This is the final volume in a four-part series covering the development of the university in Europe (east and west) from its origins to the present day, focusing on a number of major themes viewed from a European perspective. The originality of the series lies in its comparative, interdisciplinary, collaborative and trans-national nature. It deals also with the content of what was taught at the universities, but its main purpose is an appreciation of the role and structures of the universities as seen against a backdrop of changing conditions, ideas and values. This volume deals with the reconstruction and epoch-making expansion of higher education after 1945, which led to the triumph of modern science. It traces the development of the relationship between universities and national states, teachers and students, their ambitions and political activities. Special attention is paid to fundamental changes in the content of teaching at the universities.
A HISTORY OF THE UNIVERSITY IN EUROPE

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A HISTORY OF THE UNIVERSITY IN EUROPE

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VOLUME IV
UNIVERSITIES SINCE 1945

EDITOR
WALTER RÜEGG
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Contributors and editors

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John Ziman† (United Kingdom, 1925–2005) was born in Cambridge but brought up in New Zealand. He studied at Oxford and lectured at Cambridge, before becoming professor of theoretical physics at Bristol in 1964. His researches on the theory of the electrical and magnetic properties of solid and liquid metals earned his election to the Royal Society in 1967. Voluntary early retirement from Bristol in 1982 was followed by a period as visiting professor at Imperial College, London, and from 1986 to 1991 as founding director of the Science Policy Support Group. He was chairman of the Council for Science and Society from 1976 to 1990, and wrote extensively on various aspects of the social relations of science and technology.
This series, although compiled by specialists, is destined for the general reader. The notes and bibliographies accompanying the different chapters have therefore been kept to a minimum. The notes are either bibliographical references to specify sources, generally the most important or recent works relating to the subject, or they have been introduced to justify quantitative data or explain any significant differences between two interpretations of a particular point. Select bibliographies at the end of the chapters are designed to stimulate further reading and are not exhaustive. The reader will find more complete bibliographical references in the works indicated. As a number of well-known works for the period are quoted in several chapters, abbreviations of the titles of these works have been used in the notes. A list of bibliographical abbreviations is provided on the next page. In addition, the reader will find a more general bibliography at the end of chapter 2 (‘Patterns’), as this chapter locates the presence and nature of universities during the period covered by this volume. In order to avoid unnecessary overlaps between the various chapters, the editors have made cross-references to other chapters in the text as well as in the notes, thereby informing the reader that more ample information on the subject can be found elsewhere in the volume (see also the subject index). The standard English version of proper names has been used throughout; when necessary, a form more commonly used in Continental Europe is indicated by means of a cross-reference in the name index.
BIBLIOGRAPHICAL
ABBREVIATIONS USED
IN THE NOTES

Clark and Neave, *Encyclopedia I*

Clark and Neave, *Encyclopedia II*

Clark and Neave, *Encyclopedia III*

Clark and Neave, *Encyclopedia IV*

Jilek, *Historical Compendium*
FOREWORD

WALTER RÜEGG

With this fourth volume the History of the University in Europe reaches its conclusion. It owes its origins to the Standing Conference of Rectors and Vice-Chancellors of the European Universities (Conférence permanente des Recteurs et Vice-chanceliers des Universités Européennes, CRE). In the Epilogue the former general secretary, Andris Barblan, describes how the project came about, and, from the position of someone who has been continually involved with European university questions, adds conclusions he has drawn from the completed History.

After thorough clarification of the aims in the autumn of 1983, the CRE handed the concrete realization of the project to an international editorial board. This body decided that a modern university history focusing on Europe could not simply be organized according to countries, types of university, leading universities, and intellectual movements. Instead it should seek to summarize the social conditions and tasks, the structures and functions, the protagonists and activities of the university from its origins to the period after the Second World War in a comparative European context and according to the very latest research. There then appeared between 1992 and 2004 three volumes with the same thematic structure for the Middle Ages, the Early Modern era, and the period covering 1800 to 1945 – a fundamentally coherent time span in terms of university history. The Epilogue in each volume sketched the transition to the next and, in addition, in the second volume the chapter ‘Tradition and Innovation’ showed the gradual transition from the Middle Ages to the Early Modern period.

The comparative European approach of the individual chapters caused the least difficulties in the first volume, not only because the university landscape of the Middle Ages was largely restricted to those parts of Europe Christianized by Rome, but especially because medievalists have
foreword

always carried out their research within a European perspective. This could only be sustained in the following volumes for Part IV, ‘Learning’, in which topics were not bound by national frontiers. For those aspects treated in the other chapters, historians in a variety of countries had produced excellent work, but in terms of content they were for the most part national, indeed local, in their focus.

Already in the preparatory stages of the project, the CRE had set up a network of national correspondents, who were able to help improve the European comparative element of the undertaking. The network passed its first major test in collecting material, for a Historical Compendium of European Universities was published by the CRE in 1984 and served as a reference book for the whole project.¹ Later on, the national correspondents were at the disposal of the different authors for information on the particularities of their respective university systems, and they helped to furnish a more complete European perspective.

As a result, the editorial board tried to find authors for the various chapters of each volume from a wide range of European cultural traditions willing to pursue their theme comparatively over the whole of Europe. In order to introduce them to this comparative approach, they were invited to take part in two or three workshops for each volume, which were hosted by old and new universities famous for their European importance – from Bologna and Oxford to Bochum, from Salamanca and Coimbra to Ghent. At the first workshop the authors’ concepts of the individual chapters, which they had prepared on the basis of guidelines proposed by the editorial board, were thoroughly discussed by both authors and editors. At the second and third meetings a similar debate occurred relating to the authors’ drafts. This led to a learning process that increased not only the European perspective of the different chapters, but was also introduced by our collaborators into conferences and publications on modern European university history.²

The fifteen chapters and the Epilogue of volume IV have been produced by an East European scholar, a French-speaking Swiss, two Flemish Belgian, four German-speaking and ten Anglophone authors. That the last group forms the majority is a reflection of the leading role assumed by their universities since 1945. The American model of entrepreneurial universities was introduced in Europe in 1985 by the British Vice-Chancellors’ Committee. In chapter 4, ‘Management and Resources’,

¹ Jilek, Historical Compendium.
the example of the University of Sussex clearly shows this revolu-
tionary change, which was later adopted by university bodies throughout
Europe. The reason why the universities were cast adrift into this state
of autonomy is explained in chapters 2 and 3. That they were forced to
learn in a few decades of autonomous deficit funding what the American
universities had practised for hundreds of years is discussed in the con-
clusion of the first chapter. This one example shows that the thematic
treatment can sometimes only be explored in its European perspective
over several chapters.3

Part IV, under the title ‘Learning’, was designed to show what was stud-
ied, discovered, and taught in the various subject areas, but it presented
a special problem. Such an excursion into the history of scholarship and
knowledge had proved relatively easy to carry out in the earlier volumes.
Yet this was not the case in the fourth volume. The subject matter of
modern science and its applications is too far ranging and technically
demanding, and the university’s part in the development of science too
extensive, for adequate review in a work of this kind. However, the fact
that the European countries hardest hit by the war faced similar prob-
lems of reconstruction after it, including adjustment to the new American
dominance in all the natural sciences and technologies, suggested a sim-
plication in our approach.

We thus emphasize science policy, as in John Ziman’s chapter on the
exact sciences, rather than substantive scientific contributions. Some-
times, because of the many successes of the policy, a congratulatory tone
creeps in, as in Herbert Macgregor’s piece on the biological sciences. But
we have let the chapters stand as the considered opinions of experienced
men who worked in science and advised about its future during much of
the time covered by this volume. Their contributions have value as both
primary and secondary accounts of their topics.

The six authors of the chapters on science, medicine and technology
are British. Although this was not a determined editorial policy, it has
advantages that compensate for the resultant emphasis on the experience
of the UK. Firstly, it has provided some unity in problems and their
solutions and allowed extensive treatment of teaching in the sciences,
technology and medicine. Secondly, because Britain occupied a position
between the post-war driver of world science, the United States, and
Continental Europe, it felt American pressures early and keenly; and
because its infrastructures had not been destroyed in the war, it faced
squarely and publicly the problem of renovating them to meet the new
circumstances. Thirdly, the programme for academic expansion in general
and for enlarging the relative representation of science and technology

3 That is the reason for the detailed subject index.
Foreword

in particular gave exemplary results in Britain. Our authors have made comparisons with the situation in other European countries as they have seen fit.

On the occasion of the ‘Ninth Centenary Celebrations’ of the University of Bologna in 1988,4 work started on volume IV with the establishment of the plan and the guidelines. When the working groups and the authors who had been engaged up to that point came together in 1991 and 1992 in Bologna and Ghent, the European university landscape was no longer divided by the Iron Curtain. The comparison of the Soviet and western university models in the third chapter, ‘Relations with Authority’, which had been developed using the example of the occupying powers in Germany, had to be augmented by an author who was particularly familiar with the universities of Central and Eastern Europe. In other chapters writers were asked to broaden the European perspective wherever possible and appropriate. It was also necessary to extend the finishing point of the volume in stages, from 1990 to 1995.

Delays held back the appearance of the third volume until 2004, and we had to ask the authors of volume IV to revise their drafts in light of the current state of research. Some of them felt it necessary to sketch in developments beyond 1995. Sir John Ellis, who wrote the chapter ‘Medicine’, died in 1998 and John Ziman passed away at the beginning of 2005, before being able to complete the revision of his chapter ‘The Mathematical, Exact Sciences’.

The editorial board reviewed the revised drafts at its nineteenth meeting in June 2005 and delegated various editorial tasks for the English edition to individual members. We owe a particular debt of gratitude to John Heilbron, who agreed to help with the editing of the science chapters of the ‘Learning’ part, paying special attention to those written by the now deceased authors. Both he and the board decided to leave this section as a testimony to the authors’ own experience.

The earlier volumes contained a chronological catalogue of the universities in existence during the period in question. In the third volume this was augmented by a list of specialist colleges and applied science universities of equivalent standing. In the fourth volume the great number of colleges and universities has made such a detailed catalogue impractical. However, at its last meeting the editorial board thought it helpful to list for every country those universities founded between 1945 and 1995 in chronological order. The successor body to the CRE, the EUA, kindly asked the national rectors’ conferences to supply the appropriate information. Any missing data were added by the general editor, using the World Higher Education DATABASE 2005/6. As in the earlier volumes

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4 For further information on the ‘foundation’ date of 1088, see vol. I, pp. 24–6, 58–60.
Foreword

(and, indeed, as in most developed nations) the definition of a university was taken to be an institution that had been accorded the right to award doctorates by the state; this definition naturally presupposes teaching supported by research.

Among the national correspondents, Walter Höflehner, Graz, and I. V. Komarov, St Petersburg, have contributed most helpfully to individual chapters with their commentaries. We are also very grateful to our authors for their patience and their willingness to revise their contributions. The two youngest members of the editorial board, Andris Barblan and Alison Browning, have been especially active in the preparation of the fourth volume. As secretary general and deputy secretary general of the CRE during the gestation and implementation phase of this project, they have played a crucial part in following it through to completion with never-failing energy. They must derive great satisfaction from the fact that not only the English and German editions initiated by the CRE have been very well received, but Portuguese and Spanish versions of the first volumes have already appeared, and translations into Russian and Chinese are in progress.

In the early volumes it was repeatedly necessary to point to gaps in the research base. The same is of course true for volume IV. As we have done throughout this series, in the ‘Learning’ section we have emphasized the subjects that gave the university its character during the several periods covered by the volumes. Thus theology and the arts received special attention in the first three volumes, with particular emphasis on the rise of humanism and the humanities. During the period covered by the present volume, natural science set the tone and direction, and the social sciences followed suit. Our coverage includes history as a social science and omits religion and the humanities. The latter as academic disciplines have undergone substantial changes since 1945 and their place in contemporary universities driven by science, engineering and business is constantly being redefined. Perhaps our successors will be inspired to examine recent developments in both areas, and in the process persuade the publishers to bring out a fifth volume.5

Yet despite its deficiencies, we hope that A History of the University in Europe – by presenting and explaining the conditions and developments that shaped this history – will not only stimulate further research but also contribute to a better understanding of the purpose and task of the university in a globalized world.

5 For the teaching of the humanities, see chapter 8, ‘Education’.
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