Contents

Contributors xxv

Preface xxxv

Abbreviations, Conventions, and Definitions xxxix

Part I Grammatology

Introduction—Peter T. Daniels 1

Section 1

The Study of Writing Systems—Peter T. Daniels 3

Grammatology 3

History of the study of writing 5

The typology of writing systems 8

The study of writing 10

Related topics 12

Part II Ancient Near Eastern Writing Systems

Introduction—Peter T. Daniels 19

Section 2

The First Civilizations—Peter T. Daniels 21

“Forerunners” of writing 21

The Vinča signs

Near Eastern tokens

Interconnections 23

The significance of the alphabet 26

Undeciphered scripts

Scripts from the Aegean and Cyprus

Proto-Sinaitic

Pseudo-hieroglyphs of Byblos 28
Mesopotamian Cuneiform

Origin—Piotr Michalowski
History of discovery
Structure
Distribution and contents

Sumerian and Akkadian—Jerrold S. Cooper
Cuneiform writing
Cuneiform signs
Sumerian cuneiform
Akkadian cuneiform

Basic cuneiform syllabary

Other languages—Gene B. Gragg
Elamite cuneiform
Hurrian cuneiform
Urartian cuneiform
Hittite cuneiform

Egyptian Writing—Robert K. Ritner
Hieroglyphic
Hieratic
Demotic

The Meroitic Script—N. B. Millet

Epigraphic Semitic Scripts—M. O’Connor
Scripts in the Bronze Age (2000–1200 B.C.E.)
Scripts in the Iron Age and later times (from 1200 B.C.E.)
Phoenician and related scripts
Aramaic
Arabia
Salient features of various groups of texts

The Iberian Scripts—Pierre Swiggers
Description
Inventory and commentary
Problems

The Berber Scripts—M. O’Connor
Ancient Berber
The Islamic period: Silence; modern use
Section 6
Anatolian Hieroglyphs—H. Craig Melchert
Usage and history 120
General characteristics 120
Signs 123

Section 7
Aegean Scripts—Emmett L. Bennett
Linear B 125
The Greek mainland and Crete, ca. 1550–1200 B.C.E. 125
Scripts of Cyprus 130
Cyprus, ca. 800–200 B.C.E. 130
Cyprus, ca. 1500–1200 B.C.E. 130
Minoan Linear A 132
Crete and Aegean islands, ca. 1800–1450 B.C.E. 132
The pictographic or Cretan Hieroglyphic script 132
Crete, ca. 1750–1600 B.C.E. 133
The Phaistos Disk 133

Section 8
Old Persian Cuneiform—David D. Testen 134

Part III Decipherment

Introduction—Peter T. Daniels 139

Section 9
Methods of Decipherment—Peter T. Daniels 141
Types of decipherment 141
Processes in decipherment 142
Accounts of decipherment 143
Palmyrene
Cuneiform
Egyptian
Hymaritic
Brahmi
Cypriote
Turkic runes
Meroitic
Luvian
Ugaritic
Linear B
Maya

Section 10
The Proto-Elamite Script—Robert K. Englund 160
History of decipherment 160
Basic characteristics of Proto-Elamite script and texts 161
Section 11  The Indus Script—Asko Parpola  165
  Historical background and development  165
  Obstacles to decipherment  165
  Characteristics
  Direction of writing  166
  The means of distinguishing words  166
  Type of the script and orthography  166
  Current state of decipherment  168

Section 12  Maya and Other Mesoamerican Scripts  172
  —Martha J. Macri  174
  Logographic/syllabic scripts
  Maya writing  180
  Codified pictorial systems

Section 13  Rongorongo of Easter Island—Martha J. Macri  183
  Progress in decipherment  183
  A linguistic approach to decipherment  185

Part IV  East Asian Writing Systems  189

Section 14  Early Chinese Writing—William G. Boltz  191
  Unit characters  192
  Compound characters  194

Section 15  Modern Chinese Writing—Victor H. Mair  200
  Relationship to the Chinese languages  202
  Reform  203

Section 16  Japanese Writing—Janet S. (Shibamoto) Smith  209
  Kanji  209
  Hiragana and katakana  210
  Romaji  213
  Other script elements  213
  Direction, punctuation, and organization of texts  214
  Conclusion  214

Section 17  Korean Writing—Ross King  218
  Chinese writing in Korea  218
  Hankul: General characteristics  219
The symbols
  The modern vowels
  The modern consonants
  Middle Korean pitch accent
  Forming orthographic syllables
Orthography and letter shapes
  The relationship of Hankul to other scripts

Section 18  Siniform Scripts of Inner Asia
  Tangut—E. I. Kychanov
  Kitan and Jurchin—György Kara
    The Kitan scripts
    Jurchin script

Section 19  The Yi Script—Dingxu Shi
  Classic Yi
  Modern Yi

Section 20  Asian Calligraphy—John Stevens
  Comparative table of Sinitic characters

Part V  European Writing Systems
  Introduction—Peter T. Daniels

Section 21  Transmission of the Phoenician Script to the West—Pierre Swiggers
  Geographical and chronological aspects
  Linguistic aspects
    Structural innovation
    Local innovations
  Problems
    Agents
    Date
    Place
  Observations

Section 22  The Greek Alphabet—Leslie Throatte
  The symbols
  Diacritical marks and punctuation
  Numerals
The Anatolian Alphabets — Pierre Swiggers and Wolfgang Jenniges 281

Phrygian 282
Pamphylian and Sidetic 282
Lycian 282
Lydian 284
Carian 285
Other languages 287

The Coptic Alphabet — Robert K. Ritner 287

The Gothic Alphabet — Ernst Ebbinghaus 290
Special features 291

Section 23  The Scripts of Italy — Larissa Bonfante 297

Etruscan 297
Other languages and scripts of Italy 301
Latin 301
Etruscan influence in the north 301
Central and southern Italy 301

Section 24  The Roman Alphabet — Stan Knight 312

Ancient Roman scripts 312
Old Roman Cursive 312
Rustic Capitals 312
Uncial scripts 312
Half Uncial scripts 312
Square Capitals 312
New Roman Cursive 312

Regional hands 315
Luxeuil Minuscule 315
Corbie ab 315
Visigothic Minuscule 315
Beneventan Minuscule 315

Insular scripts 317
Insular Minuscule 317
Insular Half Uncial 317
Anglo-Saxon Minuscules 317

Carolingian Minuscule 319
English Carolingian Minuscule 319
Italian Carolingian Minuscule 319
Gothic scripts
  Transitional Gothic
  Gothic Prescissus
  Gothic Quadrata
  Gothic Rotunda
  Gothic Bâtarde

Humanist scripts
  Humanist Minuscule
  Humanist Cursive
  Humanist Italic

Cursive writing from the sixteenth century
  The pointed pen
  Italic revival

The printed word
  Mainz
  Venice
  Garamond
  Caslon
  Baskerville
  Bodoni
  The nineteenth century
  The twentieth century

SECTION 25  The Runic Script—Ralph W. V. Elliott

Later developments
  Scandinavia
  The British Isles

SECTION 26  Ogham—Damian McManus

The script
  Stone inscriptions
  Manuscript tradition
  Names

SECTION 27  The Slavic Alphabets—Paul Cubberley

The historical background
Forms of letters and phonological fit in old alphabets
Glagolitic: Later history
Cyrillic: Later history
Orthography and phonotactics in Russian
PART VI South Asian Writing Systems

Introduction—Richard G. Salomon

Section 30 Brahmi and Kharoshthi—Richard G. Salomon

- Systemic features
- Linguistic features
- Functions
- Origins
- Development

Section 31 The Devanagari Script—William Bright

- The symbols
- Specific features
- Correspondences
- Relations to other scripts

Section 32 Gujarati Writing—P. J. Mistry

- The symbols
- Specific features

Section 33 The Gurmukhi Script—Harjeet Singh Gill

- The consonants
- Vowels and accessory signs
- Tones

Section 34 Bengali Writing—Tista Bagchi

- Differences in inventory of characters
- Script-to-pronunciation correspondences
- Clusters
Section 35  Oriya Writing—B. P. Mahapatra

The symbols  405
Conjunct consonants  406
Distinctive characteristics  407

Section 36  Sinhala Writing—James W. Gair

The symbols  408
Correspondence of speech to writing  409

Section 37  Kannada and Telugu Writing—William Bright

The symbols  413
Characteristic features  416
Correspondences  417

Section 38  Malayalam Writing—K. P. Mohanan

Section 39  Tamil Writing—Sanford B. Steever

Historical background  426
Description  426
Adequacy in representing Tamil phonology  427
Trends  428

Section 40  The Tibetan Script and Derivatives—Leonard W. J. van der Kuijp

Symbols and specific features  432
Subscript symbols
Prescript symbols
Superscript symbols
Postscript symbols
Post-postscript symbols

Additional features  435
The Lepcha script  436
The 'Phags pa script  437
Historical background
General characteristics
Geographic distribution
Part VII Southeast Asian Writing Systems

Introduction—Christopher Court

Section 41 The Spread of Brahmi Script into Southeast Asia—Christopher Court

- The beginnings of writing
- Indigenization of Indian scripts

Section 42 Burmese Writing—Julian K. Wheatley

- History
- Symbols
- General characteristics
- Pronunciation
- Miscellaneous signs and modifications

Section 43 Thai and Lao Writing—Anthony Diller

- Development
- Consonant symbols
- Vowel symbols
- Tone rules
- Numerals and other symbols

Section 44 Khmer Writing—Eric Schiller

- The symbols
  - Consonants
  - Vowels
  - Clusters
  - Special cases
- Correspondences
- Punctuation and numerals

Section 45 Insular Southeast Asian Scripts—Joel C. Kuipers and Ray McDermott

- Structure and historical continuity: The Holle charts
- Cultural uses of the writing systems of Insular Southeast Asia
  - Sumatra: Batak
  - Sumatra: Rejang
  - Java and Bali
  - South Sulawesi: Buginese and Makasarese
- An arresting case: The Hanunóo of Mindoro, Philippines

Page 443

Page 445

Page 450

Page 455

Page 457

Page 465

Page 467

Page 472

Page 474
Part VIII  Middle Eastern Writing Systems

Introduction—Peter T. Daniels 485

Section 46  The Jewish Scripts—Richard L. Goerwitz 487
From Phoenician to Aramaic to Jewish script 487
From consonants to vowels 489
Codification of the medieval script 494

Section 47  Aramaic Scripts for Aramaic Languages 499
—Peter T. Daniels 499
Classical Syriac
Three kinds of consonants
Diacritical points
Modern Aramaic—Robert D. Hoberman 504
Letters and obligatory diacritics
Optional diacritics
Other scripts
Mandaic—Peter T. Daniels 511

Section 48  Aramaic Scripts for Iranian Languages 515
—P. Oktor Skjærvø 515
Orthographic principles
Transliteration
Use of Aramaic letters
Developments from Imperial Aramaic 516
Heterograms (ideograms)
Phonetic complements
Archaizing or “pseudo-historical” orthography
Book Pahlavi script
The Avestan alphabet
Sogdian script
Developments from Estrangelo Syriac 530
Developments from Nestorian Syriac 533

Section 49  Aramaic Scripts for Altaic Languages—György Kara 536
The runiform alphabet of the ancient Turks 536
The Uyghur alphabet 539
The Manichean script of the Uyghurs 542
The Mongolian script 545
The “Clear script” 548
The Manchu alphabet 550
The Buryat alphabet 554
Cyrillic script 556
CONTENTS

Section 50  Arabic Writing—Thomas Bauer  559
  Basic characters  561
  Morphophonemic representation  561
  Optional signs  562
  The effects of defectiveness  563

Dhivehi Writing—James W. Gair and Bruce D. Cain  564
  The symbols  565

Section 51  Ethiopic Writing—Getatchew Haile  569
  Consonants  569
    Characters  569
  Vowels  571
    Vowel signs  571
  Characters or diagrams  574
  Numerals  574
  Writing Ethiopic  575

Part IX  Scripts Invented in Modern Times

Introduction—Peter T. Daniels  577

Section 52  The Invention of Writing—Peter T. Daniels  579
  Sophisticated grammatogenies  579
    The Pollard script  579
    The Fraser script  579
    Fictional scripts  579
  Unsophisticated grammatogenies  583
    The Bamum script  583
    The Alaska script  583
    The Ndjuka script  583
    The Caroline Islands script  583
  The origin of writing  585

Section 53  Cherokee Writing—Janine Scancarelli  587
  The characters of the Cherokee syllabary and their arrangement  587
  The appearance of written Cherokee  589
  The sound and spelling of Cherokee  590
  Uses of the syllabary  591
Section 54  Scripts of West Africa—John Victor Singler  
   The N’ko alphabet  
   Vai script  
   Orthographic principles  
   The characters  

Section 55  The Cree Syllabary—John D. Nichols  
   Algonquian syllabaries  
   Characteristic features  
   Scripts for Inuit (Eskimo) languages  
   Syllabics for Sub-Arctic Athabaskan languages  

Section 56  Scripts for Munda Languages—Norman Zide  
   Sorang Sompeng  
   Ol Cemet’  
   Ho  

Section 57  The Pahawh Hmong Script—Martha Ratliff  
   Features of the system  
   The symbols  
   Use  

Part X Use and Adaptation of Scripts  

   Introduction—Peter T. Daniels  

Section 58  A Functional Classification—John Mounford  
   Functional kinds of writing system  
   General-purpose versus special-purpose writing systems  
   Terminology  
   The composition of writing systems in relation to function  
   Multiplicity of writing systems  
   More functional kinds?  
   Conclusion
Adaptations of the Roman Alphabet

Romance languages—Edward Tuttle
  Transition from Latin to early Romance
  Lineal descent and internal realignment
  Treatment of empty vestiges
  Graphemes from external sources
  Abbreviations as diacritics
  Collateral extension of the foregoing sources
  Orthographic reforms
  Rumanian
  Contemporary orthography

Germanic languages—Wayne M. Senner
  German
  Dutch and Afrikaans
  Scandinavian languages
  English—Peter T. Daniels

Celtic languages—Damian McManus
  Irish
  Welsh—Eric P. Hamp

Languages of Eastern and Southern Europe—Bernard Comrie
  Baltic and Slavic
  Albanian
  Uralic languages
  Turkish
  Basque
  Maltese

African languages—John Bendor-Samuel
  Problems in adapting consonants
  Problems in adapting vowels
  Vietnamese—Nguyễn Đình-Hoà
  Letters of the alphabet

Adaptations of the Cyrillic Alphabet—Bernard Comrie

Slavic languages

Non-Slavic languages
  Representation of vowels
  Representation of palatalization
  Representation of consonants
  Representation of prosodic phenomena
  Letter names and alphabetical order
Adaptations of Hebrew Script—Benjamin Hary

Jewish “languages” or ethnolects

Judeo-Arabic
Arabicized orthography
Phonetic orthography
Hebraized orthography

Judeo-Spanish (Ladino)

Yiddish—Howard I. Aronson
Standard orthographies
Variant orthographies
Vowel representation
Consonant representation
Special spellings

Adaptations of Arabic Script—Alan S. Kaye

Spread of Arabic script

Minor adaptations of the Arabic script
The Malagasy script
The Yezidi cryptic script

General characteristics of Arabic-based writing systems

Scripts of Islamic literary languages
Persian
Kurdish
Pashto
Kashmiri
Urdu
Sindhi
Ottoman Turkish
Uyghur
Malay

Part XI Sociolinguistics and Scripts

Introduction—William Bright

Section 63 Germany: Script and Politics—Gerhard Augst

Section 64 Serbo-Croatian: A Biscriptal Language—Laurie Beth Feldman and Dragana Barac-Cikoja

Section 65 South Asia: Coexistence of Scripts—Colin P. Masica

Section 66 Christian Missionary Activities—Allan Gleason
Section 67  Script Reform in and after the Soviet Union  781
—Bernard Comrie
  Script replacement  781
  Intra-script reform  783
  Post-Soviet developments  783

Part XII  Secondary Notation Systems

Introduction—Peter T. Daniels  785

Section 68  The Alphabet as a Technology—M. O'Connor  787
  How do people learn how to write?  787
  The order of the alphabet  788
  Letter names  790
  Elements of writing systems used for various purposes  791

Section 69  Numerical Notation—John Sören Pettersson  795
  Forerunners of numerical notation  795
  Ancient Near East  798
    Mesopotamia
    Egypt
    Linear A and B
    Northwest Semitic
  South and East Asia  801
    Indus script
    China
  Classical Greece and Rome  803
    Greece
    Rome
  0 – 9  804
  Further reading  805

Section 70  Shorthand—Peter T. Daniels  807
  Historical survey  807
    Classical era
    Renaissance
    Modern
  Typology  815
    Logographic
    Alphabetic
    Phonotypic
Section 71  Phonetic Notation—Michael K. C. MacMahon  
The International Phonetic Alphabet (IPA)  
The structure of the International Phonetic Alphabet  
Consonant and vowel sounds  
Prosodic features  
Extensions to the IPA  
Using IPA notations  
Different IPA alphabets  
Other alphabetic notations  
Iconic notation  
Linear and parametric notations  
Analphabetic notation  
Summary  

Section 72  Music Notation—James D. McCawley  
Pitch  
Duration  
Dynamics and articulation  
Structure  
Modifications  

Section 73  Movement Notation Systems—Brenda Farnell  
Historical developments in Europe  
The emergence of general movement scripts  
Problems in the transcription of human movement  
Body  
Space  
Time  
Additional dynamics  
Relationships  
Reading the action  

Part XIII  Imprinting and Printing  

Introduction—Peter T. Daniels  

Section 74  Analog and Digital Writing—Peter T. Daniels  
Dichotomy  
History  
People  
Machines  
Consequences  

Index