

# Bridges as Symbols

MARTIN P. BURKE, JR.

On April 13, 1995 an estimated 10,000 people gathered beside Rotterdam's main waterway as a flotilla of tugs and small boats celebrated the erection of the city's new bridge. At the beginning there was no bridge. By the end of the day the 125 meter (413 foot) pylon and deck of a startling new addition to the Rotterdam skyline were in place.(1)

Thus is reported not only the erection of the Erasmus Bridge (below), but also the creation of a new symbol, one that should grow stronger and more powerful as the years unfold and images of this bridge become more generally familiar.

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What is most valuable about the Erasmus Bridge and its relationship with the city that commissioned and funded its design and construction? Is it the utilitarian purpose of providing a safe and durable waterway crossing, or the bridge's power as a new symbol for the city? What meanings or messages are conveyed by this bridge and its published images? Was the cost of creating the bridge commensurate with the value of its functions? This brief look at bridges as symbols cannot fully answer such questions. It can, however, provide some insight on why bridges become endowed with meaning, as well as why some bridges have become powerful symbols for the cities they serve.

## Erasmus Bridge

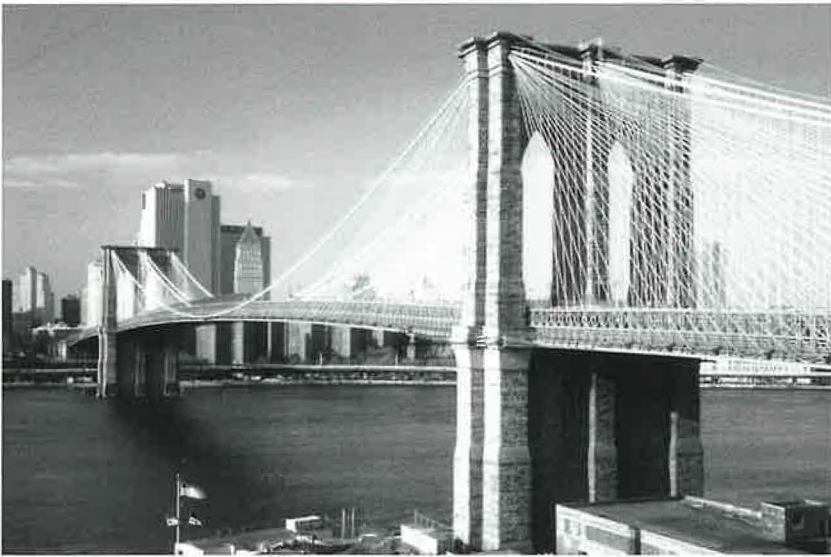
The Erasmus Bridge, a beautiful asymmetrical cable-stayed bridge designed by Ben van Berkel of Amsterdam, was built by a joint venture between Grootint/Heerema and Belgian contractor CFE/MBG. Completed in 1997, it spans the Maas River

*The author is bridge consultant, Burgess & Niple, Limited, Columbus, Ohio.*

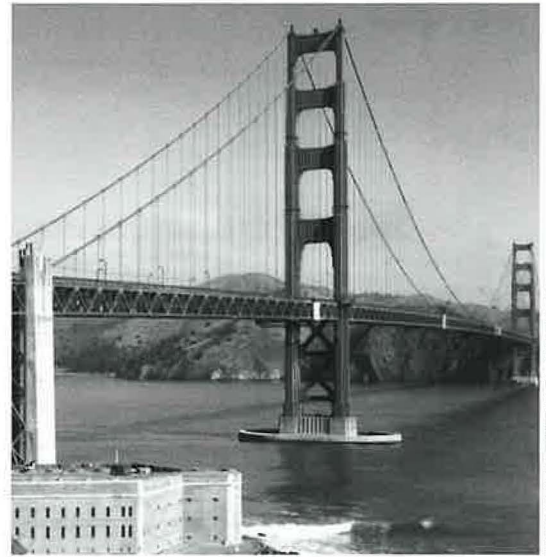


BEN VAN BERKEL AND THE JOINT VENTURE OF GROOTINT/HEEREMA AND BELGIAN CONTRACTOR CFE/MBG

Erasmus Bridge of Rotterdam.



Bridge symbols for New York (Brooklyn Bridge), (left) and San Francisco (Golden Gate Bridge).



and provides access from the city proper to an old dock area being revitalized into a mixed-use urban development project. The bridge was named to honor and reinforce the memory of Desiderius Erasmus, one of Rotterdam's most illustrious citizens and an internationally famed 15th-century writer and humanist.

As implied by the dramatic appearance of its fan-shaped cables and its bent and inverted Y-shaped steel pylon, this bridge was designed for multiple purposes, not just to provide a strictly utilitarian vehicular and pedestrian waterway crossing. In addition to its explicit transportation and memorial purposes, its name and modern presence—in contrast with older structures of the city—should serve as a mute reminder of the city's cultural, intellectual, and historical heritage. Similarly, the bridge's technologically advanced design and construction should serve as a motivator for and predictor of a technologically and scientifically advanced future for the city. At the same time, however, the strong emphasis on the bridge's visual aspects, as evidenced by its dramatic appearance, suggests a future for the city dedicated primarily to improving the human condition. Finally, and significantly, published images of this bridge should make it a powerful international symbol for the city of Rotterdam itself.

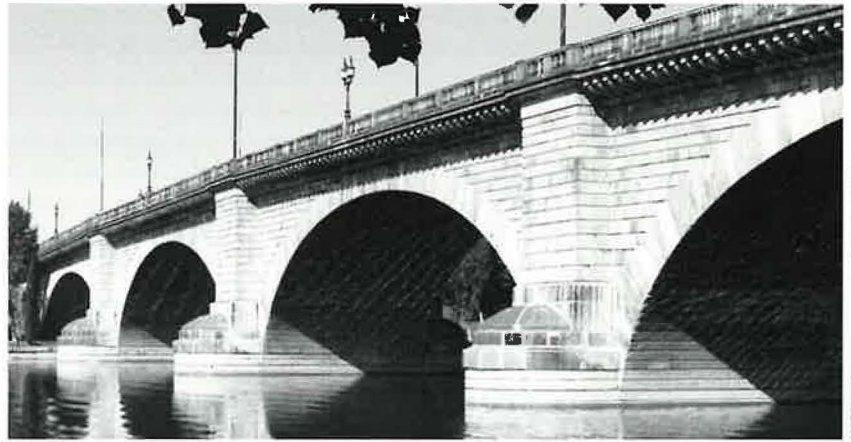
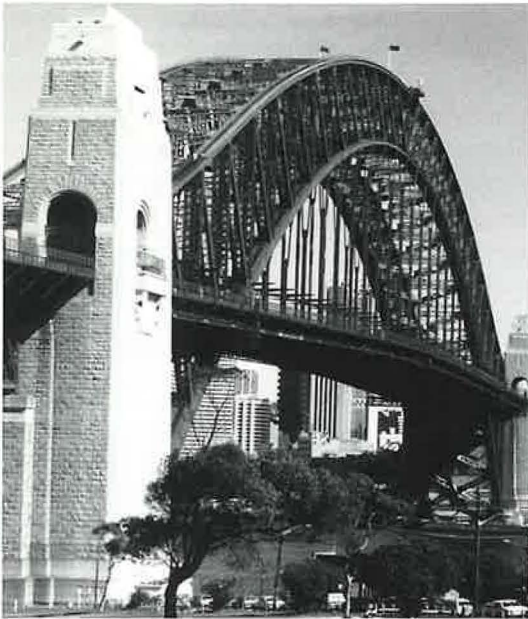
### Symbolic Power of Bridges

A symbol is generally understood to mean “something chosen to stand for or represent something else; especially an object used to typify a quality, abstract idea, etc.” (2,p.1357). Symbols are particularly useful and effective when they are used to represent abstractions with multiple meanings. For example, the word “city” is variously defined as a

place inhabited by a large, permanent community; a geographical political area; a center of trade and culture; the structured environment at a particular location; and a place where a certain group of people lives. To differentiate one city from another in speech or writing, each is symbolized by a different name.

Because the name of a particular city will for most individuals provoke a vague image of a cluster of buildings or the skyline of the city's major buildings, cities are most effectively symbolized visually by an image of a unique or major structure. Such a structure is frequently a building (e.g., Eiffel Tower of Paris, Sears Tower of Chicago, Gateway Arch of St. Louis, Independence Hall of Philadelphia, Alamo of San Antonio). On the other hand, most major cities are transportation centers because they were founded at intersections between primary overland routes and major waterways. As a result, these cities have large bridges, many of which have attractive configurations and/or great size, or represent significant personal and technical achievement (see photographs above and page 33). Because of all these attributes, bridges instead of buildings have often been adopted as symbols for these cities.

What characteristics must a bridge have to be an effective symbol? The most effective symbols are those recognized by the largest audience. Bridges that have received the most publicity because of their record-breaking span or size, unusual shape or configuration, or association with significant historical events and personal affairs have the most symbolic power. Such bridges, however, must also have a distinguished appearance and widespread visual appeal. Regardless of the significance of its characteristics and associations, an unattractive bridge stands little chance of being adopted as the symbol for a city. Unattractive bridges have sym-



bolic power, but such power has significant negative connotations and emotional effects.

A structure's symbolic power is not constant. That power can strengthen as the bridge ages and survives its competitors, or wane as its primary characteristics are eclipsed by those of another structure. Moreover, as with other symbols, the symbolic power of bridges can be enhanced or diminished by the type and magnitude of meanings with which the bridge becomes endowed as a result of the passage of time and associations with various persons and events.

Before a house becomes a home, meaning is bestowed on it by the architect who gives it form and the craftsmen whose care and attention give it beauty. Nevertheless, the house is endowed with the most meaning by successive generations that make it home and by its presence during events that shape their lives. Other structures, including bridges, are similarly endowed with meaning. The Tower of London, the Alamo of San Antonio, Independence Hall of Philadelphia, the fractured tower of Kaiser Wilhelm Memorial Church of Berlin, the Atomic Dome of Hiroshima, and the Golden Gate Bridge of San Francisco are familiar examples.

The Golden Gate Bridge was the last mainland structure seen by the author on his way by water to the war in the Pacific, and its silhouette was the first familiar landmark seen on the horizon on his return to the mainland at the war's conclusion. In contrast, consider the meanings and emotional reactions associated with images and recollections of this bridge by descendants of its builders, or by families that have lost loved ones who leapt from its deck, or by the few who know little or nothing about the

Bridge symbols for (clockwise from left) Sydney (Sydney Harbor Bridge), Lake Havasu (London Bridge), and London (Tower Bridge).

bridge and are otherwise preoccupied with their own personal problems. Although most well-informed people would recognize the Golden Gate Bridge as a symbol for San Francisco, the meanings and emotions evoked by its appearance will be as different as the individuals who view it and their familiarity with the structure. Thus the meanings that become associated with structures and the emotions they provoke can supplement or counteract a structure's symbolic power and its suitability as a symbol for a city.

## Summary

Every characteristic of a bridge, including its setting and its association with other structures, persons, and events, gives it symbolic power and meaning.

The most attractive bridges with the greatest symbolic power and most positive meanings have the greatest potential to be adopted as a symbol for a city. In contrast, unattractive bridges, regardless of their symbolic power, are the least suitable for this purpose. They may have symbolic meaning, but it will not be positive. They may symbolize the lack of aesthetic talent by an agency's design staff, neglect or social insensitivity by agency officials who supervised and approved their design, preoccupation with other concerns by public officials who authorized and funded their construction, or all of these in an unfortunate coincidence of design and administrative actions. Worst of all, unattractive bridges also symbolize a passive or complacent society that tolerates the placement of such structures in its communities.

The more socially and culturally conscious communities and transportation agencies now recog-

nize the symbolic power of bridges and the meanings that can become associated with them. Control is therefore exercised over the design and construction of bridges to ensure that their appearance will have a beneficial visual impact on their setting. The Erasmus Bridge and many other such bridges are outstanding examples of the recognition that the aesthetics of a bridge are as important to the image and welfare of the community it serves as its safety is to the traffic it bears.

## References

1. The Erasmus Bridge. *Bridge Design and Construction*, May 1996, insert between pp. 34 and 35.
2. *The Reader's Digest Great Encyclopedic Dictionary*. The Reader's Digest Association, Pleasantville, New York, 1968.

### **Bridges: A History of the World's Most Famous and Important Spans**

Judith Dupré. *Black Dog and Leventhal Publishers, Inc.*, 151 West 19th Street, New York, NY 10011 (telephone 212-647-9336); 1997; \$22.98, hardcover; ISBN 1-884822-75-4; 128 pp.

This book was designed in horizontal format so that most of its splendid photographs need not be split across two pages. Organized chronologically, the book includes 46 bridges from around the world. It begins with the Pont au Gard, a Roman aquaduct that crosses the Gard River in southern France (completed in 18 B.C.), and ends with the

Tatara Bridge in Japan, which will be the world's longest cable-stayed bridge when it is completed in 1999. For each bridge, a photograph spanning at least a full 18-inch page and a concise history and description (with several smaller photos) are provided.

In addition, scattered throughout the book are sections on general topics related to bridges, such as "Bridge Basics," describing the three broad types of bridges; "Garden Bridges"; "Catastrophe," covering bridge collapses throughout history; "Covered Bridges"; and "The Bridges of War." Also included are the author's interview with architect Frank O. Gehry and a glossary of bridge-related terms.

