

## A Phonological History of Chinese

The phonological history of Chinese can be traced back to two main traditions: one starting with the *Qieyun* of 601, and the other starting with the *Zhongyuan Yinyun* of 1324. The former marks the beginning of Middle Chinese, and the latter marks the beginning of Old Mandarin. Both of these systems, as well as reconstructed Old Chinese, should be understood as ideal phonological standards and composite in nature. Until modern times, phonological standards were never based strictly on the phonology of a single dialect. This book provides the first study written in English of the phonological history of Chinese. It provides information about the standard phonological systems for each of the language's major historical periods, drawing on a range of historical materials such as dictionaries, rhyming tables, and poetry, and is a reference book for understanding the key developments in the Chinese sound system.

PROFESSOR ZHONGWEI SHEN is a Full Professor of Chinese Linguistics in the Department of Languages, Literatures, and Cultures at University of Massachusetts Amherst. He has served as a co-editor of the *Journal of Chinese Linguistics*, and co-editor-in-chief of the *Bulletin of Chinese Linguistics*.

# A Phonological History of Chinese

---

Zhongwei Shen

*University of Massachusetts Amherst*



CAMBRIDGE  
UNIVERSITY PRESS

Cambridge University Press & Assessment  
 978-1-316-50165-8 — A Phonological History of Chinese  
 Zhongwei Shen  
 Frontmatter  
[More Information](#)



Shaftesbury Road, Cambridge CB2 8EA, United Kingdom  
 One Liberty Plaza, 20th Floor, New York, NY 10006, USA  
 477 Williamstown Road, Port Melbourne, VIC 3207, Australia  
 314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India  
 103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

[www.cambridge.org](http://www.cambridge.org)  
 Information on this title: [www.cambridge.org/9781316501658](http://www.cambridge.org/9781316501658)  
 DOI: 10.1017/9781316476925

© Zhongwei Shen 2020

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

First published 2020  
 First paperback edition 2024

*A catalogue record for this publication is available from the British Library*

*Library of Congress Cataloging-in-Publication data*

Names: Shen, Zhongwei, author.

Title: A phonological history of Chinese / Zhongwei Shen.

Description: Cambridge ; New York, NY : Cambridge University Press, 2020. |

Includes bibliographical references and index.

Identifiers: LCCN 2019036955 (print) | LCCN 2019036956 (ebook) |

ISBN 9781107135840 (hardback) | ISBN 9781316501658 (paperback) |

ISBN 9781316476925 (epub)

Subjects: LCSH: Chinese language—Phonology, Historical.

Classification: LCC PL1201 .S456 2020 (print) | LCC PL1201 (ebook) |

DDC 495.1/15—dc23

LC record available at <https://lcn.loc.gov/2019036955>

LC ebook record available at <https://lcn.loc.gov/2019036956>

ISBN 978-1-107-13584-0 Hardback

ISBN 978-1-316-50165-8 Paperback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Contents

|                                               |         |
|-----------------------------------------------|---------|
| <i>List of Figures</i>                        | page xi |
| <i>List of Tables</i>                         | xiii    |
| <i>Foreword by William S-Y. Wang 王士元</i>      | xxx     |
| <i>Preface</i>                                | xxxiii  |
| <i>Major Periods of Chinese History</i>       | xxxv    |
| <i>Locations of Ancient Capitals of China</i> | xxxvi   |

|                                                                                      |    |
|--------------------------------------------------------------------------------------|----|
| <b>Part I The Keys to Traditional Phonology</b>                                      | 1  |
| 1 An Introduction to Chinese Historical Phonology                                    | 3  |
| 1.1 Defining Chinese                                                                 | 4  |
| 1.2 The Nature of Phonological History                                               | 6  |
| 1.2.1 Chinese Phonology through Written Record                                       | 6  |
| 1.2.2 Phonological Categories in Logographic Systems                                 | 7  |
| 1.2.3 Terminology of Traditional Chinese Phonology                                   | 8  |
| 1.2.4 Syllable Structure                                                             | 9  |
| 1.2.5 Nonsyllabic Phonological Characteristics                                       | 10 |
| 1.3 <i>Yùnsū</i> 韻書 ‘Rhyme Dictionaries’                                             | 11 |
| 1.3.1 The <i>Qièyùn</i> 切韻 (601)                                                     | 12 |
| 1.3.2 <i>Fǎnqiè</i> 反切                                                               | 16 |
| 1.3.3 <i>Zhíyīn</i> 直音 Notation                                                      | 19 |
| 1.3.4 <i>Shēngdiào</i> 聲調 ‘Tones’                                                    | 20 |
| 1.3.5 <i>Yùnxì</i> 韻系 ‘Rhyme Series’                                                 | 21 |
| 1.4 <i>Yùntú</i> 韻圖 ‘Rhyme Tables (Rhyme Charts)’                                    | 22 |
| 1.4.1 The Thirty-Six Initials                                                        | 25 |
| 1.4.2 The <i>Qīngzhuó</i> 清濁 System                                                  | 27 |
| 1.4.3 <i>Yīndiào</i> 陰調 and <i>Yángdiào</i> 陽調                                       | 29 |
| 1.4.4 <i>Děng</i> 等 ‘Division’ and ‘Rank’                                            | 30 |
| 1.4.5 <i>Kāihé</i> 開合                                                                | 35 |
| 1.4.6 <i>Chóngniǔ</i> 重紐 and <i>Chóngyùn</i> 重韻                                      | 36 |
| 1.4.7 <i>Sìhū</i> 四呼                                                                 | 38 |
| 1.4.8 <i>Wàizhuǎn</i> 外轉 and <i>Nèizhuǎn</i> 內轉                                      | 39 |
| 1.4.9 <i>Shè</i> 攝 ‘Rhyme Groups’                                                    | 46 |
| 1.4.10 <i>Yīnshēng Yùn</i> 陰聲韻, <i>Yángshēng Yùn</i> 陽聲韻, and <i>Rùshēng Yùn</i> 入聲韻 | 48 |
|                                                                                      | v  |

|                                |                                                                |            |
|--------------------------------|----------------------------------------------------------------|------------|
| vi                             | Contents                                                       |            |
| 1.5                            | Nonanalytical Source Materials                                 | 48         |
| 1.5.1                          | Poem Rhyming                                                   | 48         |
| 1.5.2                          | Foreign Transcriptions and Sino-Xenic Pronunciation            | 49         |
| 1.5.3                          | <i>Xiéshēng</i> Characters 諧聲字                                 | 50         |
| 1.6                            | The Availability and Reliability of Source Materials           | 51         |
| 1.7                            | Periodization                                                  | 54         |
| 1.8                            | Reconstruction                                                 | 54         |
| 1.9                            | Transcriptions                                                 | 56         |
| <b>Part II Old Chinese</b>     |                                                                | <b>57</b>  |
| 2                              | Old Chinese                                                    | 59         |
| 2.1                            | Introduction                                                   | 59         |
| 2.1.1                          | The Tibeto-Burman Connection                                   | 61         |
| 2.1.2                          | Methodology and Working Principles                             | 61         |
| 2.2                            | Source Materials                                               | 62         |
| 2.2.1                          | <i>Shījīng</i> 詩經 Rhyming                                      | 63         |
| 2.2.2                          | <i>Xiéshēng</i> Characters 諧聲字                                 | 63         |
| 2.2.3                          | Partially Reduplicated Words                                   | 65         |
| 2.2.4                          | The <i>Qìèyùn</i> 切韻 System                                    | 65         |
| 2.3                            | Reconstruction                                                 | 66         |
| 2.3.1                          | The Reconstruction of Syllable Structures                      | 67         |
| 2.3.2                          | The Reconstruction of Onsets                                   | 69         |
| 2.3.3                          | The Reconstruction of Rhymes                                   | 78         |
| 2.3.4                          | The Reconstruction of Syllable Structures                      | 97         |
| 2.3.5                          | Recent Advances                                                | 99         |
| 2.4                            | Examples of Old Chinese                                        | 102        |
| <b>Part III Middle Chinese</b> |                                                                | <b>105</b> |
| 3                              | Middle Chinese: The <i>Qìèyùn</i> 切韻                           | 107        |
| 3.1                            | Special Notes on the <i>Qìèyùn</i> 切韻 and <i>Fǎnqiè</i> 反切     | 108        |
| 3.1.1                          | The <i>Fǎnqiè</i> of Rank-III                                  | 108        |
| 3.1.2                          | The Information Contained within the <i>Qìèyùn</i>             | 110        |
| 3.1.3                          | Some Main Issues of the <i>Qìèyùn</i>                          | 112        |
| 3.1.4                          | A Single System or a Composite System                          | 112        |
| 3.1.5                          | The <i>Qìèyùn</i> Rhymes and the Nature of the <i>Yùn</i> 韻    | 116        |
| 3.1.6                          | The Revisions of the <i>Qìèyùn</i> and the Splitting of Rhymes | 119        |
| 3.2                            | The Nature of the Rhymes                                       | 120        |
| 3.2.1                          | New Approaches                                                 | 122        |
| 3.2.2                          | A Possible Solution                                            | 123        |
| 3.3                            | Complementary and Near-Complementary Relationships             | 126        |
| 3.4                            | Syllable Structure                                             | 128        |
| 3.4.1                          | Suprasegmental Tones                                           | 129        |
| 3.4.2                          | Segmentals                                                     | 130        |
| 3.4.3                          | Initials (I)                                                   | 131        |
| 3.4.4                          | Medials (M)                                                    | 132        |
| 3.4.5                          | Main Vowels (V)                                                | 133        |
| 3.4.6                          | Codas (E)                                                      | 134        |

|                                                                                      |            |
|--------------------------------------------------------------------------------------|------------|
| Contents                                                                             | vii        |
| 3.5 Phonological Characteristics of Middle Chinese                                   | 134        |
| 3.5.1 The Tripartite Distinction of Stop and Affricate Initials                      | 134        |
| 3.5.2 The Labials                                                                    | 135        |
| 3.5.3 The Retroflex Stops                                                            | 135        |
| 3.5.4 The Four Ranks (Divisions)                                                     | 137        |
| 3.5.5 The <i>Kāihé</i> 開合 Contrast                                                   | 141        |
| 3.5.6 The Contrast of <i>Chóngniǔ</i> 重紐 Syllables                                   | 141        |
| 3.5.7 The Contrast of <i>Chóngyùn</i> 重韻 Rhymes                                      | 143        |
| 3.5.8 Final Types                                                                    | 143        |
| 3.6 Modern Evidence of the Phonological Contrasts                                    | 146        |
| 3.6.1 The Three-Way Contrast of Phonation Types                                      | 146        |
| 3.6.2 The Coda System                                                                | 147        |
| 3.6.3 The <i>Chóngniǔ</i> 重紐 Contrast                                                | 148        |
| 3.6.4 The <i>Chóngyùn</i> 重韻 Contrast                                                | 148        |
| 3.6.5 The Contrast of Rank-III and Rank-IV                                           | 150        |
| 3.7 Examples of Middle Chinese Phonology                                             | 150        |
| 4 Middle Chinese: The Tang and Song Dynasties                                        | 152        |
| 4.1 The Tang Dynasty (618–907)                                                       | 152        |
| 4.1.1 Xuánzàng’s 玄奘 Inscriptions                                                     | 152        |
| 4.1.2 Simplification and <i>Tóngyòng</i> 同用 Marking                                  | 154        |
| 4.1.3 The New Standard                                                               | 155        |
| 4.1.4 Devoicing of Voiced Stops and Affricates                                       | 159        |
| 4.1.5 Labiodentalization                                                             | 160        |
| 4.1.6 Later Middle Chinese                                                           | 162        |
| 4.2 The Five Dynasties and Ten Kingdoms (907–960)                                    | 163        |
| 4.2.1 <i>Ēryā Yīntú</i> 爾雅音圖 (tenth century)                                         | 163        |
| 4.2.2 Northwest Dialects                                                             | 165        |
| 4.3 Northern Song (960–1127)                                                         | 166        |
| 4.3.1 <i>Guāngyùn</i> 廣韻 (1008)                                                      | 166        |
| 4.3.2 <i>Jīyùn</i> 集韻 (1039) and <i>Lǐbù Yùnlüè</i> 禮部韻略 (1037)                      | 168        |
| 4.3.3 <i>Shēngyīn Chànghè Tú</i> 聲音唱和圖                                               | 169        |
| 4.3.4 Summary                                                                        | 179        |
| 4.4 Southern Song (1127–1297)                                                        | 180        |
| 4.4.1 Hangzhou Dialect                                                               | 181        |
| 4.4.2 The <i>Sishēng Dēngzǐ</i> 四聲等子                                                 | 183        |
| 4.4.3 The <i>Qièyùn Zhǐzhāngtú</i> 切韻指掌圖                                             | 187        |
| 4.4.4 The <i>Qièyùn Zhǐnán</i> 切韻指南                                                  | 189        |
| 4.5 Examples of Tang Poetry                                                          | 192        |
| <b>Part IV The Beginnings of Mandarin</b>                                            | <b>195</b> |
| 5 The Chinese of the Liao, Jin, and Xixia Dynasties                                  | 197        |
| 5.1 The Liao Dynasty (916–1125)                                                      | 197        |
| 5.1.1 The Khitan Materials                                                           | 197        |
| 5.1.2 Diphthongization of Middle Chinese Syllables with Coda -k                      | 200        |
| 5.1.3 Devoicing of Middle Chinese Voiced Obstruents                                  | 201        |
| 5.1.4 Labiodentalization                                                             | 202        |
| 5.1.5 The Merger of the Middle Chinese <i>zhī</i> 知 and <i>zhào</i> 照 Initial Series | 203        |
| 5.1.6 The Loss of the Middle Chinese Stop Codas -p, -t, -k                           | 204        |

|      |                                                                                         |            |
|------|-----------------------------------------------------------------------------------------|------------|
| viii | Contents                                                                                |            |
|      | 5.1.7 The Status of the Middle Chinese Velar Nasal Initial ŋ-                           | 204        |
|      | 5.1.8 The Middle Chinese Bilabial Nasal Coda -m                                         | 204        |
|      | 5.1.9 Middle Chinese <i>má</i> -III (麻) Syllables                                       | 205        |
|      | 5.1.10 The Foundations of Mandarin                                                      | 206        |
|      | 5.1.11 Examples                                                                         | 206        |
| 5.2  | The Jin Dynasty (1115–1234)                                                             | 207        |
|      | 5.2.1 The <i>Gǎibìng Wúyīn Jìyùn</i> 改併五音集韻 (1212)                                      | 208        |
|      | 5.2.2 The Jurchen Materials                                                             | 210        |
| 5.3  | The Xixia Dynasty (1038–1227)                                                           | 215        |
|      | 5.3.1 The Tangut Script                                                                 | 215        |
|      | 5.3.2 Phonological Characteristics and Differences of Northern Dialects                 | 225        |
|      | <b>Part V A New Standard</b>                                                            | <b>229</b> |
| 6    | Old Mandarin: The <i>Ménggǔ Zìyùn</i> 蒙古字韻                                              | 231        |
| 6.1  | The ʰP’ags-pa Script                                                                    | 234        |
|      | 6.1.1 Adaptations between Tibetan and ʰP’ags-pa Script                                  | 234        |
|      | 6.1.2 The Syllable Block                                                                | 238        |
|      | 6.1.3 The Problems of the Script                                                        | 238        |
|      | 6.1.4 Phonological Contrasts That Cannot Be Reflected                                   | 240        |
| 6.2  | The Phonological System of the <i>Ménggǔ Zìyùn</i> 蒙古字韻                                 | 241        |
|      | 6.2.1 The Fifteen Rhyme Groups                                                          | 243        |
|      | 6.2.2 The Phonetic Values of the ʰP’ags-pa Letters                                      | 244        |
|      | 6.2.3 The Spelling of Finals                                                            | 244        |
|      | 6.2.4 The Subsystems of Finals                                                          | 245        |
|      | 6.2.5 Tonal Marks                                                                       | 246        |
| 6.3  | Sound Changes in the Initial System                                                     | 247        |
|      | 6.3.1 The Loss of Voiced Obstruents                                                     | 247        |
|      | 6.3.2 Labiodentalization of Middle Chinese Bilabial Initials                            | 248        |
|      | 6.3.3 The Loss of the Middle Chinese <i>yí</i> 疑 ŋ- Initial                             | 248        |
| 6.4  | Sound Changes in the Final System                                                       | 249        |
|      | 6.4.1 The Medial                                                                        | 249        |
|      | 6.4.2 The Reduction of the Vowel System                                                 | 250        |
|      | 6.4.3 <i>Chóngniǔ</i> 重紐 Reflexes in the <i>Ménggǔ Zìyùn</i>                            | 251        |
|      | 6.4.4 The Loss of Final Consonant Codas                                                 | 255        |
|      | 6.4.5 Diphthongization of Middle Chinese Syllables with Coda -k                         | 255        |
|      | 6.4.6 The Loss of the Parallel Relationship between <i>yáng</i> and <i>rù</i> Syllables | 256        |
|      | 6.4.7 The Contrast of <i>jan/jen</i> and <i>jaw/jew</i>                                 | 257        |
|      | 6.4.8 The High Central (Apical) Vowel                                                   | 258        |
|      | 6.4.9 Vowel Raising                                                                     | 259        |
| 7    | Old Mandarin: The <i>Zhōngyuán Yīnyùn</i> 中原音韻                                          | 262        |
| 7.1  | The Base Dialect                                                                        | 264        |
|      | 7.1.1 The Influence of Southern Mandarin                                                | 268        |
| 7.2  | The <i>Zhèngyǔ Zuòcí Qǐlì</i> 正語作詞起例                                                    | 270        |
|      | 7.2.1 Dialect Features                                                                  | 270        |
| 7.3  | The Phonetic Reconstruction                                                             | 272        |
|      | 7.3.1 Initials (21)                                                                     | 272        |
|      | 7.3.2 Finals (47)                                                                       | 276        |

|                                                                                                              |            |
|--------------------------------------------------------------------------------------------------------------|------------|
| Contents                                                                                                     | ix         |
| 7.4 Innovative Characteristics of the <i>Zhōngyuán Yīnyùn</i> 中原音韻                                           | 278        |
| 7.4.1 Devoicing of the Middle Chinese Voiced Obstruents in the Initial Position                              | 279        |
| 7.4.2 The Emergence of the Labiodental Fricative                                                             | 279        |
| 7.4.3 The Development of the High Central (Apical) Vowels                                                    | 281        |
| 7.4.4 The New Four-Tone System                                                                               | 282        |
| 7.4.5 The Loss of the Middle Chinese <i>yí</i> 疑 Velar Nasal Initial                                         | 285        |
| 7.4.6 The Disappearance of the Four-Rank System of Finals                                                    | 286        |
| 7.4.7 The Preservation of the -m Coda                                                                        | 290        |
| 7.4.8 The <i>jiān-tuán</i> 尖團 Distinction                                                                    | 290        |
| 7.5 Examples of Yuan Pronunciation                                                                           | 291        |
| 7.6 Summary                                                                                                  | 293        |
| 8 Old Mandarin: The Persian Transcriptions                                                                   | 294        |
| 8.1 The Ancient Persian Script                                                                               | 294        |
| 8.2 <i>History of China</i>                                                                                  | 295        |
| 8.2.1 Middle Chinese Voiced Stops and Affricates                                                             | 296        |
| 8.2.2 The Loss of Velar Nasal Initial <i>yí</i> 疑 $\eta$ -                                                   | 296        |
| 8.2.3 Middle Chinese <i>rì</i> 日 Initial                                                                     | 298        |
| 8.2.4 Middle Chinese <i>wēi</i> 微 Initial                                                                    | 299        |
| 8.2.5 The Coda of <i>rù</i> 入 Syllables                                                                      | 300        |
| 8.2.6 High Centralized (Apical) Vowels                                                                       | 301        |
| 8.2.7 Main Vowel -e                                                                                          | 301        |
| 8.2.8 Summary of Features                                                                                    | 302        |
| 8.3 The <i>Mài Jué</i> 脈訣                                                                                    | 302        |
| 8.3.1 The Stop Codas of the <i>rù</i> 入 Syllables                                                            | 304        |
| 8.3.2 The Inconsistency of the Stop Coda in the Transcription                                                | 306        |
| 8.3.3 The Dialectal Features Reflected in the Transcription                                                  | 307        |
| 8.3.4 The Nebulous Nature of Early <i>Guānhuà</i> 官話                                                         | 313        |
| <b>Part VI Toward Modern Mandarin</b>                                                                        | <b>317</b> |
| 9 The Mandarin of the Ming Dynasty                                                                           | 319        |
| 9.1 North Versus South                                                                                       | 319        |
| 9.1.1 <i>Guānhuà</i> 官話                                                                                      | 320        |
| 9.2 The <i>Hóngwǔ Zhèngyùn</i> 洪武正韻 (1375)                                                                   | 320        |
| 9.2.1 Initials                                                                                               | 322        |
| 9.2.2 Finals                                                                                                 | 322        |
| 9.2.3 Tones                                                                                                  | 323        |
| 9.2.4 A Coherent System                                                                                      | 325        |
| 9.2.5 <i>Zhèngyīn</i> 正音 and <i>Súyīn</i> 俗音                                                                 | 325        |
| 9.2.6 Revision of the <i>Hóngwǔ Zhèngyùn</i>                                                                 | 326        |
| 9.3 The <i>Yùnlüè Yītōng</i> 韻略易通 (1442)                                                                     | 327        |
| 9.3.1 Initials and the <i>Zǎo Méi</i> 早梅 ‘Early Plum Blossom’ Poem                                           | 328        |
| 9.3.2 Finals and the Twenty Rhyme Groups                                                                     | 329        |
| 9.3.3 <i>Běnwù</i> ’s 本悟 Revision                                                                            | 331        |
| 9.3.4 Tones                                                                                                  | 333        |
| 9.4 The <i>Sìshēng Tōngjiě</i> 四聲通解 (1517), <i>Fānyì Lǎo Qīdà</i> 翻譯老乞大, and <i>Fānyì Piáo Tōngshì</i> 翻譯朴通事 | 334        |
| 9.4.1 Initials                                                                                               | 335        |

|      |                                                     |     |
|------|-----------------------------------------------------|-----|
| x    | Contents                                            |     |
|      | 9.4.2 Finals                                        | 336 |
|      | 9.4.3 Tone Sandhi                                   | 340 |
| 9.5  | The <i>Xīrú Ērmù Zī</i> 西儒耳目資 (1626)                | 342 |
|      | 9.5.1 Initials                                      | 342 |
|      | 9.5.2 Finals                                        | 345 |
|      | 9.5.3 Tones                                         | 349 |
| 9.6  | The <i>Děngyùn Tújīng</i> 等韻圖經 (1606)               | 350 |
|      | 9.6.1 Initials                                      | 350 |
|      | 9.6.2 Finals                                        | 355 |
|      | 9.6.3 Tones                                         | 356 |
|      | 9.6.4 Innovative Features                           | 356 |
| 10   | The Mandarin of the Qing Dynasty and the Modern Era | 360 |
| 10.1 | The Qing Dynasty (1644–1912)                        | 360 |
|      | 10.1.1 The <i>Yùdìng Pèiwén Yùnfǔ</i> 御定佩文韻府 (1711) | 361 |
|      | 10.1.2 The <i>Yīnyùn Chǎnwēi</i> 音韻闡微 (1728)        | 366 |
|      | 10.1.3 The Wade Textbook (1867)                     | 369 |
| 10.2 | Post-Imperial China (1912–present)                  | 377 |
|      | 10.2.1 The Old National Standard                    | 377 |
|      | 10.2.2 The New National Standard                    | 378 |
|      | 10.2.3 Modern Standard Phonology                    | 379 |
|      | 10.2.4 Modern Dialects ( <i>Fāngyán</i> 方言)         | 379 |
|      | <i>References</i>                                   | 385 |
|      | <i>Index</i>                                        | 395 |

## Figures

|                                                                                                                                                          |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1.1 A page from the <i>Kānmiù Bǔquē Qièyùn</i> 刊謬補缺切韻.                                                                                                   | page 13 |
| 1.2 The first table in the <i>Yùnjìng</i> 韻鏡 ‘Mirror of Rhymes’, one of the earliest rhyme tables.                                                       | 24      |
| 1.3 A page from the <i>Sishēng Dēngzǐ</i> 四聲等子.                                                                                                          | 32      |
| 1.4 The <i>Yùnjìng</i> pages for the rhymes <i>dōng</i> 東, <i>dōng/zhōng</i> 冬/鍾, and <i>jiāng</i> 江, and their <i>zè</i> 仄 tone equivalents.            | 40      |
| 2.1 Baxter and Sagart’s representation of the Old Chinese root.                                                                                          | 100     |
| 3.1 Middle Chinese (and Modern Mandarin) syllable structure.                                                                                             | 128     |
| 4.1 A page from the Ze-Cun-Tang version (澤存堂本 <i>zécúntáng běn</i> ) of the <i>Guǎngyùn</i> 廣韻.                                                          | 167     |
| 4.2 Two pages from the <i>Sishēng Dēngzǐ</i> , showing the merger of the syllables of the <i>dōng</i> 東, <i>dōng</i> 冬, and <i>zhōng</i> 鍾 rhyme series. | 184     |
| 4.3 The first table in the <i>Qièyùn Zhǐzhǎngtú</i> 切韻指掌圖.                                                                                               | 188     |
| 4.4 The first page of the tables in the <i>Qièyùn Zhǐnán</i> 切韻指南.                                                                                       | 190     |
| 4.5 A page from the <i>Qièyùn Zhǐnán</i> , showing the <i>Ménfǎ Yùyàoshì</i> 門法玉鑰匙.                                                                      | 191     |
| 5.1 A rubbing from the <i>Dào zōng āi cè</i> 道宗哀冊.                                                                                                       | 199     |
| 5.2 The titles of <i>Yélǜ Gù</i> 耶律固.                                                                                                                    | 207     |
| 5.3 A page from the <i>Zhǎng Zhōng Zhū</i> 掌中珠.                                                                                                          | 217     |
| 6.1 A page from the <i>Méngǔ Zìyùn</i> 蒙古字韻.                                                                                                             | 232     |
| 6.2 A comparison of the Tibetan and ḥP’ags-pa scripts.                                                                                                   | 235     |
| 6.3 A vowel chart demonstrating vowel raising in the Yuan era.                                                                                           | 260     |
| 7.1 A page from the <i>Zhōngyuán Yīnyùn</i> 中原音韻.                                                                                                        | 263     |
| 7.2 A page from the second part of the <i>Zhèngyǔ Zuòcí Qǐlì</i> 正語作詞起例.                                                                                 | 271     |
| 8.1 A page of the <i>Mài Jué</i> 脈訣.                                                                                                                     | 303     |
| 9.1 A page from the <i>Hóngwǔ Zhèngyùn</i> 洪武正韻 ( <i>Sikù Quánshū</i> 四庫全書 version).                                                                     | 321     |
| 9.2 A page from the <i>Lǎo Qīdà Yànjiě</i> 老乞大諺解.                                                                                                        | 343     |
| 9.3 Two pages from the <i>Xīrú Ěrmù Zī</i> 西儒耳目資.                                                                                                        | 344     |

|      |                                                                                          |     |
|------|------------------------------------------------------------------------------------------|-----|
| xii  | List of Figures                                                                          |     |
| 10.1 | The first three pages of the <i>Pèiwén Yùnfǔ</i> 佩文韻府<br>( <i>Sikù Quánshū</i> version). | 363 |
| 10.2 | The first page of the <i>Yīnyùn Chǎnwēi</i> 音韻闡微<br>( <i>Sikù Quánshū</i> version).      | 367 |
| 10.3 | The cover of 語言自邇集 <i>Yü-yen tzŭ-êrh chi</i> .                                           | 370 |