

**Manuscripts of the
Greek Bible:
An Introduction to Greek
Paleography**

BRUCE M. METZGER

OXFORD UNIVERSITY PRESS

**MANUSCRIPTS
OF THE GREEK BIBLE**

This page intentionally left blank

MANUSCRIPTS
OF THE
GREEK BIBLE

An Introduction to Greek Palaeography

BY

BRUCE M. METZGER

*George L. Collord Professor of
New Testament Language and Literature
Princeton Theological Seminary*

NEW YORK OXFORD
OXFORD UNIVERSITY PRESS

Copyright © 1981 by Oxford University Press, Inc.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of Oxford University Press.

Corrected edition, 1991.

Library of Congress Cataloging in Publication Data

Metzger, Bruce Manning.

Manuscripts of the Greek Bible.

Bibliography: pp. 141-143.

Includes indexes.

1. Bible—Manuscripts, Greek.
2. Palaeography, Greek.
3. Greek language, Biblical.
4. Bible—Manuscripts, Greek—Facsimiles.

I. Title.

BS39.M47 220.4'8

80-26205

ISBN-13 978-0-19-502924-6

ISBN 0-19-502924-0

Preface

THIS book is intended primarily for students of the Greek Bible. Its scope includes manuscripts not only of the Greek New Testament but also of the Greek Old Testament. The latter, though often neglected today, was the Scriptures of the early Christians, and was quoted habitually by Paul and other apostolic writers.

Besides students of the Bible, however, anyone concerned with the Greek classics and their transmission down the centuries will also find something of interest in the following pages. In fact, the importance and utility of palaeography can be appreciated by all who read any literary work from antiquity. Printed books as we know them today have existed for a little over five hundred years, but the writing and publishing of literary works in the Western world began at least twenty-five hundred years ago. The study of palaeography enables us to span the centuries prior to Gutenberg, and makes the literary treasures of antiquity available to the present generation.

Palaeography is of concern also to the historian of art. In every age of the world's history, and to a great extent in some ages, there have been those who took pride in their handwriting and cultivated it to a high degree of excellence. Care given to calligraphy and to the illumination of manuscripts has resulted in the production of deluxe editions fit for the libraries of kings and nobles. Literary works were illustrated with exquisite miniatures, painted in the margins or on separate folios with lovely colors that even after centuries still dazzle the eye. These frequently depict scenes of the Bible, recording both the interest of the passage and the piety of the artist.

Likewise, in terms of practical usefulness for textual criticism, the present volume aims to acquaint the beginner in palaeography with the habits of scribes and the difficulties they faced in copying manuscripts. Such information will enable one to understand and appreciate the reasons for the emergence of variant readings in manuscripts of the Greek Bible.

To this end the Plates in the second part of the book present and illustrate forms of Greek script from the second century B.C. to the fifteenth century A.D. Each of the forty-five manuscripts represented is interesting or important from the view point of palaeography and/or textual criticism of the Greek Bible. Here one will find, to take three or four examples, reproductions of a fragment of Deuteronomy in Greek that contains the sacred name of God (the Tetragrammaton) written in Hebrew letters (Plate 3), a leaf from a copy of the Gospel of Matthew in which

PREFACE

Pilate asks whether he should release *Jesus Barabbas* or Jesus who is called the Christ (Plate 25), a page of Luke's Gospel in which the second petition of the Lord's Prayer is replaced with 'Thy holy Spirit come upon us and cleanse us' (Plate 37), and the earliest manuscript that contains the extra verse in chapter 8 of the Book of Acts (Plate 22). There is also the occasional wry comment or indignant expostulation written in the margin of a manuscript (Plates 28 and 13). Nor have representations been forgotten that provide examples of lectionaries, musical neumes, bilingual texts, and illustrations of Scriptural scenes (for example, Potiphar's wife attempting to seduce Joseph, Plate 20, or the literalistic interpretation of metaphorical language in the Psalms, Plate 27).

Gratitude is expressed to all who have assisted in the production of this volume. It was Henry St. J. Hart, Dean and Tutor at Queens' College, Cambridge, who, more than a decade ago, wrote me suggesting that I should consider putting together an album of life-size facsimiles of New Testament Greek manuscripts. I am particularly indebted to Professor Eric G. Turner of the University of London for reading part one of the book and for making a variety of helpful comments and corrections. With characteristic generosity he also gave me the benefit of his wide palaeographical expertise when more than once I discussed with him certain specimens of Greek hands depicted in part two. Professor Demetrios J. Constantelos of Stockton State College kindly answered my questions concerning Byzantine liturgical manuscripts. Stephen S. Wilburn of the New York office of the Oxford University Press has maintained from the beginning an unfailing interest in the writing and publication of the volume.

The plates have been obtained from a variety of sources. By far the largest number are reproduced from the microfilms assembled over the years by the International Greek New Testament Project and now housed in the archives of the Ancient Biblical Manuscript Center at Claremont, California. Besides the convenience of consultation, the microfilms also offered the opportunity to choose a particular page that provides features of palaeographic and/or textual interest. Other reproductions, particularly of manuscripts of the Greek Old Testament, were made from collections of specimen folios of such manuscripts and, occasionally, from plates in facsimile editions of individual manuscripts. I am grateful to John Joseph Lolla, Jr., for his expertise in handling all such photographic details, and to Michael W. Holmes for assistance in correcting proofs and for compiling the palaeographical index. Figure 2 in the text is reproduced with permission from David Diringer's *The Alphabet* (Hutchinson, London), and Figures 1 and 3 to 8 from B. A. van Groningen's *Short Manual of Greek Palaeography* (A. W. Sijthoff, Leiden). Finally, thanks are due to the several libraries that provided the remaining photographs and that granted permission to reproduce them in this volume.

BRUCE M. METZGER

Contents

PART ONE: GREEK PALAEOGRAPHY

I. Definition and Summary of Research	page 3
§1. DEFINITION	3
§2. THE BEGINNINGS OF PALAEOGRAPHY	3
§3. MODERN TOOLS FOR PALAEOGRAPHIC RESEARCH	4
II. The Greek Alphabet	6
§4. THE ORIGINS OF THE GREEK ALPHABET	6
§5. GREEK NUMERALS	7
§6. OFFSHOOTS OF THE GREEK ALPHABET	10
III. The Pronunciation of Greek	11
§7. THE SOUNDS OF GREEK LETTERS	11
§8. ACCENT, ORAL AND WRITTEN	12
IV. The Making of Ancient Books	14
§9. THE MATERIALS OF ANCIENT BOOKS	14
§10. THE FORMAT OF ANCIENT BOOKS	15
§11. PEN, INK, AND OTHER WRITING MATERIALS	17
§12. PALIMPSESTS	18
V. The Transcribing of Greek Manuscripts	20
§13. SCRIBES AND THEIR WORK	20
§14. STYLES OF GREEK HANDWRITING	22
§15. UNCIAL HANDWRITING	24
§16. MINUSCULE HANDWRITING	25
§17. ABBREVIATIONS AND SYMBOLS	29
§18. <i>Scriptio continua</i>	31
§19. PUNCTUATION	31
VI. Special Features of Biblical Manuscripts	33
§20. THE TETRAGRAMMATON	33
§21. <i>Nomina Sacra</i>	36
§22. HEXAPLARIC SIGNS	38
§23. STICHOMETRY AND COLOMETRY	38
§24. SUPERSCRPTIONS AND SUBSCRIPTIONS	40
§25. CHAPTER DIVISIONS AND HEADINGS	40
§26. THE EUSEBIAN CANON TABLES	42
§27. THE EUTHALIAN APPARATUS	43
§28. HYPOTHESES	43
§29. LECTIONARY EQUIPMENT	44
§30. NEUMES	44
§31. MINIATURES	44
§32. GLOSSES, LEXICA, ONOMASTICA, AND COMMENTARIES	46
APPENDICES	
I. How to Estimate the Date of a Greek Manuscript	49
II. How to Collate a Greek Manuscript	52
III. Statistics Relating to the Manuscripts of the Greek New Testament	54

CONTENTS

PART TWO: PLATES AND DESCRIPTIONS (For a List of the Plates, see below)

page 57

BIBLIOGRAPHY 141

INDEXES

i. Scripture Passages Shown in the Plates	145
ii. Manuscripts Arranged According to their Sigla	145
iii. Manuscripts Arranged According to their Present Location	146
iv. Palaeographical Index	147

List of Figures

FIG. 1. Semitic and Greek alphabets	page 8
FIG. 2. Development of the Greek alphabet	23
FIG. 3. Usual combinations of minuscule letters	27
FIG. 4. Forms of letters in minuscule codices	27
FIG. 5. Combinations of letters in later minuscule codices	27
FIG. 6. Combinations of uncial letters	30
FIG. 7. Combination and superposition of letters	30
FIG. 8. Various abbreviations	30
FIG. 9. The Tetragrammaton in archaic Hebrew letters	34

List of Plates

1. Rahlfs 957. Manchester, John Rylands Library, P. Ryl. 458.	page 61
2. Rahlfs 803. Jerusalem, Palestine Archeological Museum, 7Q1 LXX Ex.	61
3. Rahlfs 848. Cairo, University Library, P. Fouad Inv. 266.	61
4. Gregory-Aland p ⁶² . Manchester, John Rylands Library, P. Ryl. 457.	63
5. Rahlfs 814. New Haven, Yale University, Beinecke Library, P. Yale 1.	63
6. Gregory-Aland p ⁴⁶ . Ann Arbor, University of Michigan, Inv. 6238.	65
7. Gregory-Aland p ⁶⁶ . Cologne-Geneva, Bibliotheca Bodmeriana, Pap. 2.	67
8. Gregory-Aland o212. New Haven, Yale University, Beinecke Library, Dura Parch. 24.	67
9. Gregory-Aland p ⁷⁶ . Cologne-Geneva, Bibliotheca Bodmeriana, Pap. XIV.	69
10. Rahlfs 967. Princeton, University Library, Scheide Pap. 1.	71
11. Rahlfs 962. Dublin, Chester Beatty Library, Pap. V.	73
12. Gregory-Aland o169. Princeton, Theological Seminary Library, Pap. 5.	73
13. Gregory-Aland B (Codex Vaticanus). Rome, Biblioteca Vaticana, Gr. 1209.	75
14. Gregory-Aland K (Codex Sinaiticus). London, British Library, Add. 43725.	79
15. Rahlfs G (Codex Colberto-Sarravianus). Leiden, University Library, Voss. Gr. Q8.	81
16. Gregory-Aland W (Codex Washingtonianus). Washington, Freer Gallery of Art, cod. o6.274.	83
17. Rahlfs W. Washington, Freer Gallery of Art, cod. Wash. I.	85
18. Gregory-Aland A (Codex Alexandrinus). London, British Library, Royal, I.D.v-viii.	87
19. Gregory-Aland D (Codex Bezae). Cambridge, University Library, Nn.2.41.	90, 91
20. Rahlfs L (Vienna Genesis). Vienna, Nationalbibliothek, Theol. Gr. 31.	93
21. Rahlfs Q (Codex Marchalianus). Rome, Biblioteca Vaticana, Gr. 2125.	95
22. Gregory-Aland E (Codex Laudianus). Oxford, Bodleian Library, Laud. 35.	97
23. Gregory-Aland o47. Princeton, University Library, Garrett ms. 1.	99
24. Gregory-Aland Ψ. Mount Athos, Laura ms. 172 (B'52).	99
25. Gregory-Aland Θ (Koridethi Codex). Tiflis, Inst. Rukop. Gr. 28.	100
26. Gregory-Aland 461 (Uspensky Gospels). Leningrad, State Public Library, Gr. 219.	103
27. Rahlfs 1101 (Khludov Psalter). Moscow, Historical Museum, cod. 129.	103
28. Gregory-Aland G (Codex Boernerianus). Dresden, Sächsische Landesbibliothek, A 145b.	105
29. Gregory-Aland 892. London, British Library, Add. 33277.	107
30. Rahlfs 1098. Milan, Biblioteca Ambrosiana, O 39 Sup.	109
31. Gregory-Aland S. Rome, Biblioteca Vaticana, Gr. 354.	110
32. Gregory-Aland 1739. Mount Athos, Laura ms. 184 (B'64).	113

CONTENTS

33. Gregory–Aland 1562.	Rome, Biblioteca Vaticana, Gr. 2138.	<i>page</i> 115
34. Prophetologion.	Jerusalem, Greek Patriarchal Library, Saba 247.	117
35. Gregory–Aland 623.	Rome, Biblioteca Vaticana, Gr. 1650.	119
36. Gregory–Aland 124.	Vienna, Nationalbibliothek, Theol. Gr. 188.	121
37. Gregory–Aland 700.	London, British Library, Egerton 2610.	123
38. Gregory–Aland 1303.	Princeton, Theological Seminary Library, 11.21.1900.	125
39. Gregory–Aland 1809.	Sinai, Monastery of St. Catherine, Gr. 286.	127
40. Gregory–Aland 165.	Rome, Biblioteca Vaticana, Barb. Gr. 541.	129
41. Gregory–Aland 1922.	Florence, Biblioteca Laurenziana, ms. Plut. X. 19.	131
42. Gregory–Aland 2060.	Rome, Biblioteca Vaticana, Gr. 542.	133
43. Gregory–Aland 223.	Ann Arbor, University of Michigan, ms. 35.	135
44. Gregory–Aland 1022.	Baltimore, Walters Art Gallery, ms. 533.	137
45. Gregory–Aland 69.	Leicester, Town Museum, Muniment Room, Cod. $\frac{6D32}{1}$	139

This page intentionally left blank

PART ONE

Greek Palaeography

This page intentionally left blank

I

Definition and Summary of Research

§1. DEFINITION

PALAEOGRAPHY (παλαιά + γραφή) is the science that studies ancient writing, preserved on papyrus, parchment, or paper, occasionally on potsherds, wood, or waxed tablets. Epigraphy deals with ancient inscriptions on durable objects, such as stone, bone, or metal, while numismatics is confined to coins and medals. The distinctions are less superficial than it may seem, for the forms of letters were determined in part by the nature and the size of the material that received them.

Greek palaeography has three aims: first, developing the practical ability of reading and dating the manuscripts; second, tracing the history of Greek handwriting, including not only the form and style of letters, but also such matters as punctuation, abbreviations, and the like; and third, analyzing the layout of the written page and the make-up of ancient book forms (codicology).

§2. THE BEGINNINGS OF PALAEOGRAPHY

PRIOR to the seventeenth century palaeography as a systematic study had not yet come into existence.¹ Confronted with variant readings in ancient manuscripts scholars were content to make *ad hoc* judgments concerning the relative age of documents. The development of palaeography as a discrete discipline had its origin in reaction to charges made in 1675 by the Bollandist scholar Daniel Papebroch denying the authenticity of certain documents constituting the credentials of several Benedictine monasteries. The learned Benedictine monks at St. Maur took up the challenge by founding the science of palaeography. The first treatise to deal with the classification of Latin manuscripts according to their age in the light of handwriting and other internal evidence was the monumental work of the Maurist Jean Mabillon (1632–1707), entitled *De Re Diplomatica* (Paris, 1681; 2 vols., Naples, 1789).

The first scholar who studied Greek palaeography in a systematic way was another Benedictine, Bernard de Montfaucon (1655–1741). Besides producing in fifteen folio volumes a vast work on Greek and Roman antiquities, Montfaucon laid the foundation for the study of Greek manuscripts in his *Palaeographia Graeca, sive de ortu et progressu literarum Graecarum . . .* (Paris, 1708). In this splendid work,

¹ Cf. P. Lehmann, 'Einteilung und Datierung nach Jahrhunderten,' in *Erforschung des Mittelalters*, i (Stuttgart, 1941; reprinted 1959), pp. 114–29; S. Rizzo, *Il lessico filologico degli umanisti* (Rome, 1973), pp. 114–68;

Patricia Easterling, 'Before Palaeography: Notes on Early Descriptions and Datings of Greek Manuscripts,' *Studia Codicologica*, ed. by Kurt Treu (Texte und Untersuchungen, cxxiv; Berlin, 1977), pp. 178–87.

still useful on account of the amount of material brought together, 'not only was a new discipline created, but, as it seems, was also perfected.'²

During the rest of the eighteenth century and the first part of the nineteenth century no significant advance was made in Greek palaeography.³ In 1811 Frid. Jas. Bast issued at Leipzig his 'Commentario palaeographica,' bound as an Appendix at the close of Gottfried H. Schaefer's edition of the works of Gregorius Corinthius.⁴ Here Bast discusses the forms of individual Greek letters, various compendia, letters designating numerals, and similar matters.

Among nineteenth-century scholars who gave attention to manuscript studies, the most productive by far was Constantine von Tischendorf (1815-1874). Besides undertaking repeated journeys to the Near East in search of Greek manuscripts, Tischendorf worked untiringly in editing the Septuagint, the New Testament (in eight editions), and the text of many apocryphal books. His knowledge of Greek uncial writing was unparalleled, being based upon an examination of some three hundred specimens.

§3. MODERN TOOLS FOR PALAEOGRAPHIC RESEARCH

BEGINNING about the middle of the nineteenth century international scholarship started to give serious attention to the discipline of palaeography and the publication of manuscripts in facsimile reproduction. During the twentieth century, with the development of improved techniques of photography, microfilms of manuscripts have made it virtually unnecessary to travel to far-away libraries in order to consult the documents themselves. Indexes, catalogues, and check-lists are now available to assist the study of all aspects of ancient manuscripts, the most comprehensive being the two volumes entitled *The Palaeography Collection in the University of London Library* (Boston, 1968). Volume 1 is an Author Catalogue, containing an estimated 10,800 cards; volume 2 is a Subject Catalogue, with an estimated 13,100 cards.

The manuscript treasures of the libraries in the Monastery of St. Catherine on Mt. Sinai (founded A.D. 527),⁵ in the Greek and Armenian Patriarchates in Jerusalem,⁶ and in the monasteries on Mount Athos⁷ are now available on 35 mm. negative film at the Library of Congress, Washington, D.C., from which copies

² So Viktor Gardthausen evaluates the work, in his *Griechische Palaeographie*; i, *Das Buchwesen im Altertum und im byzantinischen Mittelalter*, 2nd ed. (Leipzig, 1911), p. 7.

³ A convenient summary of Montfaucon's *magnum opus* was issued under the title *Epitome Graecae palaeographiae*, auctore D. Gregorio Placentino [Piacentini] (Rome, 1735; reprinted, Milan, 1970).

⁴ Being pp. 701-861 of Schaefer's volume.

⁵ *Checklist of Manuscripts in St. Catherine's Monastery, Mount Sinai*. Microfilmed for the Library of Congress, 1950. Prepared under the direction of Kenneth W. Clark (Washington, 1952). See also K. W. Clark, 'The Microfilming Projects at Mount Sinai and Jerusalem,'

The Library of Congress Quarterly Journal of Current Acquisitions, viii, no. 3 (May 1951), pp. 6-12.

⁶ *Checklist of Manuscripts in the Libraries of the Greek and Armenian Patriarchates in Jerusalem*. Microfilmed for the Library of Congress, 1949-50. Prepared under the direction of Kenneth W. Clark (Washington, 1953).

⁷ *A Descriptive Checklist of Selected Manuscripts in the Monasteries of Mount Athos*. Microfilmed for the Library of Congress and the International Greek New Testament Project, 1952-53. . . . Compiled under the general direction of Ernest W. Saunders (Washington, 1957). Cf. also Ernest W. Saunders, 'Operation Microfilm at Mt. Athos,' *Biblical Archaeologist*, xviii (1955), pp. 22-41.

may be obtained. Besides consulting the checklists of each of these collections, one should not overlook other, smaller collections which are listed in John L. Sharpe's 'Checklist of Collections of Biblical and Related Manuscripts on Microfilm in the United States and Canada.'⁸

What has been described as the most important research tool to be developed in the past fifty years for Greek studies based on manuscripts is the late Marcel Richard's *Répertoire des bibliothèques et des catalogues de manuscrits grecs*, 2nd ed. (Paris, 1958), with *Supplément I* (1958–1963) (Paris, 1964). This provides the titles of some 900 catalogues describing 55,000 Greek manuscripts belonging to 820 libraries or owners, in 415 locations where the manuscripts are at present deposited.⁹

Historical and critical surveys of published research on manuscripts are helpful in obtaining a general overview of the field. Notable among several such bibliographical aids are the surveys in *Bursians Jahresbericht über die Fortschritte der klassischen Altertumswissenschaft*, the most recent being Wilhelm Weinberger's 'Bericht über Paläographie und Handschriftenkunde' in vol. 236 (1932), pp. 85–113. Still more useful for the study of Greek palaeography are the summaries and evaluations prepared by Gérard Garitte, 'Manuscrits grecs, 1940–1950,' in *Scriptorium*, vi (1952), pp. 114–46, and 'Manuscrits grecs, 1950–1955,' *ibid.*, xii (1958), pp. 118–48; and by Jean Irigoin, 'Les manuscrits grecs, 1931–1960,' in *Lustrum*, vii (1962 [1963]), pp. 1–93, 332–5. Garitte lists and comments on 552 items published during the ten-year period and 680 items for the five-year period; Irigoin's comments are somewhat fuller on nearly 350 items published during the thirty-year period.

So far as the Greek manuscripts in the Vatican Library are concerned, a bibliographical tool of considerable usefulness is the wide-ranging volume compiled by Paul Canart and Vittorio Peri entitled, *Sussidi bibliografici per i manoscritti greci della Biblioteca Vaticana* (Studi e testi, 261; Vatican City, 1970), xv+709 pp. This work provides an index to studies of, monographs on, and references to individual Greek manuscripts in the Vatican collections.

For details concerning the papyri of the Greek Bible, including extensive bibliographies, one may consult with profit Kurt Aland's *Repertorium der griechischen christlichen Papyri*; i, *Biblische Papyri* (Berlin and New York, 1976). Broader in scope, but less detailed for each item, is Joseph van Haelst's *Catalogue des Papyrus littéraires juifs et chrétiens* (Paris, 1976), which, besides Biblical papyri, includes patristic texts, liturgical and private prayers, magical texts, and Latin texts.¹⁰

⁸ *Scriptorium*, xxv (1971), pp. 97–109. Sharpe's list may now be supplemented with Paul Canart, 'Les inventaires spécialisés de manuscrits grecs,' *Scriptorium*, xxiv (1970), pp. 112–16.

⁹ For plans to put the information contained in Richard's *Répertoire* into a computer data-bank at the University of Toronto, see W. M. Hayes in *Studia codi-*

ologica, ed. by Kurt Treu (Texte und Untersuchungen, cxxiv; Berlin, 1977), pp. 231–35.

¹⁰ For a detailed review of both Aland's and van Haelst's volumes, with rather extensive corrections for both, see T. C. Skeat, *Journal of Theological Studies*, n.s. xxix (1978), pp. 175–86.

II

The Greek Alphabet

§4. THE ORIGINS OF THE GREEK ALPHABET

DOWN to about the end of the fifth century B.C., there was no common alphabet recognized by all Greek city-states, but each had its own local variety.¹¹ Although certain elements were common to all, there were differences as to form, significance, and order of letters. Eventually the Ionic alphabet of twenty-four letters came to supplant the epichoric alphabets. At Athens, where twenty-one letters were commonly used, it was decreed in 403 B.C. that in the future all public acts should be inscribed in Ionic characters. Within a very few years all the other city-states that used non-Ionic alphabets followed the lead of Athens.

According to a widespread tradition, the invention of the Greek alphabet is ascribed to Cadmus, the son of Agenor king of Phoenicia. The semi-legendary account tells how Cadmus, in the fourteenth century B.C., settled in Boeotia, bringing with him an alphabet that comprised sixteen letters.¹² In support of the essential truth of this tradition one can point to (a) the fact that the name Cadmus is undoubtedly derived from a common Semitic root which means 'an Easterner' (cf. Hebrew קדמון), and (b) the testimony of Herodotus (*Hist.* v.58 and 59), who calls the letters of the Greek alphabet 'Cadmean letters' (Καδμήϊα γράμματα) and 'Phoenician letters' (Φοινικήϊα γράμματα).

Quite apart from such considerations, however, further support is found in the circumstance that (c) the names of many of the Greek letters are pure Semitic words,¹³ and (d) the letters stand in the sequence of the Northwest Semitic alpha-

¹¹ See L. H. Jeffery, *The Local Scripts of Archaic Greece; A Study of the Origins of the Greek Alphabet and its Development from the Eighth to the Fifth Centuries B.C.* (Oxford, 1961); Benedict Einarson, 'Notes on the Development of the Greek Alphabet,' *Classical Philology*, lxii (1967), pp. 1-24, with 'Corrigenda and Addenda,' pp. 262 f.; *Das Alphabet. Entstehung und Entwicklung der griechischen Schrift*, ed. by Gerhard Pfohl (Darmstadt, 1968); and Joseph Naveh, 'The Greek Alphabet, New Evidence,' *Biblical Archaeologist*, xliii (1980), pp. 22-25.

¹² Concerning Cadmus and the origins of the Greek alphabet, see Rudolf Pfeiffer, *History of Classical Scholarship, from the Beginning to the End of the Hellenistic Age* (Oxford, 1968), pp. 19-24, and Ruth Blanche Edwards, 'Greek Legends and the Mycenaean Age, with Special Reference to Oriental Elements in the Legend of Kadmos,' unpublished Ph.D. dissertation, University of Cambridge, 1968, esp. pp. 218-24. A revised version of Dr. Edwards's research is to be published through A. M. Hakkert under the title, *Kadmos the*

Phoenician: A Study in Greek Legends and the Mycenaean Age.

¹³ The names currently used of other Greek letters arose at a later date, and are of Greek derivation. The ancient name of *epsilon* was εἰ, but when the sound of the diphthong αι could no longer be distinguished from that of ε, schoolmasters found it necessary to designate ε by the epithet ψιλόν ('simple'). Similarly the ancient name of *upsilon* was υἱ, but when the sound of ου could no longer be distinguished from it, schoolmasters again made use of the same epithet. Furthermore, the name ω μέγα, in distinction from δ μικρόν, is of relatively recent origin; the earliest firm reference cited by Liddell-Scott-Jones (the work *Partitiones*, attributed to Ælius Herodianus, is spurious and of unknown date) is the *Canones* drawn up by the grammarian Theognostus in the ninth century; cf. Klaus Alpers, *Theognostos Περὶ ὀρθογραφίας. Überlieferung, Quellen und Text der Kanones 1-84* (Diss., Heidelberg, 1964), p. 91, lines 25 f. One is therefore not greatly surprised that in