

## Preface

Studying building precedents to deduct solutions for one's own design projects, or as part of research for teaching or scholarship is a long-established domain of architectural practice. It is based on the understanding that an architectural precedent, more than simply being an isolated physical artefact, contains knowledge that can set an example for related cases.

But since the act of applying these embedded solutions is much more than just a copy-paste exercise, it requires the development of a systematic approach to access this particular form of knowledge, to decontextualize it and to make it applicable as a more generic solution. An essential format of this knowledge transfer is to work with case studies. The act of systematically conducting these is taught at schools of architecture, and as time goes by every designer establishes a certain routine of simply looking at plans to directly deduce the embedded patterns and strategies.

A comprehensive selection of Birkhäuser publications – design manuals on almost all relevant building types – have always been an established and highly valued source to both teach this expertise in academia, but also as a reference when working directly with such building types, either in university design studios or architectural practices.

The content of these volumes was written and selected by internationally renowned authors in architectural design, who are leading experts in their respective fields. The well-founded compilations of case studies of meticulously selected precedents are always accompanied by a series of articles: fundamental introductory essays and writings on relevant key aspects such as the historical background, typological classifications, technical knowledge and much more. These texts provide the reader with various options for analysis, as well as with a kind of framework to help order and delimit the variety and abundance of the projects. The format of these compilations has always been a book, almost like a vessel containing all the essential knowledge necessary to proceed.

The ongoing shift from print media to ever more influential digital formats is at once a challenge for publishers and an opportunity. To seek synergies and combine the content of all the design manuals with electronic formats of publication became a viable option when Birkhäuser was acquired in 2012 by the academic publisher De Gruyter which has released more than 50 databases and a large variety of other digital products and is an established expert in the digitalization of academic and professional publications.

The Birkhäuser database 'Building Types Online', the result of this collaboration and first joint publication of this kind, is an online resource for the study and practice of architectural design. It includes a large international collection of contemporary buildings from the fields of

housing, office buildings, museums, schools, libraries, research and technology buildings, sacred buildings and industrial complexes. In its launch version, the more than 850 international case studies from primarily the past 30 years are supplemented by more than 120 building type specific thematic articles.

But the benefit of this knowledge-base is more than the sum of its parts and goes far beyond just combining the contents of all books to one large collection of case studies. First and foremost, this body of knowledge will continue to grow with annual updates, which include additional projects and articles as well as new building types.

Its format also takes into account that the very act of knowledge acquisition functions essentially different in an online database. Replacing the act of flipping through the pages of a book and following the predetermined structure of its contents, the database offers highly flexible, comprehensive and self-tailored access to all the contents with a detailed set of search and browse options.

The tool to combine all the sources, of integrating and systemizing them within one knowledge base was the definition of an overarching, all-encompassing classification system that covered all essential aspects of studying the buildings represented within. Establishing this we strived to take all the classification approaches already conceived and applied in the original books into account, but to also synchronize and combine them within a unified, not overly differentiated system.

The intention was to cover all relevant scales from the urban context to the building and individual unit, to include the organizational and morphological aspects and to refer to both generic and function-specific issues. This turned out to be an intense process requiring in-depth research of relevant sources, a series of comparative case studies of covered projects, long discussions and feedback from well-established experts in each respective field.

It is an interesting question whether this process has established a new typological approach or in the end just a user interface. However, it offers numerous options for the user. One can either search through case studies by combinable criteria such as architect, country, building type, urban context and many more, or browse with the aid of an elaborate structure according to building type, urban context or morphological type through sub-categories such as volumetric configuration, height, load-bearing system, access type, and the type-specific categories layout and program. This systematic typological classification of the projects is meant to allow users to access the knowledge, solutions and strategies embedded in designs in a purposefully structured manner.

But the user interface also allows the user to contextualize specific cases by comparison with other projects that meet a similar, predefined set of criteria. Guessing that most of our readers – as a majority will have an architectural background – will be visually thinking and operating users, and may consequently wish to gain most of the information searched for from visualizations rather than from texts, we took great care to integrate all visual data in the most comfortable and productive manner, so that a designer or researcher can easily work with the contents. Each building is presented with a wide array of technical drawings, such as site plans, floor plans and sections, diagrams as well as exterior and interior photos. In total, the launch version incorporates approximately 5000 drawings and about 2000 reference photographs. Wherever possible, the scale of the drawings is mentioned in the captions and file names, or indicated in the drawing itself. A majority of the drawings are vector-based plans of excellent quality, available for download and import to graphic programs for further

study. We also took care to label the files in a manner so that their contents can be quickly deduced even after downloading and saving them offline.

In addition, making best possible use of the potential functionalities of such a database, we have integrated links to the relevant case studies, when referred to in the thematic essays accompanying the various building types. And the link to 'Googlemap' – for most of the case studies excluding some residential buildings due to privacy concerns – allows the user to immediately locate the buildings in their surrounding for further study, use Street View and the Zoom functions to gain a more informed understanding of the broader geographic context.

I am very grateful to the many people and the entire team at Birkhäuser and De Gruyter, who have contributed to this project.

I would like to thank, most of all, the many authors of the original publications, who not only built the very foundation of this database, but whose own typological frameworks were also an invaluable inspiration.

In particular I would like to acknowledge Ria Stein and Andreas Müller, who were deeply involved with the very conception of this work. I believe that the long and intense but always constructive debates that we had on the general structure of all search and browse options contributed significantly to the project's overall coherence and conclusiveness.

Special thanks also to a number of colleagues who advised us (cf. Acknowledgements and Project Team.pdf), and whose feedback were invaluable to the completion of this database.

I would especially like to thank Eric Zapel for his tremendous support and tireless contribution, not only for the time-consuming preparation and adaptation of all printed content into a database-compatible format. He also contributed to the content of the more than 850 case studies (2016) and proposed adaptations to the database infrastructure, which significantly extended the range of functionalities possible.

Bettina de Keijzer, who at De Gruyter is in charge of publishing technology and applications, was invaluable to the completion of the launch publication by managing the transfer of all content material into the database. I would particularly like to thank her for her support and extreme patience with an entire series of adaptations to the original terminologies that turned out to be necessary after having gone through all the case studies. Her colleague Christoph Steinhof provided helpful input and advice in the early phase of the project.

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