Klaus Idelberger

The World of Footbridges

From the Utilitarian to the Spectacular

Ernst & Sohn
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Preface

Although footbridges may seem very modest in comparison with railway or road bridges, they are often important landmarks in the urban or rural landscape.

This book contains 85 studies of selected pedestrian and cycle bridges as open footbridges or enclosed skywalks to protect bridge users from wind and weather and frequently with an additional function as a utility bridge carrying conduits and pipelines. All the bridges described were built in Europe (for example, in Switzerland, Germany, France, Great Britain, Italy, Norway and Cyprus) and in Asia (for example Singapore, Hong Kong, Malaysia and Japan) or Australia in the past 30 years. The bridges are presented in chapters according to their load bearing systems and span lengths, which seemed the most sensible way to deal with the large number of structures contained in the collection. It begins with wide-span suspension and cable-stayed bridges and continues with girder bridges and arch bridges. Chapter 5 is devoted to enclosed footbridges connecting buildings. These skywalks represent a type of bridge that frequently has no need for stairways, ramps and support columns. Each chapter begins with a spectacular and iconic footbridge of international significance followed by a series of "collector's items" in the form of unique and remarkable footbridges likely to inform and inspire future bridge builders. Each bridge is separately described with subsections dealing with location, local conditions and span length as the key data for design, the load bearing system, whether the bridge is of steel or composite steel construction and, when relevant, details are given of pylons, corrosion protection and construction methods. The chapter on skywalks also describes the tubular or box-shaped structure enclosing the walkway.

The book contains a multitude of photographs and construction drawings, often as isometric perspectives, and is intended as a stimulus not only for structural engineers and architects in their daily practice, but also for clients, teachers and students. May they all be encouraged to turn their attention to the fascinating world of footbridges.

During the course of his research, the author set himself the task of discovering the identities of the people involved in the construction of each bridge and contacted them in order to obtain the technical data and drawings needed for a systematic analysis – this was difficult even in Germany because of new regulations for data privacy. He viewed and photographed almost every bridge in the book and verified the structural descriptions with the builders of the bridges. The construction drawings were all supplied in the usual sizes of A0 to A2 which could not be reduced to A5 or 1/32 to 1/64 and had to be redrawn. Thanks go to Mr Fritz Rinschede, Düsseldorf, for the drawings he produced on the basis of the original plans.

Every effort has been made to name the clients, designers, architects, structural planners, photographers and authors involved with each structure and, when applicable, to provide sources and literature likely to facilitate the reader's own research.

May the tenacity of the author and the labours of the editors be rewarded!

Klaus Idelberger,
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