poor thermal insulator for providing protection to the stored grain. Because of its availability, workability and excellent structural characteristics, concrete became the logical choice for the next generation of grain elevators.

As concrete technology developed so did the search for the best geometrical plan or bin shape. The problem was simple enough: how to best connect one cylinder to another without wasting space or causing structural instability. Mahar-Keplinger presents a number of different plan types to

address this problem. They range from the circle to the rectangle, the hexagon to the octagon and combinations of each. What is most interesting is that no matter what the plan or bin type, concrete elevators seem to have the same character because they all project from the earth in a rhythm of dramatic vertical elements. Once seen and understood, the elevator does become both "structure and monument," engineering wonder and symbol. **Robert Duncan**, *Department of Architecture, University of Nebraska-Lincoln*