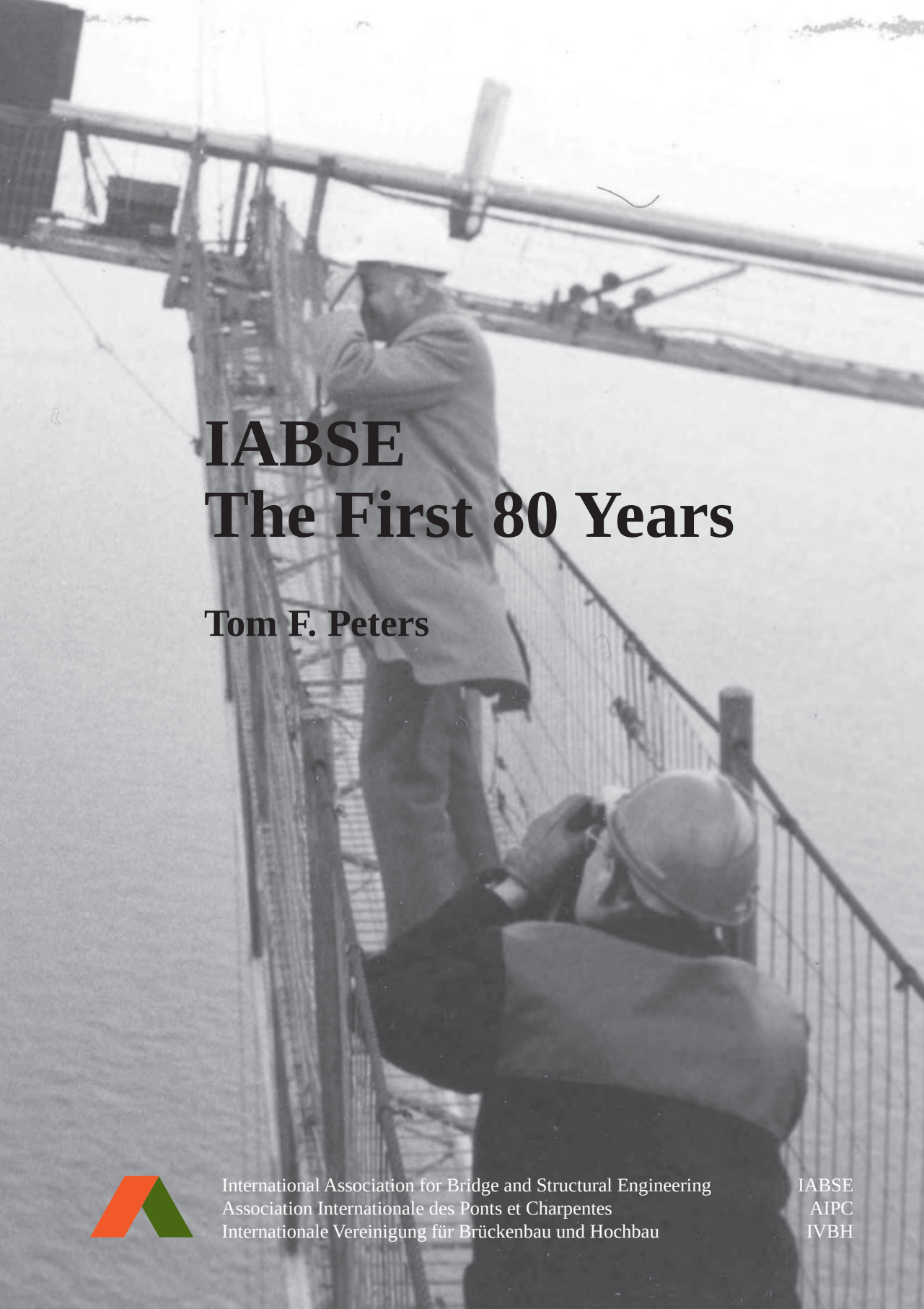


IABSE
The First 80 Years

Tom F. Peters

International Association for Bridge and Structural Engineering IABSE
Association Internationale des Ponts et Charpentes AIPC
Internationale Vereinigung für Brückenbau und Hochbau IVBH

The International Association for Bridge and Structural Engineering

The First 80 Years 1929–2009

Tom F. Peters

International Association for Bridge and Structural Engineering **IABSE**
Association Internationale des Ponts et Charpentes **AIPC**
Internationale Vereinigung für Brückenbau und Hochbau **IVBH**

ISBN 978-3-85748-129-1

Publisher:
IABSE-AIPC-IVBH
ETH Zürich
CH-8093 Zürich, Switzerland

Phone: Int. + 41-44-633 2647
Fax: Int. + 41-44-633 1241
E-mail: secretariat@iabse.org
Web: www.iabse.org

Table of Contents

Foreword

I am pleased to hold in my hands an unfolding history of IABSE which, until now, was a legend. Many of us, even long-time Members, did not know most of the early history of IABSE. We have heard stories of the past from longstanding Members but none of us had all the historical facts. Now we know and I feel that my being a Member has a more complete and fuller meaning for me.

It was important to write this history now to benefit from the living memory of past presidents and longstanding dedicated Members. This project was initiated upon the retirement of Executive Director, Alain Golay, who served the organization for over 30 years. It was also important that this history be written because, as the author quotes IABSE Foundation Past President Jean-Claude Badoux, “No history, no memory, no future!” The 80th anniversary of IABSE was a good milestone at which to initiate writing this History.

This is a wonderful, easy to read book and the author, Prof. Dr. Tom F. Peters, should be commended on his successful research and presentation of the historic facts. Our thanks go to all who shared their memories and contributed to this book. Special thanks should go to the IABSE Foundation without whose support this book would not have been possible. I hope you will enjoy reading and get as much pleasure from this book as I did.

Predrag L. Popovic
President of IABSE

Introduction

In 2009, IABSE decided to publish a history of the Association from its inception to celebrate their 80th anniversary. This was made possible by generous financial support from the IABSE Foundation for the Advancement of Structural Engineering. Generally we tend to think of history as a luxury, the luxury of contemplation and a passive preoccupation for one's retirement years. Elementary school spoiled it for most of us because the subject was never treated as an intellectually challenging pursuit. It was taught as a series of bald facts and dates concerning iconic heroes and battles; but facts are to history as numbers are to mathematics: they merely form its alphabet. History is really the examination of case studies from a distance, and case studies are familiar to engineers as one of the chief methods by which the field of engineering develops. Case studies look at the "why" and "how" of a development more than the "what" it was and "who" did it, and these are questions that are relevant to us in our current work. History involves memory, a key human characteristic, and it deals directly with the questions we constantly pose to our development. Memory is what forms our experience, and experience is what teaches us how to ask questions and develop answers to the problems that concern us. So, history is actually an interactive planning tool. As our questions change over time, so must history be periodically rewritten. IABSE Foundation Past-President, Anton Tedesko Medal Laureate, and Honorary Member Jean-Claude Badoux put it most succinctly: "No history, no memory, no future!"[1]

This account examined many archival documents for the first time in detail with the goal of discovering the reasons for founding IABSE, the mechanisms by which that happened, and for the changes that occurred in its development over the decades, and, although the general outlines of IABSE's history as known from the 50th anniversary Jubilee brochure published in 1980 were confirmed as correct, many hitherto unknown details were uncovered that revealed new aspects and the long forgotten work of many unsung pioneers. An organization as complex and successful as IABSE does not thrive on the ideas and the decisions of the presidents alone, but also on the work of those who suggested, amplified, supported, and implemented them. The diverse cultural backgrounds, characters, and thoughts of all these contributors – and their agreements and disagreements – are important to the story and flesh out the bare facts. For the first time also, the difficult period bracketing World War II was examined fully and the role evaluated that those responsible played who shepherded the young and fragile Association through this period.

Technical site visit during the Shanghai Workshop in 2009

Executive Director Ueli Brunner and Marketing and Communications Manager Sissel Niggeler form an excellent administrative team; they share a light moment at the Weimar Symposium registration desk in 2007 while the image of the Executive Committee looks on

I wish to express my profound gratitude to many of the participants in the events and developments described in this account. They helped me with information and personal recollections, and they made access to the material in the archives easy. The staff of the Secretariat, especially Executive Director Ueli Brunner and Marketing and Communications Manager Sissel Niggeler were always open for questions and supplied many contacts and insights into people and events.

Niggeler also ferreted out many issues that had long lain dormant, and senior members of the Association, especially Past-Presidents Jacques Combault, Maurice Cosandey, Hans von Gunten, John M. Hanson, Manfred Hirt, Manabu Ito, and Klaus Ostenfeld gave generously of their time and recollections that helped bring these issues to life. Other active participants in IABSE's development also provided valuable information and help. Prominent among these were Jean-Claude Badoux, Mourad Bakhoum, Bo Edlund, former Executive Director Alain Golay, Aarne Jutila, and Jörg Schneider. Edlund, Golay, von Gunten, Hirt, and especially Schneider took the trouble to comb through the text multiple times – a time-consuming and painstaking task – and offered invaluable help in organization and fact checking. All of these deeply committed Association members helped define the questions for which they and I had to find the answers. They also helped evaluate the facts and their interpretation to accord them their proper balance in the story, and through that they contributed substantially to the project and helped minimize my mistakes and lacunae. I regret that a few of these may unfortunately persist.

Tom F. Peters, 2011


MAGAZINE GLOBUS MAGAZINE
CAFE RESTAURANT SHOP

Chapter

1 Prehistory

The 1922 Conference of the TKVSB

Like all new ideas, the IABSE originated in a combination of events. The beginning is marked by the general assembly of the TKVSB (Technische Kommission des Verbandes Schweizerischer Brückenbau- und Stahlhochbau-Unternehmungen – Association of Swiss Bridge and Steel-Structure Contractors' Technical Commission) on September 29th–30th, 1922. The TKVSB had been formed as a support group by Swiss steel industrialists before World War I. By 1921 the six founding industries had been joined by representatives of the railways, the technical universities, the machine industry, and the government. Its president at the time was the dynamic industrialist and bridge builder Rudolf Wartmann, and it was now ready in the post-war era to expand its purview beyond Switzerland by engaging the international arena.

The 1922 meeting was held at the ETH (Eidgenössische Technische Hochschule – Swiss Federal Institute of Technology) in Zurich. Two of the initiators of what was later to become IABSE and who gave the primary impetus for this meeting were the TKVSB's secretary Mirko Roš and the ETH representative to the Association, Professor Arthur Rohn. Both were bridge builders and Roš was also a materials expert and the *spiritus rector* of the meeting. Both men were convinced internationalists and concerned to overcome the four-year hiatus 1914–1918 in intellectual professional activity during World War I and the consequent professional isolation of engineers in the former combatant countries.

Isolation hindered communication, and Roš and Rohn were of the opinion that an international exchange of ideas would rekindle the development of bridge building, both in a literal and in a philosophical sense. They were convinced that Switzerland, that had stayed neutral during the four-year conflict, could play a constructive mediating role. As a result and in addition to the 80 Swiss participants (subsequent authors erroneously claimed fewer)[2] they solicited and received communications from bridge engineers from 12 countries including the USA and India.[3]

Four of these were present in person at the Zurich meeting.[4] Arthur Vierendeel came from Belgium. He was renowned for his work on the truss form that bears his name. Two Germans also attended. The first of these was Friedrich Bohny, a famed expert on the use of nickel steel.[5]

View of Zurich around 1922 showing the ETH where the TKVSB conference was held (photo courtesy: ETH-Bibliothek Zurich, image archive)

Chapter

2

Acts That Founded IABSE

The Constituent Meeting of October 29th, 1929

Roš sent out an official letter of invitation on October 7th, 1929 in the name of the Vienna ad-hoc committee consisting of Gaston Pigeaud, Friedrich Bleich, and himself.[58] This letter must have been the confirmation of a previous agreement, because the large constituting committee, encompassing the national representatives of 14 countries: Germany, the UK, Austria, Belgium, Denmark, France, the Netherlands, Hungary, Italy, Norway, Poland, Sweden, Switzerland, and Czechoslovakia,[59] as well as prominent representatives from government, research, and industry, met in Zurich almost immediately thereafter on October 29th, "Black Tuesday" in the scenario of the stock market crash in New York that led to the Great Depression, but this had no effect at all on the proceedings that day. From Austria came the representatives Friedrich Bleich and Fritz von Emperger, from Belgium Ferdinand Campus, from Denmark Asger Ostenfeld, from France Gaston Pigeaud, from Germany five including Moritz Klönne and Wilhelm Petry, from the Netherlands and Italy each two (including Luigi Santarella for Italy), from the UK John Mitchell Moncrieff, from Czechoslovakia, Hungary, Norway, Poland, and Sweden one each, and from Switzerland six: Arthur Rohn, Adolf Bühler, Leopold Karner, O. Ziegler (penciled into the list for Robert Maillart), Max Ritter, and Mirko Roš.[60] These delegates, of whom only those of later importance for the development of IABSE are mentioned here by name, were the Association's founders. They decided then and there to form a permanent association. All this must have been worked out before to have progressed so smoothly and quickly. The actual founding act took place in the ornate ceremonial auditorium, the "Aula" of the Eidgenössische Technische Hochschule (ETH) and must have been a solemn occasion.[61] The meeting enacted bylaws that had been designed by the Vienna ad-hoc group, Bleich, Pigeaud, and Roš, the summer before and presented to the Swiss Group at a meeting in the second-class railway station restaurant in Olten on the invitation of Roš on July 19th. Many had been unable to attend that preparatory meeting, but had sent notices of their interest, and Bühler, Ziegler, Karner, Maillart, Gustav Bener who was the engineer of the Rhaetian Railway, and Roš had been among those present.[62]

The bylaws consisting of eight articles were subsequently discussed at the founding meeting in Zurich in October, and the "Articles of Association" as they were then

View of Zurich around 1930 showing the ETH in the distance, the venue of the 1929 meeting (postcard view courtesy of ETH-Bibliothek Zurich, image archive)

Chapter

3

The Organization of IABSE

Mission

The bylaws of 1929 defined IABSE's mission: "The objects of the Association are: To promote the international cooperation of representatives of science, manufacturing and building industry in the field of bridge and structural engineering, and to provide facilities for the interchange of ideas as well as for the publication of the results of research work and practical experience. . . For this purpose congresses will be held at intervals of 3 to 6 years. Moreover the association may apply any other means in pursuance of the objects of its foundation. It will publish reports and promote scientific research work and practical experiments."

This statement was gradually expanded and adapted to new ideas in various revisions, especially in the revision of 1990 that introduced the definitions and concepts adopted in the first Long-Range Plan of 1989. The mission was now stated to be: "to exchange knowledge and advance the practice of Structural Engineering worldwide, in the service of the Profession and Society." Instead of the creative ambiguity that had characterized the name of the Association and its goals in 1929 and that had allowed the gradual inclusion of new areas of expertise, the Executive Committee now felt that precise, inclusive definitions were necessary. It therefore defined structural engineering as "the science and art of planning, design, construction, operation, monitoring and inspection, maintenance, rehabilitation and preservation, demolishing and dismantling of structures, taking into consideration technical, economic, environmental, aesthetic and social aspects." The term "structures" was stated to "include bridges and all types of civil engineering structures, composed of any structural material."[90] Interesting was the official appearance of societal and environmental terms, as well as the expansion of the definition of structures. This could now include all materials whether currently used or those to be developed in the future (fiber-reinforced concrete or polymers, structural glass, and nanotubes come to mind) and underwater or outer-space construction as well. The late 1980s and the early 1990s marked a period of increasing research into new materials and the development of the international space station.

Current organization diagram of IABSE

Chapter

4

Other Related Organizations

International Organizations with Similar Objectives

Just as IABSE was founded as an outcome of the TKVSB conferences of 1922 and 1926, and of the Vienna Conference of 1928, so have many organizations including IABSE fostered a multitude of specialized engineering groups that developed into professional or scientific/technical associations in their own right. Many of these were founded by forceful personalities who felt the need to develop their own international associations. Among these are several that the Liaison Committee was subsequently founded to coordinate:

RILEM: Réunion Internationale des Laboratoires d'Essais et de Recherche sur les Matériaux et les Constructions

The International Association of Testing Laboratories and Research on Materials and Structures was founded in 1947. IABSE Vice-President Ferdinand Campus was instrumental in setting up this organization and it was also one of those that were instrumental in founding the Liaison Committee.

IIW: International Institute of Welding

The IIW was conceived in 1947 and founded in 1948 with interested engineers from 13 countries. It became the largest international organization to concentrate on connection technologies and in 2010 had members from 53 countries with 25 technical commissions and working units.

FIB: Féderation Internationale du Béton

The International Concrete Federation was created out of the merger of two older organizations, FIP (Fédération Internationale de la Précontrainte – International Federation for Prestressing) and CEB (Comité Européen du Béton – European Committee for Concrete). Both were members of the Liaison Committee from the outset. The former, FIP, was founded in Cambridge in 1952 at the same time the IABSE Congress was held there. The first presidents

On occasion IABSE holds joint events with related organizations; one of the largest was the 1997 Innsbruck Inter-Association Conference on composite construction

Chapter

5

The Early Quadrennial Congresses and Political Survival Through World War II

The Third International Conference on bridges and structures in 1932 in Paris became the first IABSE Congress. As intended by the founders, the congresses developed into the international rallying point for contact in the Association, and they remained the only regular IABSE events until 1967. Congresses have been held in a four-year cycle ever since with one exception: the years 1940 and 1944 were missed during World War II. One event, the Shanghai Symposium in 2004 became a semantic anomaly although it fulfilled all the functions of a congress, and the 2008 Chicago Congress was also originally designated a symposium, but changed back into a congress for political reasons in the planning stage. The reasons are detailed in Chapter 6.

The four-year cycle was originally established to avoid scheduling conflicts with the congresses organized by the International Association for Testing Materials that Roš headed, but this did not work and the two were subsequently held in the same years. Thus, the Permanent Committee meeting of 1939 in Zurich discussed whether to shorten the interval to three years, but this idea was rejected, as the workload would have been too heavy for the Secretariat and the costs too great.[152]

The congresses have always functioned well as the networking, social events tying the IABSE together and presenting it to the outside world, albeit with a comprehensive technical and scientific program, while the later symposia (begun on a regular basis in 1967) functioned as the corresponding professional working meetings that dealt with well-defined scientific and technical issues. Apart from their professional role, the early congresses tested and, although the war prevented more than the first two from taking place, their professional desirability assured the political revival of the Association after the war years 1939 to 1945. Therefore, it is of historical interest to examine the earlier congresses in detail, as these were the founding meetings that created the political as well as the social strength of the Association and that provided a solid basis for the development of today's IABSE. The general political situation that conditioned the tenor of the congresses, especially on the eve and in the aftermath of World War II, merits detailed attention because it throws light on the role that international organizations were able to play in the preservation of civility and the development of professionalism in those trying times.

A group of participants and spouses at the 1932 Paris Congress with the famous Fritz von Emperger standing at the right of the second row (photo: gift of Alfred Moe, now in IABSE archive)

Chapter

6 The Mature Development of IABSE Events

As the world changed and began to develop, so did the Association. The earlier congresses had been driven in part at least by the quest for the social recognition of engineering and material technology as the intellectual equivalent of the sciences. Now, in the post-war boom of construction and the gradual expansion of commerce on a worldwide level, society began to recognize the intrinsic importance of engineering to economic development, and the intellectual as well as the political value of technology slowly began to manifest itself. Engineering conferences could unselfconsciously concentrate on professional matters and be taken seriously by the public and government. Slowly the palette of professional concerns expanded from theory and material questions to questions of infrastructure, design media such as modeling or computers, methods, and manufacturing processes, and detailing including connections and prefabrication, maintenance, and safety. Initially, these themes appeared for the most part as subdivisions of the all-encompassing congresses that moved outside Europe for the first time in 1964.

Aside from the Annual Meeting and the Congresses, their *Reports*, the *Bulletin*, and the *Publications* (*Memoirs*) provided all that was necessary for an adequate exchange of information for the first decades of the Association. Very occasionally supplementary symposia were held, usually jointly with other organizations on special topics. One such symposium on the loading of highway bridges was held in Oporto, Portugal, in 1956 in conjunction with the Lisbon Congress of that year. The results were published in three volumes in Stockholm with forewords by Lars Östlund and William Henderson (Honorary Member from 1977).[225] According to his obituary, Henderson was credited with the idea of the IABSE symposium that he conceived as a small gathering of specialists.[226] Another symposium organized under the auspices of the Liaison Committee in 1962 was a jointly sponsored RILEM – IABSE – IFIP (International Federation for Information Processing) meeting on the use of computers in civil engineering.[227] Fritz Stüssi and Frank Baron of ASCE had previously organized a joint meeting in 1958 that initiated the contact between the two organizations.[228] Besides these international events, some individual National Groups have held uncounted events of their own over the years. Like the symposia, these events are what have advanced IABSE professionally.

Young and older members networking at a reception at the Shanghai Symposium, 2004

Chapter

7

Trends in Professional Interest as Mirrored in the Events and Meetings

Long-term trends in a profession can be seen in the development of any active association. At the formation of IABSE in 1929, the profession had not liberated itself from the 19th-century Anglo-Saxon pejorative view of the engineer as a "tradesman" rather than a "professional." (The English title derives from engine driver with a strong whiff of the empirical mechanic, the do-it-yourself tinkerer or handyman, or what the French call a "bricoleur.") This was certainly culturally different in French society, where the engineer concentrated on theoretical aspects of the field and their relationship to the natural sciences from the outset, and where the title "ingénieur" relates more to "ingenium," which is Latin for innate character, talent, and nature. However, most 19th and 20th-century practicing engineers certainly felt that there was something they had to prove to society in order to validate engineering as a genuinely professional endeavor despite, or perhaps because of its preoccupation with men, mud, and materials. They needed to define the pragmatism of construction as an intellectual concern. Thus the early focus of the Association and its research was on the "scientific" nature and value of engineering, carefully segregating the "new," industrially produced structural materials steel and concrete (although at the outset there was less research in concrete than in steel) from the "old," pragmatic and thus "lesser" ones, stone and wood, in order to study them more in detail. This, and the concentration on structure, formed the conceptual basis on which the Association was founded.

By mid-century attitudes had relaxed somewhat; the original goal had been more or less attained and engineering was beginning to find itself and its own mode of thinking—until 1973 when the worldwide oil crisis plunged the profession into a self-defense mode. Attacks, especially by the 1968 generation, exploded over the "destruction of the environment" by construction and transportation and especially condemned the role of the builder. The feared "concreting-over of nature" (albeit more roads, retaining walls, dams, and buildings than bridges) and the melodramatic "rape of Gaia" (the ancient Greek version of "Mother Nature") were their primitive, proto-ecological battle cries that underscored the emotional rather than a rational tenor of the discussion. As a result, engineers scrambled to understand the rationale behind the emotion and began to think more holistically in order to define their role less as instigators of destruction and more as participators in finding solutions to the societal problems

President Bruno Thürlimann on a technical visit to the Petersburgsky Sport and Concert Complex construction site in Leningrad (now St. Petersburg) during the Moscow Symposium in 1978

Chapter

8

Special Aspects of the Development of IABSE

Publications

Congress Reports, from 1932

The *Congress Reports* were separate from the *Bulletin, Publications, Periodica,* and *Structural Engineering International (SEI),* and appeared in several parts before and after each Congress. In the earlier decades the first part contained the invitation and organizational matter. The *Preliminary Report* contained the submitted and accepted papers, and the *Final Report* contained those that had actually been presented at the Congress, as well as ancillary material such as the speeches at the opening and closing sessions, and in later congresses, events like poster sessions, workshops, and "teach-ins." Some papers that were considered worthwhile, but that exceeded the page-limits of the *Reports* were subsequently published in the *Publications* (also called *Memoirs* in English). During World War II, those papers that had been submitted and accepted for the 1940 Warsaw Congress that did not take place, were published as volumes 6 and 7 of the *Publications* (*Memoirs*) in 1942 and 1944, respectively. From the Lucerne Congress in 2000, the reports were published as a volume of abstracts with the full versions of the papers on a CD-ROM. To celebrate IABSE's 80th year, all IABSE publications from 1929 to 1999 including the IABSE Reports were digitized and made available online, accessible by all at: www.iabse.org/publications/archive/index.php

Publications (Memoirs), 1932–1976

The first volume of the *IABSE Publications* (*AIPC Mémoires, IVBH Abhandlungen*) appeared in 1932 after the Paris Congress. These volumes published papers on scientific and technical matters, some of which were from the Congresses, but which could not find space in the *Congress Report*. They were costly to publish and therefore sold only slowly, and so a first proposal was made to increase the membership fee to include the purchase of the *Publications* at the Permanent Committee meeting of 1939 in Zurich.[267] The idea was unpopular and therefore postponed until later. In the 1974 revision of the bylaws a decision was taken to simplify the Association's publications by collecting all excepting the *Congress Reports* themselves under a single heading, the *Periodica*.

Structural Engineering International, 10th anniversary cover

Chapter

9

The Sociopolitical Aspect: Personalities and Activities of Influential Contributing Members of IABSE

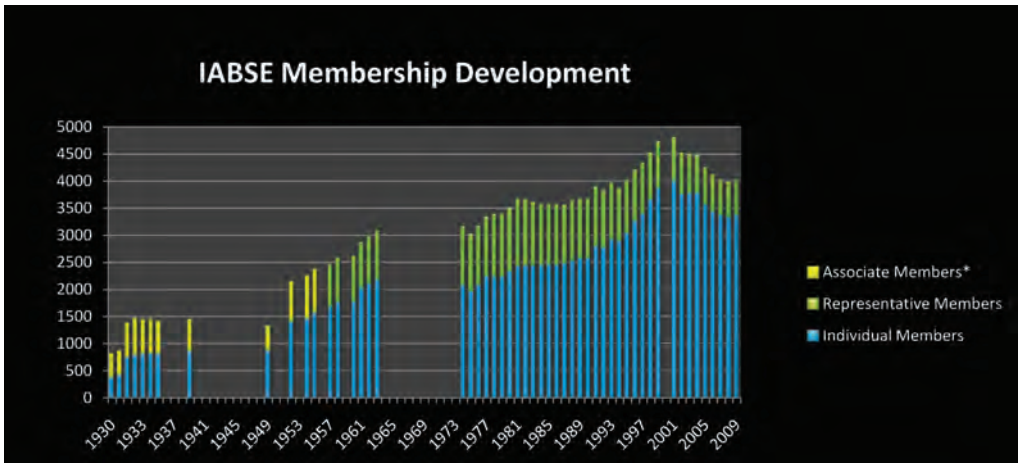
This chapter contains the brief biographies and contributions of those particularly active members who have shown themselves to be preeminent among the many who substantially contributed to the foundation and development of IABSE in the early period and to its subsequent expansion internationally. Among them are the presidents, but also many others who have supported them and often taken the initiative in the growth and changes in the Association. Biographies can tell us a great deal about an association: we know, of course, that professional judgment impacts a development, but we tend to forget that personalities and individual tendencies that sometimes lie seemingly far from the profession can also impact judgment and decision making, frequently even more decisively than facts. This is why such biographies, here listed alphabetically, can supplement the bare facts of a development.

The year 2010 will see the inauguration of IABSE's 12th President. Over the decades there has been a change in the presidential term. At the outset it was unlimited; then it was reduced to a single four-year term in 1974 and further reduced to a single three-year term in 1990. This has impacted the personal input of the president into the development of the Association. Furthermore, the presidents were at first invariably Swiss academics, most from the Eidgenössische Technische Hochschule (ETH) in Zurich (except Charles Andreae—a former ETH professor—and Maurice Cosandey from the EPFL Lausanne) until John M. Hanson was elected in 1993. This has also changed the development and the culture of the Association, as the early presidents were all Swiss academics and military officers, which gave them a unique form of sociopolitical cohesion, which formed a common cultural background that is not shared by other nations.

Many key personalities who contributed to the development of IABSE are not to be found in the following biographies although they would fully merit inclusion. It was difficult to limit their number, and I chose to concentrate chiefly on those early persons who are less familiar to today's members, but a further expansion of this section would simply burst the bounds of this study and constitute a separate book. Among those who should be included would be all honorary members as well as many others. Some of the names that come to

IABSE Vice-President Josef Aichhorn from Austria, British Group Secretary Robert Milne, and Executive Director Alain Golay on a technical site visit to the cable spinning of the Humber Bridge in Hull, 1975

Membership Development



Individual Members plus Associative Members (*Associative Members were related to Collective Members until 1955. A Collective Member had a minimum of two Associative Members, Additional associative membership could be purchased).

Individual Members plus the representatives of Collective Members (as from 1956 a Collective Member could appoint two representatives).

Graph of IABSE membership development 1929-2009

Detailed listing of congress sessions

After each theme title and sub-session only those speakers are mentioned who were closely associated with the development and guidance of IABSE, who were among the IABSE honorees, or whom history has shown to have been particularly eminent in the development of their speciality. A complete list of speakers and the titles of their individual contributions can be found in the reports of each congress, and the liberty was taken here to correct the English translations of some of the session titles.

The Guggenheim Museum in Bilbao, completed in 1997, was presented with the 2001 IABSE Outstanding Structure for "the use of imaginative engineering applications that made possible this exciting architecture" (photo: Katarina Malaga, Sweden)

Index of Names (Associated with IABSE)

About the Author

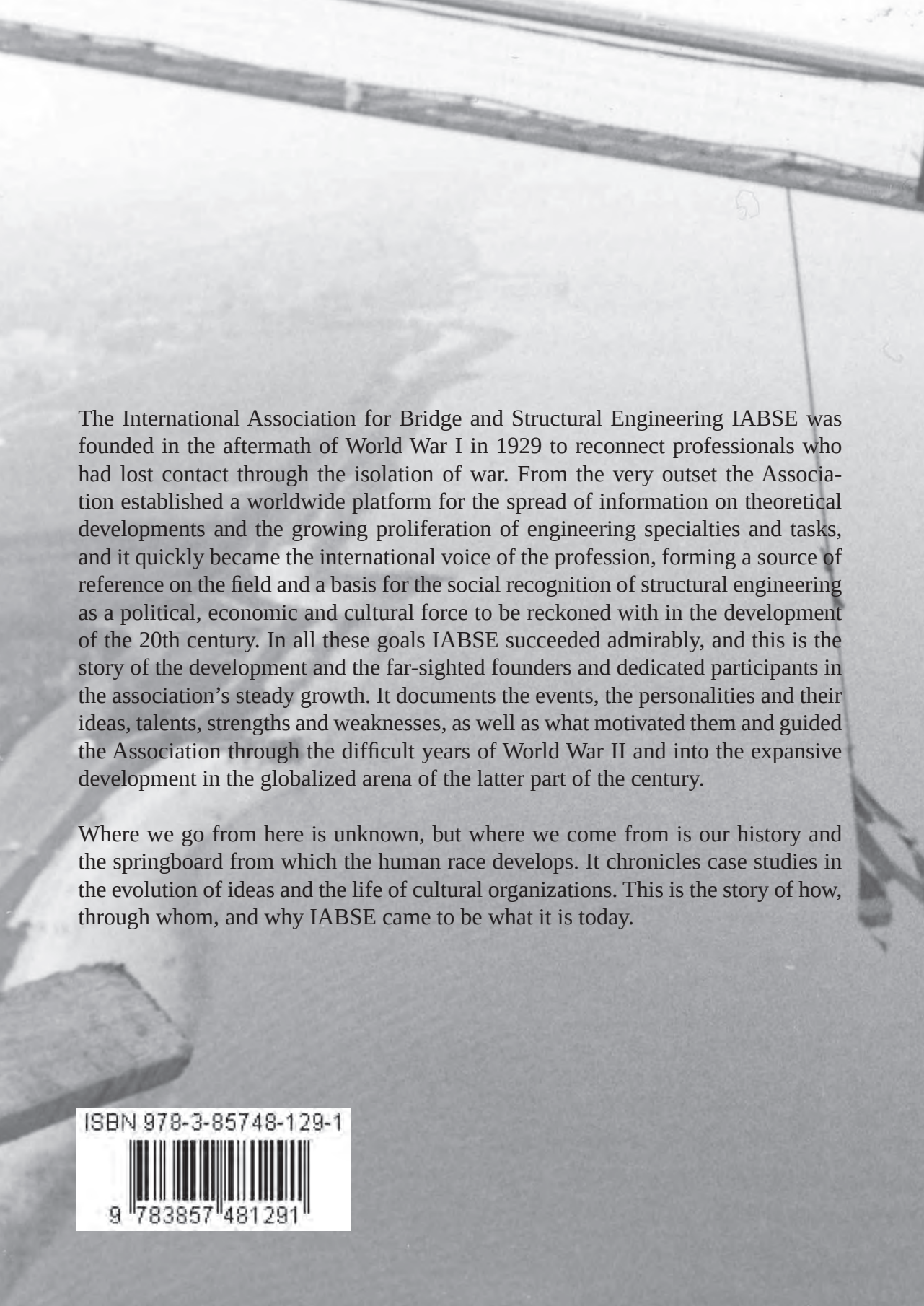
Tom F. Peters is Lehigh University Emeritus Professor of Architecture and History. His writing ranges from the theory of technological thinking in civil engineering and architectural design, cultural theory in structural engineering, and pedagogical studies on teaching construction and materials, to treatises on construction history, a field he helped develop from the mid-1970s. He is the author of many influential books, reports, and articles and is known for his expertise in antiquarian books that deal with civil engineering and construction.

Born in Berkeley, California, Peters was educated in Rochester NY, Mumbai, and Zurich, before training as an architect at the ETH Zurich with a focus on construction and materials. He subsequently worked as an architect in Denmark, England, and Switzerland before turning to teaching construction and research in 1972. He holds a masters degree and a doctorate in Architecture from the ETH Zurich and a Habilitation in the history of technology from the TH Darmstadt. From 1982 to 2007 he taught architectural technology and history at the University of California at Berkeley, Cornell University, and Lehigh University, and served as Director of the Building and Technology Institute there from 1989 to 2007 and as Chair Professor and Chairman of Architecture at the Chinese University of Hong Kong (1998–2000). He has lectured widely in Europe, China, and North America and has worked with schools or professional groups worldwide, serving as advisor to several undergraduate and graduate architecture programs.

IABSE
The First 80 Years

Publisher:
The International Association for Bridge and Structural Engineering (IABSE) was founded as a non-profit scientific association in 1929. Today it has more than 3900 members in over 90 countries. IABSE's mission is to promote the exchange of knowledge and to advance the practice of structural engineering worldwide. IABSE organizes conferences and publishes the quarterly journal Structural Engineering International, as well as conference reports and other monographs, including the SED series. IABSE also presents annual awards for achievements in structural engineering.

For further Information:
IABSE-AIPC-IVBH
ETH Zürich
CH-8093 Zürich, Switzerland
Phone: Int. + 41-44-633 2647
Fax: Int. + 41-44-633 1241
E-mail: secretariat@iabse.org
Web: www.iabse.org



The International Association for Bridge and Structural Engineering IABSE was founded in the aftermath of World War I in 1929 to reconnect professionals who had lost contact through the isolation of war. From the very outset the Association established a worldwide platform for the spread of information on theoretical developments and the growing proliferation of engineering specialties and tasks, and it quickly became the international voice of the profession, forming a source of reference on the field and a basis for the social recognition of structural engineering as a political, economic and cultural force to be reckoned with in the development of the 20th century. In all these goals IABSE succeeded admirably, and this is the story of the development and the far-sighted founders and dedicated participants in the association's steady growth. It documents the events, the personalities and their ideas, talents, strengths and weaknesses, as well as what motivated them and guided the Association through the difficult years of World War II and into the expansive development in the globalized arena of the latter part of the century.

Where we go from here is unknown, but where we come from is our history and the springboard from which the human race develops. It chronicles case studies in the evolution of ideas and the life of cultural organizations. This is the story of how, through whom, and why IABSE came to be what it is today.

ISBN 978-3-85748-129-1
9 783857 481291