

VOCALIC PHONOLOGY IN NEW TESTAMENT MANUSCRIPTS

by

DOUGLAS LLOYD ANDERSON

(Under the direction of Jared Klein)

ABSTRACT

This thesis investigates the development of iotacism and the merger of \omicron and ω in Roman and Byzantine manuscripts of the New Testament. Chapter two uses onomastic variation in the manuscripts of Luke to demonstrate that the confusion of η and ι did not become prevalent until the seventh or eighth century. Furthermore, the variations $\upsilon \sim \eta$ and $\upsilon \sim \iota$ did not manifest themselves until the ninth century, and then only adjacent to resonants. Chapter three treats the unexpected rarity of the confusion of \omicron and ω in certain second through fifth century New Testament manuscripts, postulating a merger of \omicron and ω in the second century CE in the communities producing the New Testament. Finally, chapter four discusses the chronology of these vocalic mergers to show that the Greek of the New Testament more closely parallels Attic inscriptions than Egyptian papyri.

INDEX WORDS: Phonology, New Testament, Luke, Greek language, Bilingual interference, Iotacism, Vowel quantity, Koine, Dialect

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CHAPTER 1

INTRODUCTION

Regional Distinctions in Greek

From its earliest literature Greek was not one unified language; rather it encompassed a number of dialects spoken by separate communities. The *Iliad* and the *Odyssey* contain elements indicative of distinct dialects. Then, in the Classical and Hellenistic periods, various Greek communities spoke their own dialects as literature and inscriptions testify. These dialects differed on the levels of morphology, inflection, and lexicon. Such distinctions define the Greek dialects for philologists.

Even with the wide-spread acceptance of Attic Koine as the *lingua franca* in the Mediterranean and parts of Asia under Alexander, local dialects continued to be spoken. A Northwest Greek Koine, showing a mixture of Attic and Northwest Greek elements, is in evidence as late as the second century BCE.¹ Also, Doric Koine, being an Attic and Doric mixture, appears in inscriptions in the last three centuries BCE.² This may mark the end of Doric on some level, but there is evidence that it persisted as a patois. For a collection of Spartan inscriptions to Artemis Orthia utilize one specific type of Doric, namely Laconian, in the second century CE.³ Buck considers these inscriptions an artificial revival reflecting the language still spoken by the Laconian peasants.⁴ Lesbian,

1. C. D. Buck, *The Greek Dialects* (Chicago, IL: University of Chicago Press, 1955), 178.

2. *Ibid.*, 176.

3. *Ibid.*, 272

4. *Ibid.*, 272-273.

Laconian, and Elean inscriptions show this same dialect revival in the first and second centuries CE.⁵ Furthermore, the Modern Greek dialect of Tsakonian, sharing many features with Laconian, shows the survival of a dialect distinct from Attic in a mountainous area of the Peloponnese.⁶ As further evidence for the persistence of spoken Doric, Strabo, Suetonius, and Pausanias all testify to the existence of Doric in their times, that is in the first century BCE through the second century CE.⁷ Although Attic Koine became the dominant dialect in the eastern Mediterranean, evidence of communities speaking other Greek dialects occurs into the second century CE.

Yet the dialectal differences mentioned above do not distinguish the Greek of the New Testament from other types of contemporaneous Greek. Moulton considered the Greek Bible a "*Durchschnittsprache* which avoided local peculiarities."⁸ Speaking of these kinds of dialect distinctions, Meillet says, "les particularités locales ont été presque partout éliminées."⁹ Consequently, it is not fruitful to distinguish New Testament Greek from other types of Greek as defined by classical philology.

The manifestation of sound changes evidenced by Modern Demotic Greek does distinguish the various types of Greek in Roman times. One such change is the fricativization of the unaspirated voiced stop β from /b/ to /v/.¹⁰ Late Roman New

5. Ibid., 180.

6. R. Browning, *Medieval and Modern Greek* (Cambridge: Cambridge University Press, 1983), 124.

7. L. R. Palmer, *The Greek Language* (Atlantic Highlands, NJ: Humanities Press, 1980), 190.

8. J. H. Moulton, *A Grammar of New Testament Greek, Vol. 1: Prolegomena* (Edinburgh: T. & T. Clark, 1908), 40.

9. A. Meillet, *Aperçu d'une histoire de la langue grecque. Études et commentaires*, 55 (Paris: C. Klincksieck, 1965), 329.

10. O. Eleftheriades, *Modern Greek* (Palo Alto, CA: Pacific Books, 1985), 58.

Testament manuscripts give evidence of this sound change, one instance being the variation $\delta\alpha\beta\iota\delta \sim \delta\alpha\upsilon\iota\delta$ (Lk 1:27). Furthermore, a number of Greek vowels merged to /i/, namely $\epsilon\iota$, ι , η , $\omicron\iota$, υ , and $\upsilon\iota$,¹¹ at different times in different places from the second century BCE to the Byzantine era. This is iotacism. Another important sound change that took place in the late Roman era was the loss of vowel quantity distinction and the concomitant merger of \omicron and ω . These changes did not occur uniformly among the Greek-speakers of Egypt, Palestine, Attica, and other regions. Admittedly, some of the changes happened in the same century in separate communities, such as the merger of $\epsilon\iota$ and $\bar{\iota}$ in Attica and Egypt.¹² Yet for some other changes, several centuries elapse between the frequent demonstration of a change in one community and another. The merger of \omicron and ω in Egypt and Attica¹³ as well as the merger of ι and η in Egypt and the Greek-speaking communities producing the New Testament are examples of this phenomenon. The timing of these developments differentiates the Greek-speaking communities of the Roman and even the Byzantine era.

Two sound changes will be investigated in this thesis to illuminate the phonology of the communities writing and copying the New Testament, namely the iotacism of certain vowels and the merger of \omicron and ω . Firstly, onomastic variation in the Gospel of Luke demonstrated by Roman and Byzantine manuscripts as well as the Gothic and Vulgate versions will reveal the chronology of iotacism in these communities. Secondly, the

11. Ibid., 57.

12. L. Threatte, "The Alleged Conservatism of Attic Epigraphical Documents: A Different View," in *Hesperia Supplements, Vol. 19*, ed. E. Vanderpool (Athens: American School of Classical Studies, 1982), 149.

13. Ibid.

unexpected rarity of the confusion of ο and ω in certain late Roman manuscripts may reveal the timing of the merger of ο and ω in these Christian communities. Through the chronology of iotacism and the merger of ο and ω in this text one may better understand the relationship between the Greek of these Christian communities and the Greek witnessed in Egypt, Attica, and elsewhere.

One approach to understanding the variety in the Greek language during Roman times is bilingual interference. Both the Egyptian papyri and the New Testament Gospels were produced in an environment where Greek existed alongside an unrelated language spoken by a significant portion of the population. However, the effects of the other language on Egyptian Greek and New Testament Greek are quite distinct.

In Egypt the dialects of Coptic influenced the speech and writing of Greek. One influence on the language of the papyri was the lack of distinction in Coptic of certain Greek phonemes. For example, Coptic did not distinguish voiced and voiceless stops.¹⁴ As a result, Egyptian writers of Greek confused γ and δ with κ and τ.¹⁵ In the papyri of the Fayum, one finds frequent variation of ρ and λ.¹⁶ So one may conclude that the speakers of the Fayum had only one liquid phoneme. Also, Coptic η could stand for an allophone of /i/ and the phoneme /e/.¹⁷ This bivalence may explain the confusion of η and ι in the Egyptian papyri. Another level of influence of Coptic on the language of the Greek papyri was syntax. For example, the Greek papyri show the Coptic phenomenon

14. F. T. Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, Vol. 1: Phonology (Milano: Instituto Editoriale Cisalpino, 1975), 46.

15. *Ibid.*, 76-77.

16. *Ibid.*, 102.

17. *Ibid.*, 242.

of "further specification of a relative by a resumptive personal pronoun."¹⁸ Also, the incorporation of Coptic loanwords likely affected the Greek papyri, although I located no studies elucidating any examples. Along with other factors, the wide-spread impact that the phonology of Coptic had on the Greek papyri makes them quite distinct from the Greek texts of Attica and Palestine.

Language interference in Palestine involved additional complications. For not only did Greek exist alongside Latin and the popularly-spoken Aramaic, but Hebrew also affected the linguistic and cultural milieu. The Aramaic evidence consists primarily of sepulchral inscriptions and literary fragments from Qumran.¹⁹ From the eighth century BCE Aramaic had been the *lingua franca* of the Near East²⁰ and in the first century CE was still "the *most commonly* used language."²¹ Yet Aramaic did not totally supplant Hebrew in Palestine, for Qumran provides ample evidence of a community using Hebrew.²² Admittedly, there is hardly any clear inscriptional evidence of Hebrew in the first century CE (some sepulchral inscriptions could be Hebrew or Aramaic, especially given the borrowing of *bar* and *ben* into the respective languages).²³ Many Latin inscriptions survived from this period, although the impact of Latin seems to be limited to

18. Ibid., 46.

19. J. A. Fitzmeyer, "The Contribution of Qumran Aramaic to the Study of the New Testament," in *A Wandering Aramean: Collected Aramaic Essays*, ed. J. A. Fitzmeyer (Missoula, MT: Scholars Press, 1979), 101-102.

20. J. A. Fitzmeyer, "The Study of the Aramaic Background of the New Testament," in *A Wandering Aramean: Collected Aramaic Essays*, ed. J. A. Fitzmeyer (Missoula, MT: Scholars Press, 1979), 6.

21. J. A. Fitzmeyer, "The Languages of Palestine in the First Century AD," in *The Language of the New Testament*, ed. S. E. Porter (Sheffield: Sheffield Academic Press, 1991), 147.

22. Ibid., 159.

23. Ibid., 159-160.

Roman governance.²⁴ These were the three languages other than Greek in first century Palestine, yet what influence they had on the Greek of the New Testament is greatly debated.

There is conflicting evidence as to what impact Aramaic and Hebrew had on Palestinian Greek texts. A statement by Josephus seems to indicate Aramaic had a profound impact on Greek on the level of *parole*. For he says,

ἔχω γὰρ ὁμολογούμενον παρὰ τῶν ὁμοεθνῶν πλεῖστον αὐτῶν κατὰ τὴν ἐπιχώριον καὶ παρ' ἡμῖν παιδείαν διαφέρειν καὶ τῶν Ἑλληνικῶν δὲ γραμμᾶτων καὶ ποιητικῶν μαθημάτων πολλὰ ἐσπουδασα μετασχεῖν τὴν γραμματικὴν ἐμπειρίαν ἀναλαβῶν, τὴν δὲ περὶ τὴν προφορὰν ἀκρίβειαν πάτριος ἐκωλύσεν συνήθεια. παρ' ἡμῖν γὰρ οὐκ ἐκείνους ἀποδεχονται τοὺς πολλῶν ἔθνῶν διάλεκτον ἐκμαθόντας καὶ γλαφυρότητι λέξεων τὸν λόγον ἐπικομψεύοντας²⁵ Jos. *Ant.* 20.12.1

His πάτριος συνήθεια hindered τὴν περὶ τὴν προφορὰν ἀκρίβειαν which Feldman renders as "the habitual use of my native tongue has prevented my attaining precision in the pronunciation."²⁶ Yet this difficulty did not manifest itself in Josephus' Greek writings. In the view of Thackeray, Josephus' *oeuvre* was "an excellent specimen of

24. Ibid., 129.

25. "For my compatriots admit that in our Jewish learning I far excel them. I have also laboured strenuously to partake of the realm of Greek prose and poetry, after having gained a knowledge of Greek grammar, although the habitual use of my native tongue has prevented my attaining precision in the pronunciation. For our people do not favour those persons who have mastered the speech of many nations, or who adorn their style with smoothness of diction." trans. L. H. Feldman, *Josephus IX* (Cambridge, MA: Harvard University Press, 1965), 527-529.

26. Ibid.

Atticistic Greek of the first century."²⁷ Josephus offers some explanation for his fine Greek, χρησόμενος τισι πρὸς τὴν ἑλληνίδα φωνὴν συνέργοις.²⁸ Even though Josephus claims to have learned Greek with great difficulty, the texts that he produced shows little interference from Aramaic.

Some Jewish communities seemed to favor Greek over Aramaic or Hebrew. A letter from a Jewish revolutionary, Bar Kokhba or one his associates, states a preference for writing in Greek,

εγγραφη
δ[ε] εληνιστι δια
τ[ο ορ]αν μη ευρη-
θ[η]ναι εβραεστι
γ[ρα]ψασθαι²⁹

This early second century papyrus indicates that there was probably a Jewish community in Palestine speaking primarily Greek. Additionally, Fitzmeyer considers the Ἑλληνισταί from the dispute between the Ἑλληνισταί and the Ἑβραῖοι in Ac 6:1 to be "Christian Jews who habitually spoke Greek only."³⁰ Not only were there communities in Palestine who spoke Greek as a second language, but there were also groups that spoke primarily Greek.

27. H. S. J. Thackeray, *Josephus, the Man and the Historian* (New York: Ktav Publishing House, 1968), 104.

28. "using assistants for the sake of the Greek." *Jos. Apion* 1.9.

29. "This letter was written in Greek because no reason was found to write in Hebrew." B. Lifshitz edited this papyrus in "Papyrus grecs du désert de Juda," *Aegyptus* 42 (1962): 240-256.

30. Fitzmeyer (1991), 144.

Given the multi-lingual environment of Palestine in the first century CE, one would expect some influence from Aramaic, Hebrew, and Latin on the Greek of the New Testament. There is no evident bilingual interference on the level of phonology like there was in the Egyptian documentary papyri. One may explain this absence by pointing out the following distinctions: the literary nature of the New Testament as opposed to the documentary characteristics of the papyri, Egyptian autographs as opposed to New Testament manuscripts regularized through successive copies, and finally the difference between the phonemic systems of Coptic and Aramaic. The Greek of the New Testament does show the influence of Aramaic, Hebrew, and Latin through borrowed phrases and words. There is an abundance of Semitisms resulting from the use of the Old Greek translation of the Hebrew Bible and from a "spoken Jewish-Greek."³¹ For example, καὶ ἐγένετο (ἐγένετο δέ) for Hebrew וַיְהִי /wayəhî/ indicates the progress of the narrative, rendered in old translations 'it came to pass.'³² There are also a number of Latinisms like ἄξιός ἐστιν ὧ παρέξη τοῦτο from Lk 7:4 equivalent to *dignus est cui hoc praestes*.³³ Such is the nature of the multilingual interference upon the Greek of the New Testament.

Both Egyptian Greek and New Testament Greek show the effects of other languages. Phonological confusion resulting from Greek phonemes undifferentiated in Coptic comprises a key feature of bilingual interference upon Egyptian Greek. In New

31. F. Blass and A. Debrunner, *A Greek Grammar of the New Testament and Other Early Christian Literature*, trans. R. W. Funk (Chicago, IL: University of Chicago Press, 1961), 3.

32. W. Bauer *A Greek-English Lexicon of the New Testament and Other Early Christian Literature*, eds. W. F. Arndt and F. W. Gingrich (Chicago, IL: University of Chicago Press, 1979), 159.

33. *Ibid.*, 6.

Testament Greek, this feature is not significant, but the presence of Semitisms from the cultural milieu plays an important role. Consequently, these two contemporaneous corpora represent two separate types of Greek.

The study of these sound changes has adhered to the following methodological practices. Onomastic variants come from the apparatus of the International Greek New Testament Project's *The Gospel According to Luke, Part One: Chapters 1-12*.³⁴ Even such a massive undertaking as this edition (a collaborative project involving 300 scholars over a 35-year period produced this edition³⁵) could not hope to produce a complete and totally accurate apparatus, yet it is sufficient to give a fairly accurate characterization of iotacism in the manuscripts of Luke in the first millennium CE. Manuscripts p⁶⁶, p⁷⁵, S, A, and D provided the variants pertaining to the merger of o and ω. Further discussion will follow in the pertinent section. Only variants showing a minimal pair in another manuscript have been considered. Consequently, examples of metathesis have been disregarded. Also, we have generally not included morphological variants that were otherwise grammatically acceptable. As a shorthand for the compilation of manuscripts the terms *maxime* and *multi* have been employed, as defined in the List of Sigla. Additionally, the fourth edition of the United Bible Societies' *Greek New Testament* has

34. *The Gospel According to Luke, Part One: Chapters 1-12*, eds. American and British Committees of the International Greek New Testament: R. H. Lightfoot, A. Souter, *et al* (Oxford: Clarendon Press, 1984).

35. E. J. Epp, "The International New Testament Project: Motivation and History." *Novum Testamentum*, Vol. 39 (1997), 7.

provided the *Ausgangstext* for comparison against the variants unless otherwise noted.³⁶

These considerations have guided the investigation that follows.

List of Sigla

Go = Gothic Version. Based on *Die Gotische Bibel*. ed. W. Streitberg. Heidelberg: Carl Winter Universitätsverlag. 2000.

Lvg = Latin Vulgate Version. Based on *Biblia Sacra Iuxta Vulgatam Versionem*. eds. B. Fischer, I. Gribomont, *et al.* Dritte, verbesserte Auflage. Stuttgart: Deutsche Bibelgesellschaft. 1983.

< > = the actual orthography of a particular language.

// = the proposed pronunciation of a grapheme or word.

maxime = a preponderance of manuscripts show a given reading with less than eight uncials and 15 minuscules at variance.

multi = at least five uncials contain a certain variant.

etc. = when a variant is classified as *multi*, the minuscules are omitted and thus indicated.

The manuscript classification system of Caspar René Gregory was followed: papyri are indicated by p¹, p²...; uncials are indicated by an initial 0, namely 046, 047... (uncials 02 through 045 follow Wettstein's use of Latin and Greek capital letters, namely A, B, C...Γ, Δ, Θ...).

S = Ⲛ. Following the practice of the International Greek New Testament Project, the Codex Sinaiticus (Ⲛ according to Tischendorf) is assigned the symbol S and the Codex

36. K. Aland, B. Aland, *et al.*, *The Greek New Testament* (Stuttgart: Deutsche Bibelgesellschaft, 1998).

Vaticanus 354 (S according to Wettstein) is reassigned as 028.

* = the text of the first hand or original scribe.

^c = a correction in a manuscript either by the original scribe or a later hand.

CHAPTER 2

IOTACISM

The Variation ει ~ ι

The orthograph ει merged with long ι, /i:/, as the pronunciation of ει changed from /e:/ to /i:/. There is some evidence in the sixth century BCE for the neutralization of E/EI and I adjacent to resonants and under the influence of assimilation. Threatte considers some of these instances questionable based on the crudeness of these texts, mostly dipinti and graffiti.³⁷ Other examples he explains as "careless omissions or inaccurate renditions of diphthongs," unrelated to the sound change /e:/ > /i:/.³⁸ Teodorsson gives only insecure examples to substantiate his claim that this merger became general in certain phonetic positions in the fifth century BCE in Attic.³⁹ All the other examples are ambiguous or explainable by other factors. Threatte gives the first clear example of this variation indicating a pronunciation /i:/ for ει in the fourth century BCE, and does not consider the phenomenon common until the end of the second century BCE.⁴⁰

37. L. Threatte, *The Grammar of Attic Inscriptions, Vol. 1: Phonology* (Berlin: Walter de Gruyter 1980), 190. One example is Κλινίας for Κλεινίας in dipinti on three red-figure vases, J. D. Beazley, *Attic Red-Figure Vase Painters* (Oxford: Clarendon Press, 1963), 988.

38. Πισίστρατος for Πεισιστρατος appears in sixth-century graffito, *Hesperia Supplements, Vol. 8*. (Athens: American School of Classical Studies, 1949), 405-408, plate 60. δοκις for δοκεῖς comes from a graffito on a black-figure cup in J. D. Beazley, *Paralipomena to Attic Black-Figure and Red-Figure Vase Painters* (Oxford: Clarendon Press, 1971), 72.

39. S.-T. Teodorsson, *The Phonemic System of the Attic Dialect: 400-340 B.C.* (Göteborg: Acta Universitatis Gothoburgensis, 1974), 177-178.

40. Threatte (1980), 195.

1.000. The variation of ι ~ ει

1.100. In initial position:

1. ιερουσαλημ *maxime* ~ ειερουσαλημ 69; Go iairusalem; Lvg hierusalem Lk 2:25
2. ιεριχω *maxime* ~ ειεριχω S; Go iaireikon; Lvg hiericho Lk 10:30
3. ιρ 60 577 157 ~ ειρ 954 1542* 110 1184 11642; Go heris; Lvg heris Lk 3:28

The first two examples show the typical variation of ι ~ ει, indicating the sound /i/. Gothic does not give the grapheme <ei>, which would indicate /i:/. Instead, Gothic represents this variation with <i>, indicating /i/. Note that in medial and final positions, the Gothic Bible transcribes /i(:)/ as <ei> far more frequently than <i>. Wulfila may simply consider these antevocalic instances of /i/ as short, thus writing the short <i>.

In Köbler's *Gotisches Wörterbuch* only a few words appear that begin with *ei-*: the subordinating conjunction *ei*, its compounds, and **eisarn*.⁴¹ Also, there is the very common pronoun, *eis* 'they.' **eisarn* is the only non-compounded polysyllabic word in Gothic beginning with *ei-*. Pleiner considers this term to be a borrowing from Celtic.⁴² Suffice it to say, **eisarn* is an unusual word in the Gothic lexicon. In contrast to *ei-*, many Gothic words begin with *i-*.⁴³ Based on the relative number of words in *i-*, it is not surprising that Wulfila represented these names with <i>.

Also note that Go <i> is always a vowel or part of a digraph, so Go <j> would

41. G. Köbler, *Gotisches Wörterbuch* (Leiden, Netherlands: Brill, 1989), 131-133.

42. R. Pleiner, "Early Metallurgy in Europe." 375-415. *The Coming of the Age of Iron* (New Haven, CT: Yale University Press, 1980).

43. Köbler (1989), 288-319.

represent an initial non-syllabic yod.⁴⁴ And in Attic there is little evidence that initial unaccented ι preceding a vowel became consonantal.⁴⁵ Hence this <i> is vocalic.

This vowel does not correspond to the common Biblical Hebrew forms יְרוּשָׁלַיִם /yərûšālayim/ and יְרוּשָׁלַם /yərûšālēm/. The rough breathing of the Vulgate form *hierusalem* reflects one of the Greek folk-etymologies of this word: ἱερο-σαλυμα – ‘temple security or temple shalom’ from Josephus: τὸ γὰρ ἱερὸν κατὰ τὴν Ἑβραίων γλῶτταν ὠνόμασε τὰ Σόλυμα ὃ ἐστὶν ἀσφάλεια.⁴⁶ Smith⁴⁷ gives a number of examples with rough breathing: the Pilgrim of Bordeaux⁴⁸ and Eucherius⁴⁹ write *hierusalem*; Eusebius Ἱερουσαλημ; and Jerome *hierusolyma*. The Vulgate form above agrees with the first of these variants. Smith also cites examples without rough breathing: Jerome, Willibard⁵⁰, Bernard⁵¹, and Theodoric⁵² all write *Ierusalem*. The Gothic <i> and the Vulgate <i> both support /i/.

The variation ιρ ~ ειρ does not indicate /i/ on the basis of the versional evidence. Instead, Go <e> and Lvg <e> indicate /e:/. Note that Go <e> always represents long /e:/. The textual evidence for the two variations consists of a few minuscules and lectionaries,

44. J. W. Marchand, *The Sounds and Phonemes of Wulfila's Gothic* (The Hague, Netherlands: Mouton, 1973), 36.

45. Threatte (1980) 207-208.

46. Josephus, *AJ* VII.68.

47. G. A. Smith, *Jerusalem: The Topography, Economics, and History From the Earliest Times to A.D. 70* (Newark, NJ: Ktav Publishing House, 1972), 264.

48. *Non vidi* 333 CE.

49. *Non vidi* ca. 427-440 CE.

50. *Non vidi* ca. 722 CE.

51. *Non vidi* 867 CE.

52. *Non vidi* ca. 1172 CE.

and the minuscules are all Byzantine, dating from the twelfth to the fifteenth century.⁵³ The preponderance of manuscripts, including all the earliest ones, give the variant ηρ. Therefore, the name ειρ ~ ιρ ~ ηρ was read /ir/ infrequently, whereas the predominant reading was /er/.

1.200. In medial position

1.210. Where Gothic is <ei> and Vulgate is <i>

1. αμυναδαβ *maxime* ~ αμειναδαβ D Θ 1352*; Go ameinadabis; Lvg aminadab Lk 3:33
2. γαλιλαιαν *maxime* ~ γαλειλαιαν B*; Go galeilaian; Lvg galilaeam Lk 2:39
3. γαλιλαιας *maxime* ~ γαλειλαιας B* Θ; Go galeilias; Lvg galilaeae Lk 4:31
4. γαλιλαιας *maxime* ~ γαλειλαιας B* W; Go galeilaia; Lvg galilaeam Lk 8:26
5. δαυιδ *maxime* ~ δαυειδ B* D W Ξ; Go daweidis; Lvg david Lk 1:27, 2:4²
6. δαυιδ *maxime* ~ δαυειδ B* D W Ξ 0177; Go daweidis; Lvg david Lk 2:4¹
7. δαυιδ *maxime* ~ δαυειδ B D W Go daweidis; Lvg david Lk 6:3
8. ειαρος 0211 1342 ~ ειαειρος R; Go iaeirus; Lvg iairus Lk 8:41
9. ελιακειμ *maxime* ~ ελειακειμ E 047 131 477; Go aileiakeimis; Lvg eliachim Lk 3:30
10. ελιακιμ N 33 892 1071 1542 1675 I12 I70 I150 I1127 ~ ελιακειμ *maxime*; Go aileiakeimis; Lvg eliachim Lk 3:30
11. ελισταβερ *maxime* ~ ελεισαβερ B*; Go aileisabaith; Lvg elisabeth Lk 1:5 cf. 1:7 1:13 1:24 1:36 1:40 1:41 1:57

53. K. Aland, *Kurzgefasste Liste der griechischen Handschriften des neuen Testaments* (Berlin: Walter de Gruyter, 1994), 50, 81, 222.

12. ελισαβεθ *I*253 ~ ελεισαβεθ D; Go aileisabai*th*; Lvg elisabeth Lk 1:5
13. ελισαβεθ *I*253 ~ ελεισαβεθ Θ; Go aileisabai*th*; Lvg elisabeth Lk 1:13
14. ελισσαιου *multi*: C E F H K M X Γ Θ Λ Π Ω 028 047 etc. ~ ελεισσαιου B*; Go haileisai*u*; Lvg heliseo Lk 4:27
15. εσλιμ L N Ψ 71 131 892 954 1203 1241 1242 1458 1675 *I*12 *I*150 *I*1127 ~ εσλειμ 179 517 1194 1424 2542 *I*299 *I*1056 *I*1642; Go aizleimis Lvg esli Lk 3:25
16. ηλιαν *maxime* ~ ηλειαν p⁷⁵ B* D Θ; Go heleian; Lvg heliam Lk 9:19
17. ηλιου *maxime* ~ ηλειου A B*; Go heleiins; Lvg heliae Lk 4:25
18. ησαιου *maxime* ~ ησαιου 179; Go eisaeiins (für esaeiins); Lvg esaiiae Lk 4:17
19. ιαιρος E* 28^C 33 179 472 1220 *I*253^C *I*524 *I*1016 *I*1056 *I*1074 ~ ιαιρος *maxime*; Go iaeirus Lvg iairus Lk 8:41
20. ιεριχω *maxime* ~ ιεριχω *multi*: p⁷⁵ B* L Ξ 0190 etc.; Go iaireikon; Lvg hiericho Lk 10:30
21. ιωριμ S N U V 33 123 472 478 1012 1192 1313 1338 1347 1351 1355 1542 *I*1127 ~ ιωρειμ *multi*: p⁴ A B D E G H K L M W X Y Δ Θ Λ Π Ψ Ω 028 047 0102 0124 0211 etc.; Go ioreimis; Lvg iorim Lk 3:29
22. λευιν *multi*: D E U V X Δ Λ Π Ω 028 etc. ~ λευειν *multi*: S A B C L M N R W Γ Θ Ξ 047 0211; Go laiwwi; Lvg levi Lk 5:27
23. λευιν *I*1074 ~ λευειν 1220; Go lawweis; Lvg levi 5:29
24. λευις *multi*: E K M N U V Γ Δ Λ Π Ψ Ω 028 047 etc. ~ λευεις *multi*: S A B C L R W X Θ Ξ 0211; Go lawweis Lk 5:29
25. σαμαριτων *multi*: S A C L W X Y Γ Λ Ξ 0211 etc. ~ σαμαρειτων *multi*: p45 p75 B D

E F G K M U V Δ Θ Π Ψ Ω 028 047 0135 etc.; Go samareite; Lvg samaritanorum

Lk 9:52

26. σεμειν 892 ~ σεμειν multi: p4 S B L Θ 0124 1424*; Go saimaieinis; Lvg semei

Lk 3:26

27. σιδωνος *maxime* ~ σειδωνος S A B* Θ; seidone; Lvg sidonis Lk 6:17

28. σιδωνι *maxime* ~ σειδωνι p⁴⁵ A B* Θ; Go seidonai; Lvg sidone Lk 10:13

29. σιδωνι *maxime* ~ σειδωνι p⁴⁵ p⁷⁵ B*; Go seidonai; Lvg sidoni Lk 10:14

30. σιδωνιας *multi*: S A B^C C X Γ Θ^C Ψ etc. ~ σειδωνιας B* W; Go seidonais; Lvg

sidoniae Lk 4:26

31. φαρισαιου *maxime* ~ φαρεισαιου B*; Go fareisaius; Lvg pharisaei Lk 7:36, 7:37

32. φαρισαιων *maxime* ~ φαρεισαιων p⁴ B* Θ; Go fareisaie; Lvg pharisaeorum Lk 6:2

33. φαρισαιων *maxime* ~ φαρεισαιων B*; Go fareisaie; Lvg pharisaeis Lk 7:36

34. φαρισαιοι *maxime* ~ φαρεισαιοι B* Θ; Go fareisaieis; Lvg pharisaei Lk 7:30

All of the above examples of the variation ι ~ ει point to Go <ei> and Vulgate <i>, corresponding to /i:/. Even Go *laiwwi* (Lk 5:27) indicates correspondence to Go <ei> since nominative *laiwweis* (Lk 5:29) and accusative *laiwwi* show that Wulfila grouped this with the declension pattern of *hairdeis/hairdi*. Hence the <i> of *laiwwi* is morphological based on the <eis> of *laiwweis*. The only other instance that may not give this correspondence is ησαιου ~ ησαειου where the Vulgate reads *esaiiae*. This could be read *e-sai-ae*, but as the Greek variation η-σα-ει-ου indicates as well as the Gothic, whose

only conceivable reading is *ei-sa-ei-ins*, the Vulgate must read *e-sa-i-ae*. Thus medial ι ~ ει in these examples represents the sound /i:/.

1.220. Where Gothic is <i> and Vulgate is <i>

1. βηθσαιδα *multi*: C E G K L M R V X Y Δ Λ Ξ Π Ω 028 047 0115 0211 etc. ~
βηθσαιδα N; Go *baihsaidan*; Lvg *bethsaida* Lk 10:13
2. ηλιας *maxime* ~ ηλειας p⁷⁵ S B* D; Go *helias*; Lvg *helias* Lk 9:8
3. ηλιας *maxime* ~ ηλειας p⁴⁵ p⁷⁵ S B* D Θ 179; Go *helias*; Lvg *helias* Lk 9:30
4. ματταθιου *multi*: S A D E K L M N U V W Y Γ Δ Λ Π Ψ Ω 028 047 0124 0211 ~
ματταθειου 161 l1056; Go *mattathiwis*; Lvg *matthathiae* Lk 3:25
5. ματταθιου *maxime* ~ ματταθειου 161 l854; Go *mattathiaus*; Lvg *matthathiae* Lk 3:26
6. μαθθαθιου l150 l1127 l1642 ~ μαθθαθειου l1056; Go *mattathiaus*; Lvg *matthathiae* Lk
3:26

As shown for initial position, Go <i> may represent /i/ in the variation ι ~ ει, while the Vulgate has consistently shown <i>. Hence these instances indicate the short vowel /i/.

1.230. Where Gothic is <e> and Vulgate is <i>

1. ναιμ 5 115 ~ ναειμ 047 1 205 209 1582* 1604; Go naem; Lvg naim Lk 7:11
2. ναιν *multi*: ρ⁷⁵ S A B C D F H K L M R U V W X Δ Π Ψ Ω 028 etc. ~ ναειν *multi*: E G Y Γ Θ Λ etc.; Go naem; Lvg naim Lk 7:11

Since this constitutes a hapax, it is insignificant for determining phonology, although there is a possible explanation. The sounds <ei> and <e> may have merged between the time of Wulfila and the earliest extant Gothic manuscripts since the error of <e> for <ei> occurs 28 times in the Gothic corpus.⁵⁴

1.240. Where Gothic is <e> and Vulgate is <e>

1. ηρωδις 179 ~ ηρωδεις Θ; Go herodes; Lvg herodes Lvg 9:9
2. νιρει 0211 ~ νειρει 983; Go nerins; Lvg neri 3:27

These examples evident in solitary manuscripts are best treated as iotacisms where the preferred reading is η. Also, these variants are extant in manuscripts no earlier than the ninth century when the confusion of η with ι and ει was common.

54. Marchand (1973), 51.

1.300. In final position.

1.310. Where Gothic is <ei> and Vulgate is <i>.

1. α̅δ̅δ̅ι *multi*: D K N U V W Λ Π Ψ 0124 etc. ~ α̅δ̅δ̅ει *multi*: p⁴ S A B E G H M Y Γ Δ Θ
Ω 028 047 0102 etc.; Go addeins; Lvg addi Lk 3:28
2. ε̅σ̅λ̅ι *multi*: D K U V W X Π 0102 0124 etc. ~ ε̅σ̅λ̅ει *multi*: S A B E G H M Y Γ Δ Θ Λ
Ω 028 047 0211 etc.; Go aizleimis; Lvg esli Lk 3:25
3. η̅λ̅ι *multi*: p⁴ D E K L N U V W X Δ Π 0124 0211 etc. ~ η̅λ̅ει *multi*: S A B G H M Y
Γ Θ Λ Ψ Ω 028 047 0102; Go heleis; Lvg heli Lk 3:23
4. λ̅ε̅υ̅ι *multi*: A D E H K L M N U V W X Y Δ Π Ψ Ω 028 0124 etc. ~ λ̅ε̅υ̅ει *multi*: S B^C
G Γ Θ Λ 047 0102 0211 etc.; Go laiwweis; Lvg levi Lk 3:24
5. λ̅ε̅υ̅ι *multi*: D E K M N U V W Δ Π Ψ Ω 028 etc. ~ λ̅ε̅υ̅ει *multi*: p⁴ S A B G H L Y Γ Θ
Λ 047 0102 0124 0211 etc.; Go laiwweis; Lvg Levi Lk 3:29
6. λ̅ε̅υ̅ι K Y Ψ 5 28 131 517 544 827 1009 1077 1295 1352 1604 2096 2766 148 ~ λ̅ε̅υ̅ει
1080 1292 1890; Go laiwwi; Lvg levi Lk 5:27
7. λ̅ε̅υ̅ι Y ~ λ̅ε̅υ̅ει D 1080; Go laiwweis; Lvg levi Lk 5:29
8. μ̅ε̅λ̅χ̅ι *multi*: D E K N U V W X Π Ψ 0124 etc. ~ μ̅ε̅λ̅χ̅ει *multi*: p⁴ S A B E G H L M Y
Γ Δ Θ Λ Ω 028 047 0102 etc.; Go mailkeis; Lvg melchi Lk 3:24
9. μ̅ε̅λ̅χ̅ι *multi*: D K N U V W X Π Ψ 0102 0124 etc. ~ μ̅ε̅λ̅χ̅ει *multi*: p⁴ S A B E G H L
M Y Γ Δ Θ Λ Ω 028 047 0211 etc.; Go mailkeins; Lvg melchi Lk 3:28
10. σ̅ε̅μ̅ει *multi*: D K U V W Δ Π 0211 etc. ~ σ̅ε̅μ̅ει *multi*: A E G H M N X Y Γ Λ Ψ Ω
028 047 0102 etc. ; Go saimaieinis; Lvg semei Lk 3:26

As in medial position, in final position there is a predominance of evidence for ι ~ ει representing /i(:)/. One distinction of the final position is the balance of evidence for both variants. In every occurrence above where a multitude of witnesses exist for ι or ει, a multitude of witnesses likewise exhibit the other variant. So these two graphemes are interchangeable in final position. For *laiwwi*, see discussion above.

1.320. Where versional evidence is inconclusive.

1. αρνι L X 157 213 ~ αρνει S B Γ 1241 (v.l. αραμ); Go aramis; Lvg aram Lk 3:33
2. ιωνναι p⁴ vid S B L Δ Θ 13 33 69 543 788 826 828 1241 ~ ιωνναι 1604; Go jannins;
Lvg iannaē Lk 3:24
3. ιωαννι 179 ~ ιωαννει S A Θ 579; Go iohannen; Lvg iohanni Lk 7:18
4. ιωαννι 179 ~ ιωαννει S A L; Go iohannen; Lvg iohanni Lk 7:22
5. νερι 892* ~ νερει 983; Go nerins; Lvg neri Lk 3:27
6. νηρι *multi*: D K N U V W X Π Ψ 0124 etc. ~ νηρει *multi*: p⁴ S A B E G H L M Y Γ Δ
Θ Λ Ω 028 047 0102 0124 etc.; Go nerins; Lvg neri Lk 3:27
7. σιδωνι *maxime* ~ σιδωνει N; Go seidonai; Lvg sidone Lk 10:13
8. σιδωνι *maxime* ~ σιδωνει N; Go seidonai; Lvg sidoni Lk 10:14
9. χωραζιν N 5 60 66 83 115 157 158 262^C 265^C 267^C 348 372 443 480 544 577 669^C 903
954 1009 1216 1229 1247 1351 1355 1443 1579 1630 1685 2322 2399 2542 2757
112 180 11761 ~ χωραζειν *multi*: E V Γ Π Ω 047 0211 etc.; Go kaurazein; Lvg

corazain Lk 10:13

10. χοραζιν R U Λ 1 6 7 16 22 118 124 161 174 205 209 229 230 262* 265* 267* 349
477 478 565 700 713 1005 1012 1187 1192 1194 1195 1203 1210 1215 1241
1313 1338 1342 1365 1582 1604 1654 1675 2372 2487 2613 l10 l32 l70 l76 l150
l211 l253 l299 l524 l547 l859 l890 l1016 l1074 l1231 l1579 l1599 l1627 l1634
l1642 l1663 ~ χοραζειν *multi*: p⁴⁵ p⁷⁵ S A B C G K L M X Y Δ Θ Ξ Ψ 028 0115
etc.; Go kaurazein; Lvg corazain Lk 10:13

In the example of αρνι ~ αρνει, both the Gothic and Vulgate versions give readings based on the variant reading αραμ. νερι ~ νερει and ιανναι ~ ιανναει yield n-stems *nerins* and *jannins*, thus the Gothic morphology masks the Greek phonology. The Vulgate *neri* points to Greek /i/, but the Vulgate *iannae* points to another phenomenon. Here Jerome did not have or did not consider information beyond the form itself as he did with Lvg *hierusalem*. So he treated –αι as a diphthong without diaeresis, transliterating it –ae. Or alternately, he considered ιαννα to be the nominative, thus supplying a genitive in –ae.

The Gothic evidence corresponding to the ι ~ ει variation indicates some persistence of the distinction between short and long vowels in the fourth century. Gothic differentiates short and long i-vowels by the graphemes <i> and <ei>, respectively, whereas Latin writes both short and long /i/ with <i>. Initially the error of ει for ι only occurred when ι was long.⁵⁵ The sound merger of ει and ι spread to ĩ as the distinction of quantity and quality between ĩ and ĩ subsided.⁵⁶ The loss of quantity distinction occurred

55. Threatte (1980) 190.

56. Ibid., 207.

in the late third century BCE for Ptolemaic Koine⁵⁷ and in the second century CE for Attic.⁵⁸ In the examples above, all the interchanges in final position correspond to Go <ei>, that is /i:/. In medial position, nineteen different words correspond to Go <ei>. Whereas only three instances correspond to Go <i>, and only one of these names, *ηλιας* ~ *ηλειας*, exhibits the variation prior to the sixth century. That variation *ει* ~ *ι* did not occur until the sixth century CE or later in some of these names may indicate that the scribes considered *ι* to be a short vowel in these instances. This would correspond to Go <i> and indicate some persistence of quantity distinction. Thus, in only one example does Wulfila treat a medial or final *ι* having shown an early interchange of *ι* and *ει* as a short vowel. Although the three examples in initial position all correspond to Go <i>, the medial and final positions show that the long vowel *ῑ* predominates in the *ι* ~ *ει* variation. Thus, vowel isochrony was not necessarily generalized in the early history of New Testament manuscripts.

The Variation *ι* ~ *η*

Some evidence indicates a pronunciation of *η* distinct from *ι*. The variation *η* ~ *ι* is “exceedingly rare” prior to 150 CE in inscriptions.⁵⁹ Likewise, this variation was “rather infrequent” in the non-literary texts from Egypt between 325 BCE and 0 CE.⁶⁰ In contrast to these statements, Caragounis makes the ludicrous postulation that “the popular

57. Teodorsson (1977), 238.

58. Threatte (1980), 385.

59. F. T. Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods, Vol. 1: Phonology* (Milano: Instituto Editoriale Cisalpino, 1975), 165.

60. S.-T. Teodorsson, *The Phonology of Ptolemaic Koine* (Göteborg: Acta Universitatis Gothoburgensis, 1977), 220.

pronunciation of H was that of I" from the fifth century BCE until modern times.⁶¹ He explains his reasoning in the statement, "*The important thing is not when this process ended, but when it started.*"⁶² Now, the earliest evidence of confusion shows change only on the level of some dialect or idiolect. It is only when most speakers of a language manifest the confusion that one may say that the language has undergone a sound change. Based on the frequency of this variation in Attica and Egypt, one may conclude that most speakers of Egyptian and Attic Greek distinguished η and ι at least until the first century BCE and second century CE respectively.

In later Egyptian papyri, η and ι demonstrate a general merger by the second century CE.⁶³ Furthermore, Gignac says the variation occurs "very frequently in all phonetic conditions throughout the Roman and Byzantine periods."⁶⁴ Admittedly, he clarifies this statement, saying that this interchange increases in frequency later in the corpus.⁶⁵ Gignac aims to vitiate the assertion that the variation of η and ε indicates that η was still an e-vowel. For he claims that η ~ ε occurs under the same phonetic conditions as ε ~ ι, thus showing that η is equivalent to /i/.⁶⁶ So the frequent confusion of η and ι after the first century CE indicates the merger of these two sounds to /i/ among the Greek-speakers of Egypt.

Yet this evidence may not offer information concerning the phonology of the New Testament because of bilingual interference. The distribution of this variation in the

61. Caragounis (2004), 370.

62. Ibid., 377.

63. Gignac (1975), 235.

64. Ibid.

65. Ibid., 242.

66. Ibid., 242, 242-246, 249-262.

Roman era supports such interference. For the interchange of η and ι occurs disproportionately in Ptolemaic papyri and in some other regional dialects of Koine affected by bilingualism.⁶⁷ Such an argument is especially compelling considering the bivalence of Coptic ⲏ.⁶⁸ In all dialects of Coptic, ⲏ could indicate /i/ as in ⲏⲥⲉ 'Isis'⁶⁹ or /ε(:)/ as in ⲫⲗ-ⲏⲣ 'son of Er' and ⲫⲗ-ⲙⲁⲗⲉⲗⲉⲏⲗ 'son of Mahalaleel'.⁷⁰ Consequently, Egyptians may have pronounced η as /i/, but other Roman-era Greek-speakers did not necessarily share this pronunciation.

2.000. The variation ι ~ η

2.100. Where the variations ι, ει, and η are present, the η-variant is the following.

1. αμηναδαβ 16 213 346 517 1077 1338 1542 180 1211 1854 11056; Go ameinadabis; Lvg aminadab Lk 3:33
2. αρνη 131 (v.l. αραμ); Go aramis; Lvg aram Lk 3:33
3. γαληλαιαν 0211 543 1859; Go galeilaian; Lvg galilaeam Lk 2:39
4. γαληλαιας 0211 2766; Go galeilaia; Lvg galilaeam Lk 8:26
5. γαληλαιας 0211; Go galeilaias; Lvg galilaeae Lk 4:31
6. ειαηρος 11663; Go iaeirus; Lvg iairus Lk 8:41

67. Ibid., 248.

68. Ibid., 249.

69. J. Vergote, "Les Prototypes égyptiens des mots coptes *me-mēi* 'vérité, justice'," *Bulletin de l'Institut Français d'Archéologie Orientale* 61 (1962): 75-76.

70. Lk 3:28 and 3:37 from G. W. Horner, *The Coptic version of the New Testament in the Northern Dialect, otherwise called Memphitic and Bohairic* (Osnabrück: Otto Zeller, 1969), 42, 44.

7. ελιακημ 2 472; Go aileiakeimis; Lvg eliachim Lk 3:30
8. ελησαβετ 0211 1859 11074; Go aileisabai*th*; Lvg elisabeth Lk 1:5 cf. 1:7 1:13 1:24
1:36 1:40 1:41 1:57
9. ελησαβεθ Θ; Go aileisabai*th*; Lvg elisabeth Lk 1:5
10. ελησσαιου 0211 179 1859; Go haileisaiu; Lvg heliseo Lk 4:27
11. ηερουσαλημ 179; Go iairusalem; Lvg hierusalem Lk 2:25
12. ηρ *maxime*; Go heris; Lvg heris Lk 3:28
13. ηρωδης *maxime*; Go herodes; Lvg herodes Lk 9:9, cf. ηρωδης 179 ~ ηρωδεις Θ
14. ιαηρος 21 28* 69 477 1859; Go iaeirus; Lvg iairus Lk 8:41
15. ιωαννη *multi*: D F G H K L M R U V W X Y Γ Δ Λ Ξ Π Ψ Ω 028 047 etc.; Go
iohannen; Lvg iohanni Lk 7:18
16. ιωαννη *multi*: F G H K M U V W X Y Γ Δ Θ Λ Ξ Π Ψ Ω 028 047 0211 etc.; Go
iohannen; Lvg iohanni Lk 7:22
17. λευη 2 983 2542; Go laiwweis; Lvg levi Lk 3:24
18. λευη 2; Go laiwweis; Lvg Levi Lk 3:29
19. λευην 179; Go laiwwi; Lvg levi Lk 5:27
20. λευης 983 1890; Go laiwweis; Lvg levi Lk 5:29
21. μελχη 0211 179 983 2542; Go mailkeis; Lvg levi Lk 3:24
22. μελχη 179 213; Go mailkeins; Lvg melchi Lk 3:28
23. ναην 0211 28 1009 11056 11074; Go naem; Lvg naim Lk 7:11
24. νηρει *multi*: p⁴ S A B E G H L M Y Γ Δ Θ Λ Ω 028 047 0102 0124 etc.; Go nerins;
Lvg neri 3:27

25. νηρη 22 157 /10 /184 /1642; Go nerins; Lvg neri Lk 3:27, cf. νηρει 0211 ~ νειρει 983
26. σεμεη 544 2542 /80 /1056; Go saimaieinis; Lvg semei Lk 3:26
27. σιδωνη 13 69 826 828 /1056; Go seidonai; Lvg sidone Lk 10:13
28. σιδωνη 13; Go seidonai; Lvg sidoni Lk 10:14
29. σηδωνι 179; Go seidonai; Lvg sidoni Lk 10:14
30. σηδωνος /1579*; Go seidone; Lvg sidonis Lk 6:17
31. χωραζην 69 /854; Go kaurazein; Lvg corazain Lk 10:13
32. φαρησαιοι 472; Go fareisaieis; Lvg pharisaei; Lk 7:30
33. φαρησαιων 472; Go fareisaie; Lvg pharisaeis Lk 7:36
34. φαρησαιου 472; Go fareisaiaus; Lvg pharisaei Lk 7:36
35. φαρησαιου 472; Go fareisaiaus; Lvg pharisaei Lk 7:37

Only ιωαννη, ηρωδης, ηρ, and νηρει manifest η in the *Ausgangstext* with all the other η-variants having an i-type vowel (ι or ει). For the first three of these names, the likely readings are Ιωάννη, Ἡρώδης, and Ἥρ. Also, the η of νηρει shows itself in the *Ausgangstext* as νηρι. The phonology of ιωαννη based on Gothic and Latin forms is inconclusive since both are inflectional endings. But the versional witnesses of ηρωδης, ηρ, and νηρει give evidence for /e/ from Go <e> and Lvg <e>. Apart from αρη where the versional evidence is uninformative, the η in all the other instances points to /i/ corresponding to Go <ei>/<i> and Lvg <i>. The one exception is the ultima of νηρη for

which only the Vulgate gives clear evidence, indicating /i/. Consequently, most of these instances of η demonstrate the confusion of ι/ει with η to represent the underlying sound /i/.

2.200. The variation is only ι ~ η

This variation ι ~ η manifests itself distinctly from that of ι ~ ει ~ η in the Gothic witnesses. To be sure some examples of ι ~ η indicate /i/ in the versions, but the preponderance of evidence point to some /e/ sound. In contrast, only two names (Ἡρωιδης and Ἡρ) showing the variation ι ~ ει ~ η definitively indicate /e/ and one name does so ambiguously: ναιν ~ ναειν; Go naem; Lvg naim Lk 7:11.

2.210. In initial position.

1. ιαννα 13 ~ ηαννα 346; Go iohanna; Lvg iohanna Lk 8:3

2. ιουδαιας *maxime* ~ ηουδαιας 179; Go iudaias; Lvg iudaea Lk 6:17

3. ισκαριωτην *maxime* ~ ησκαριωτην 0211; Go iskarioten; Lvg scarioth *cl.* iscariotem Lk

6:16

In each of these instances, the η appears in only one manuscript. Also, each of these manuscripts, namely 179, 346, and 0211, date from the ninth century or later. Therefore, all the instances of ι ~ η in initial position are peripheral variants, exhibiting Byzantine-

era etacism, indicating /i/. Even though in these instances the variation ει failed to appear, the phenomenon in 2.210 mirrors that of 2.100 where η varied with ι/ει.

2.210. In medial and final position.

2.211. Where Gothic is <e> and Vulgate is <e>.

1. ασιρ 179 ~ ασηρ *maxime*; Go aseris; Lvg aser Lk 2:36
2. βιθλεεμ 053 2 13 472 828 983 1009 1203 1241 1579 l48 l70 l1074 l1579 ~ βηθλεεμ
multi: S A B C D F G H K L M U V W Y Γ Δ Θ Λ Ξ Ψ Ω 028 047 0135 0177
0211 etc.; Go *bethla*[i]haim; Lvg bethleem Lk 2:4
3. βιθλεεμ Ω 047 179 346 472 1009 1192 1241 1579 l1074 ~ βηθλεεμ *maxime*; Go
bethlahaim; Lvg bethleem Lk 2:15
4. γαδαρινων E 0211 115 343 716 903 1009 1424 1630 l253 l524 ~ γαδαρηνων *multi*: S^C
A G H K M R U V W Y Γ Δ^C Λ Π Ψ 028 047 etc.; Go gaddarene; Lvg
gerasenorum Lk 8:37
5. γαδαρινων K Λ 0211 69 179 343 472 565* 1009 1071 1216 1542 1630 l184 l211 l253
l524 l1016 l1056 l1074 ~ γαδαρηνων *multi*: A C E F G H M P R U V W Y Γ Δ Π
Ψ Ω 028 047 0135 0202 etc.; Go gaddarene; Lvg gerasenorum Lk 8:26
6. γερασινων 579 ~ γερασηνων p⁷⁵ B C* D; Go gaddarene; Lvg gerasenorum Lk 8:37
7. ιερουσαλιμ 179 ~ ιερουσαλημ *maxime*; Go iairusalem; Lvg hierusalem Lk 10:30
8. ιωαννης 179 ~ ιωαννης *maxime*; Go iohannes; Lvg iohannes Lk 7:33
9. ιωαννης 179 ~ ιωαννης *maxime*; Go iohannes; Lvg iohannes Lk 9:54

10. ιωσιφ 0211 ~ ιωσηφ *maxime*; Go iosefis; Lvg ioseph Lk 3:24
11. μαγδαληνη 346 ~ μαγδαληνη *multi*: S A B D E G K L M P U V W Γ Δ Θ Ξ Π^C Ψ Ω
028 0211 etc.; Go magdalene; Lvg magdalene Lk 8:2
12. μαγδαλινη *multi*: F H X Y Λ Π* 047 etc. ~ μαγδαληνη *multi*: S A B D E G K L M P
U V W Γ Δ Θ Ξ Π^C Ψ Ω 028 0211 etc.; Go magdalene; Lvg magdalene Lk 8:2
13. μωσις 179 ~ *multi*: μωσης p⁴⁵ p⁸² A E G H M P U V Γ Λ 028 047 0211 etc.; Go
moses; Lvg moyses Lk 9:30
14. ρισα 179 l1056 ~ ρησα *maxime*; Go resins; Lvg resa; Lk 3:27

Of the fourteen instances showing variations of ι ~ η in non-initial position corresponding to Go <e> and Lvg <e>, eight of these show the variation ι in only one or two manuscripts. These manuscripts are 179 346 0211 l1056, all dating from the ninth century CE or later. At Lk 8:26 and 8:37 the ι ~ η variation occurs in the distinct textual variants γαδαρηνων ~ γερασηνων. The Vulgate uniformly supports one variant, and the Gothic Bible the other. Both versions read <e> at the location of interest, giving partial support for two of the η-variants. In the two instances at 8:26 and 8:37, it seems clear that Wulfila and Jerome read η and transcribed Go <e> and Lvg <e> respectively, considering η to represent a front vowel more open than /i/. Although readings of η as /i/ may be in evidence, these two learned men of the fourth century CE did not hold to this pronunciation in this word.

Only one of the variants shows a multitude of witnesses for both variants, μαγδαλινη ~ μαγδαληνη. The majuscules S A B D E G K L M R U V W Γ Δ Θ Ψ Ω 028 etc. support

the latter reading while F H X Y Λ Π* 047 support the former reading. Should μαγδαληνη be the original reading, there is a possible explanation for the division of manuscripts. μαγδαληνη is based on the city name מִגְדָּלָה /migdlā⁷¹,⁷² with the denominative place-name suffix -νός, -νή added.⁷³ Copyists could have read μαγδαληνη as ending in the suffix -ινη. This suffix is a patronymic in Hesiod, Ἰσμεανός: Ἰσμεανίνη.⁷⁴ It appears as other feminine types in Menander: Καρίνη⁷⁵ and in Aelius Herodianus: ἠρωίνη.⁷⁶ Then, in Koine -ινος remains a productive suffix for adjectives of material.⁷⁷ So the correction from -ινη to -ινη may have occurred by morphological analogy. If this explanation is valid with μαγδαλη-νη coming from מִגְדָּלָה /migdlā⁷¹/, then this provides evidence that η was rather open, quite unlike close /i/. Additionally, the morphological analogy shown in μαγδαληνη ~ μαγδαλινη may apply to the variants γαδαρηνων ~ γαδαρινων and γερασηνων ~ γερασινων. These particular examples are not necessarily instances of phonological confusion. But should these readings be considered phonological, they still would not place the confusion of ι and η prior to the eighth century CE based on the dating of the manuscripts containing the ι-variants.

71. Bauer (1979), 484.

72. M. Jastrow, *A Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature. Vol. II* (London: Luzac & Co., 1903), 726.

73. H. W. Smyth, *Greek Grammar* (Cambridge, MA: Harvard University Press, 1956), 852.

74. Buck, C. D., *A Reverse Index of Greek Nouns and Adjectives* (Hildesheim: Georg Olms, 1970), 288.

75. A. Meineke, *Fragmenta Comicoorum Graecorum, Vol. 4*, 0541.040.

76. Aelius Herodianus, *Περὶ ὀρθογραφίας* Vol. 3.2, 518.

77. R. Browning, *Medieval and Modern Greek* (Cambridge: Cambridge University Press, 1983), 38-39.

2.212. Where Gothic is <ai> and Vulgate is <e>.

1. βιθσαιδα Ψ 047 472 1009 1071 /184 /1127 ~ βηθσαιδα *multi*: p⁴⁵ S B C E F G M P R
Ξ Π 0115 0135 0181 0202 0211 etc.; Go baidssaiidan; Lvg bethsaida Lk 9:10
2. βιθσαιδαν L 115 477 ~ βηθσαιδαν *multi*: A H U V W Y Γ Δ Θ Λ Ω 028 etc.; Go
baidssaiidan; Lvg bethsaida Lk 9:10
3. βιθσαιδαν 69 115 1392 ~ βηθσαιδαν *multi*: p⁴⁵ S U W Γ etc. ~ βαθσαιδαν 788; Go
baithsaidan; Lvg bethsaida Lk 10:13
4. βιθσαιδα Ψ 472 565 1009 1071 ~ βηθσαιδα *multi*: C E G K L M R V X Y Δ Λ Ξ Π Ω
028 047 0115 0211 etc.; Go baithsaidan; Lvg bethsaida Lk 10:13

Only one word exhibits Go <ai> and Lvg <e>, making this a hapax. Nevertheless, Go <ai> and Lvg <e> do indicate an e-type sound, accepting the view of Ebbinghaus and Heidermanns that the proto-Germanic diphthong *ai* had become a monophthong.⁷⁸

2.213. Where Gothic is <ei> and Vulgate is <i>.

1. σιμων *maxime* ~ σιμων 179 /859; Go seimon; Lvg simon Lk 7:40
2. σιμωνος *maxime* ~ σιμωνος 118; Go seimonis; Lvg simonis Lk 5:3
3. σιμωνα *maxime* ~ σιμωνα 179; Go seimonau; Lvg simonem Lk 5:4
4. σιμωνα *maxime* ~ σιμωνα 179*; Go seimon; Lvg simonem Lk 6:14
5. σιμωνα *maxime* ~ σιμωνα 1187; Go seimon; Lvg simonem Lk 6:15

78. W. Braune, *Gotische Grammatik: mit Lesestücken und Wörterverzeichnis*. rev. F. Heidermanns, E. A. Ebbinghaus, et al (Tübingen: Max Niemeyer Verlag, 2004), 40.

6. ιωριμ S N U V 33 123 472 478 1012 1192 1313 1338 1347 1351 1355 1542 /1127 ~
 ιωρημ 6 27 477^c 517 669* 700 827 903 954 1009 1071 1077 1223 1342 1452
 1675 2757 /12 /70 /299 /1056; Go ioreimis; Lvg iorim Lk 3:29

This is another instance where η appears in only a few marginal instances. In each of these examples, only one or two manuscripts give η. The Gothic and Vulgate versions read ι as /i/ which represents almost all manuscripts, but a very small number of scribes confused η and ι as /i/.

2.214. Where Gothic is <i> and Vulgate is <i>.

1. φιλιππον *maxime* ~ φιληππον L; Go fillipu; Lvg philippum Lk 6:14
2. σαλαθηλ *maxime* ~ σαλαθηηλ 544 /854; Go salathielis; Lvg salathihel Lk 3:27

Based on the versions, the reading is the short vowel /i/, but the data here is too insignificant for comment.

Certain manuscripts give more substantial testimony for ι ~ η variation. The frequency of etacism in each manuscript has been determined based on the data from the variations ι / ει ~ η and ι ~ η. Thus onomastic variations from Luke 1-10:30 provide the data for this analysis. Of the 8 papyri, 62 majuscules, 128 minuscules, and 41 lectionaries cited as witnesses in Luke,⁷⁹ 10 majuscules, 56 minuscules, and 21

79. *The Gospel According to Luke, Part One: Chapters 1-12*, eds. American and British Committees of the International Greek New Testament: R. H. Lightfoot, A. Souter, *et al.* (Oxford: Clarendon Press, 1984), viii-xi.

lectionaries give at least one clear instance of confusion between ι and η. Note the critical edition used here does not canvass all extant manuscripts. For the number of extant manuscripts containing a "continuous text of the Gospel of Luke, complete or fragmentary" surpasses 1787.⁸⁰ About half of the minuscules and lectionaries and a smaller portion of the majuscules cited by the IGNTP Gospel of Luke contain an instance of this phonological merger. In addition, the following manuscripts contain three or more instances: 0211 2 69 179 346 472 477 983 1009 1071 1542 2542 1184 1859 11056 11074. These manuscripts give the clearest evidence for the phonological merger of ι and η.

Given the complex manuscript history of the New Testament, the dating of the merger of ι and η poses a difficult problem. But several approaches do present themselves. For example, one may attempt to connect these variations to a particular text-type. Also, one may consider which manuscripts exhibit the variation and which do not. These two approaches will be considered presently.

Firstly, the dating of manuscripts that contain or lack the variation in question will be considered. The earliest New Testament minuscules date to the ninth century CE, whereas the earliest papyri and majuscules date to the second and third century CE respectively.⁸¹ Because the earliest minuscules of any sort come from the ninth century, these manuscripts offer little data of interest for dating. But the papyri and majuscules are much more useful for dating the merger of the sounds ι and η.

80. K. Witte, K. Aland, *et al.*, *Text und Textwert der griechischen Handschriften des neuen Testaments. IV. Die synoptischen Evangelien. 3. Das Lukasevangelium. Band 3,1: Handschriftenliste und vergleichende Beschreibung* (Berlin: Walter de Gruyter, 1999), 1.

81. K. Aland and B. Aland, *The Text of the New Testament: An Introduction to the Critical Editions and to the Theory and Practice of Modern Textual Criticism.* trans. E. F. Rhodes (Grand Rapids, MI: William B. Eerdmans, 1989), 81.

Caragounis studied the orthographic variations of the Gospel of John in the Codex Sinaiticus,⁸² dating to the fourth century CE.⁸³ He found 470 orthographical errors, but there were no instances of confusion between ι and η.⁸⁴ As a comparison, consider the variation of ει for ι in the Roman-era Attic Inscriptions, "it is unusual to find a large text dated after the end of the first century B.C without some example of EI for ι."⁸⁵ In the Gospel of John from the Codex Sinaiticus, there were 32 instances of ει for ι and 418 instances of ι for ει.⁸⁶ Caragounis not only searches Codex Sinaiticus, but he also searches p⁶⁶ for orthographic errors.⁸⁷ p⁶⁶ contains the Gospel of John in a fragmentary form from 1-21:17.⁸⁸ In this papyrus, he finds 492 orthographic errors, but there is not one occasion of the variation ι ~ η. Caragounis naively projects modern views of spelling into the second and fourth century CE to denigrate the scribes producing these texts as *anorthographoi*.⁸⁹ Yet Comfort and Barrett give a different evaluation of the scribe producing p⁶⁶, "the handwriting indicates that it was probably the work of a professional scribe...with a practiced calligraphic hand."⁹⁰ Regardless of the soundness of Caragounis' methodology, the data speaks for itself. One may not conclude that the lack of this variation resulted from rigorous education in spelling, given the large number of errors

82. Caragounis (2004), 497.

83. Aland (1994), 19.

84. Caragounis (2004), 497.

85. Threatte (1980), 198.

86. Caragounis (2004), 497.

87. Caragounis (2004), 502-514.

88. P. W. Comfort and D. P. Barrett, *The Complete Text of the Earliest New Testament Manuscripts* (Grand Rapids, MI: Baker Books, 1999), 366.

89. Caragounis (2004), 502.

90. Comfort and Barrett (1999), 366, 371.

where phonological mergers have already occurred, i.e. $\iota \sim \epsilon\iota$ and $\epsilon \sim \alpha\iota$.⁹¹ From Caragounis' studies one concludes that these particular second and fourth century scribes distinguished between the sounds ι and η .

It is also beneficial to consider which manuscripts exhibit the confusion between ι and η by onomastic variation in Luke 1-10:30. One may exclude the minuscules since this manner of writing did not begin until the ninth century CE and hence is not particularly useful for dating this variation.⁹² In contrast, the dates of papyri and majuscules range from the second to the tenth/eleventh centuries CE.⁹³ Consequently, the early papyri and majuscules are more useful for dating the merger of ι and η . None of the papyri exhibited any evidence of this merger. Admittedly, the texts of p³, p⁷, p⁴², and p⁸² are rather scant. However p⁴, p⁴⁵, and p⁷⁵ taken together present a more substantial body of text. These three papyri from the third century CE⁹⁴ contain no evidence of the variation between ι and η in the names considered from Luke 1-10:30. Of the majuscules, the following contained at least one clear instance of this variation: E (VIII century), K (IX), L (VIII), Θ (IX), Λ (IX), Ψ (IX/X), Ω (IX), 047 (VIII), 053 (IX), and 0211 (IX).⁹⁵ The majuscules that do show the variation come from eighth to ninth/tenth centuries. The 52 other majuscules did not yield any evidence of the variation in question. Some of the majuscules contain a continuous text, while others contain only small fragments. From

91. Ibid. 497, 514.

92. Metzger B. M. and B. D. Ehrman, *The Text of the New Testament: Its Transmission, Corruption, and Restoration* (Oxford: Oxford University Press, 2005), 18.

93. Aland (1989), 81.

94. Aland (1994), 3, 8, 14.

95. Ibid. 19-20, 23-24.

the fourth century CE, S and B contain continuous texts.⁹⁶ A, C, D, and W, all substantial, date from the fifth century.⁹⁷ Substantial but fragmentary texts from the sixth century for the passage in question are N,⁹⁸ Ξ, and the manuscripts associated with 070.⁹⁹ No ample texts are extant from the seventh century. And substantial texts from the eighth century include E, L, Ψ, and 047.¹⁰⁰ So there is significant evidence for the absence of ι ~ η confusion through the sixth century CE. In the seventh century, the manuscripts are too fragmentary. Not until the eighth century does evidence for the orthographic variation of ι and η arise. Based on these data, the phonological merger of ι and η began in the seventh or eighth century.

Another way to approach this sound change is to determine its correlation with the Byzantine or majority text-type. Should the variation ι ~ η be a characteristic unique to the majority text, then one could reasonably expect a close connection between manuscripts that exhibit the variation more frequently and the majority text. Unfortunately, K. Aland's extensive project to classify New Testament manuscripts does not offer assistance in distinguishing manuscripts based on this particular variation. His *Teststellen* focus on variation on the level of inflection, whole words, and phrases. Yet, spelling variants seem to play no role in the passages selected. In fact, he has even regularized ι ~ ει and αι ~ ε variants. For he groups p⁷⁵ with the manuscripts reading και

96. Aland (1989), 107-109.

97. Ibid 108, 113.

98. Cronin, H. S., *Codex Purpureus Petropolitanus* (Cambridge: Cambridge University Press, 1899), 45-53.

99. Aland (1989), 118-119.

100. Ibid., 110-118.

υμεις γινεσθε ετοιμοι in Lk 12:40 when p⁷⁵ actually reads και υμεις γεινεσθε ετοιμοι.¹⁰¹

Also, Codex Alexandrinus at Lk 2:15 contains the reading οι ποιμαινες, but Aland groups this manuscript with those containing οι ποιμενες.¹⁰² Whether Aland treats the variation ι ~ η like the two previous variations is unclear since out of thirteen New Testament passages known to contain this variation,¹⁰³ none appeared as *Teststellen* in the volumes of *Text und Textwert der griechischen Handschriften des neuen Testaments*.¹⁰⁴

Consequently, the correlation between the variation ι ~ η and the Byzantine family of manuscripts is unknowable through this method.

In contrast, one may easily discern the connection between this variation and the Alexandrian text-type. p⁶⁶, p⁷⁵, Codex Vaticanus, and Codex Sinaiticus all preserve specimens of the Alexandrian text-type.¹⁰⁵ As already shown, p⁶⁶ and Codex Sinaiticus contain no instances of etacism in the Gospel of John. Also, p⁷⁵, Codex Vaticanus, and Codex Sinaiticus do not exhibit the variant in the names from Lk 1-10:30. Hence this orthographic error did not occur in the Alexandrian tradition before the fourth century when the Codex Sinaiticus and Codex Vaticanus were produced,¹⁰⁶ and there is no correlation between this variant and the Alexandrian text-type.

101. Aland, (1999), 63.

102. Ibid., 3.

103. These passages came from Blass and Debrunner (1961), 14 and readings in A and D.

104. K. Witte, K. Aland, *et al.*, *Text und Textwert der griechischen Handschriften des neuen Testaments, Vols. I-V* (Berlin: Walter de Gruyter, 1987-2005).

105. Metzger and Ehrman (2005), 278.

106. Aland (1994), 19.

The Variation υ ~ ι ~ η

The rounded front vowel υ /y/ likewise became the unrounded front vowel /i/ in Modern Greek. The similarity between the pronunciation of υ and ι manifests itself early in the fifth century BCE on the crude texts of dipinti and ostraca.¹⁰⁷ But after 480 BCE, Threatte gives no clear examples of this neutralization, and the inscriptions he surveys generally extend to the end of the third century CE. Likewise, Teodorsson finds an insignificant number of interchanges of υ and ι that are not due to causes like metathesis and assimilation.¹⁰⁸ His findings demonstrate again that υ had not become /i(:)/ by 0 CE. In the Roman and Byzantine periods more occurrences of this change appear from Egyptian papyri,¹⁰⁹ but many of these instances are best explained by assimilation and other causes. In Egypt, Coptic bilingual interference likely caused some these instances of variation, since Coptic had no rounded front vowel /y/.¹¹⁰ Regarding the confusion υ ~ η, Hellenistic evidence for it comes mainly from one phonetic environment, namely before μ.¹¹¹ Then, it becomes more generalized in all environments in the Roman and Byzantine periods.¹¹² So in the papyri, υ shows variation with η in the Roman period, but does not show unrounding of υ to /i/ in all phonetic environments until the Byzantine period at the earliest.

107. For example, a group of ostraca from 483/482 BCE contain nine reading Ἀριστονίμο and over a hundred reading Ἀριστονύμο. Threatte (1980), 261.

108. Teodorsson (1977), 133-134, 225.

109. Gignac (1975), 267, 273.

110. Ibid.

111. Teodorsson (1977), 226.

112. Gignac (1975), 262.

3.000. The variation of υ ~ η

1. ασηρ *maxime* ~ ασυρ 1547 11016; Go aseris; Lvg aser Lk 2:36
2. νηνευη 1424 ~ νυνευη 180; Go *lacuna*; Lvg ninevitae Lk 11:32
3. τηρου 579* 11016 ~ τυρου *maxime*; Go twre; Lvg tyri Lk 6:17
4. τηρω 13 69 348 11056 ~ τυρω *maxime*; Go twrai; Lvg tyro Lk 10:13
5. τηρω 11056 ~ τυρω *maxime*; Go twrai; Lvg tyro Lk 10:14

The minor variant in these cases is limited to a few minuscules and lectionaries, all dating to the ninth century and later. Also, these variations all occur adjacent to a resonant or nasal. Teodorsson observed that almost all of the few υ ~ η variations in the Hellenistic period occurred as the graphemic sequences <ήμ> and <ύμ>. ¹¹³ There are only about ten names that contain υ as a simple vowel in the text under consideration. Three are in the list above. So a significant portion of that number shows the variation in a few manuscripts. Based on these data, no evidence exists to support the pronunciation of υ like that of η prior to the ninth century, a conclusion not in agreement with Gignac's evaluation based on Egyptian papyri. Furthermore, Wulfila transliterates υ with <w> and not with <ei>, <i>, or <e>. His transliterations are not purely orthographic since he transliterates the merged sounds ε and αι with <ai>. The fact that υ corresponded to the pronunciation /i/ by the ninth century will be shown by the variation ι ~ υ. In summary,

113. Teodorsson (1977), 226.

evidence from New Testament manuscripts of this interchange begins in the ninth century and only in a few phonetic environments.

3.010. Where the variations υ and η are present, οι occurs in the following instance.

1. τωρω 179; Go twrai; Lvg tyro Lk 10:13

The digraph οι came to represent /i/ in Modern Greek. This instance may be a sign of the merger of οι with ι. It is found in the manuscript that shows the highest frequency of ι ~ η confusion, lending more credence to this variation as οι for /i/. Admittedly, it is only one example.

3.100. The variation ι ~ υ

1. ασιρ 179 ~ ασυρ 1547 11016; Go aseris; Lvg aser Lk 2:36
2. νινευη *multi*: E* H V Y Δ 028 etc. ~ νυνευη 180; Go *lacuna*; Lvg ninevitae Lk 11:32
3. ιερυχω *multi*: A B^C C D E G H K M N U V W X Y Γ Δ Θ Λ Π Ψ Ω etc. ~ ιερυχω 2643 11074; Go iaireikon; Lvg hiericho Lk 10:30
4. σμεων 5 ~ σμεων *maxime*; Go swmaion; Lvg symeon; Lk 2:25, 2:34
5. σμεων 71* ~ σμεων *maxime*; Go swmaions; Lvg symeon; Lk 3:30

Like $\upsilon \sim \eta$, the minor variation $\iota \sim \upsilon$ manifests itself in only a few manuscripts in each instance. Again, only minuscules and lectionaries present the minor variants, the earliest dating to 1160 CE.¹¹⁴ Like $\upsilon \sim \eta$, these variants appear only adjacent to a nasal or a resonant. Teodorsson also observes this tendency in variants he collects from the Ptolemaic period.¹¹⁵ Two of the examples above, $\alpha\sigma\iota\rho$ and $\nu\iota\nu\epsilon\upsilon\eta$, also show the η -variant. Since ι , η , and υ all became /i/ in Modern Greek, it is reasonable to consider the confusion of these graphemes as evidence for their pronunciation as /i/ by the Byzantine period.

3.110. In the following case an o-variant appears in an item that elsewhere shows $\iota \sim \upsilon$

1. $\iota\epsilon\rho\upsilon\chi\omega$ 983 ~ $\iota\epsilon\rho\epsilon\iota\chi\omega$ p⁷⁵ B*L Ξ 0190 1241 1424 170; Go *lacuna*; Lvg hiericho Lk

10:30

Since $\iota\epsilon\rho\upsilon\chi\omega$ is a later variant, $\iota\epsilon\rho\epsilon\iota\chi\omega$ must represent an original pronunciation.

There is no clear phonological basis for the o-variant, this instance likely represents some other copying error.

Based on the evidence from the New Testament manuscripts, υ , ι , and η did not merge until the Byzantine period. υ and η did not merge fully, but only in environments adjacent to a resonant or nasal. The merger could have been more general, but evidence is lacking for this supposition. This contrasts with the conclusions of Gignac, that this

114. Aland (1994), 50.

115. Teodorsson (1977), 226.

merger occurred in all phonetic positions by the Roman period.¹¹⁶ According to the New Testament manuscripts, υ did not become /i/ until the ninth century. Therefore, the sounds of υ, ι, and η were differentiated in the earlier manuscripts of the New Testament.

Other ι and η Variants

4.000. The variation of η ~ ει

1. ειλιαν 0211 ~ ηλιαν *maxime*; Go heleian; Lvg heliam Lk 9:19
2. ιωαννει S A L ~ ιωαννη *multi*: F G H K M U V W X Y Γ Δ Θ Λ Ξ Π Ψ Ω 028 047
0211 etc; Go iohannen; Lvg iohannen Lk 7:22
3. ιωανει p⁷⁵ B* ~ ιωανη B^C D; Go iohannen; Lvg iohannen Lk 7:22

This variation is best treated as two separate phenomena. The first example exhibits one minor variant, notably present in one ninth century majuscule, 0211.¹¹⁷ This witness contains a high frequency of ι ~ η variation. Hence this example is a case of η being treated as /i/ and written as ει. In the last two examples, the manuscripts containing the minor variant do not possess another single instance of ι ~ η confusion from the names in Luke 1-10:30. Indeed, four of the five manuscripts date to the fifth century or earlier, the exception being the eighth century L.¹¹⁸ This is unlikely to be an instance of the confusion between ει and ηι in the dative singular because such a variation became rare

116. Gignac (1975), 262.
117. Aland (1994), 37.
118. Ibid. 20.

once ει and ι merged in most environments.¹¹⁹ A possible explanation for this example is that it instantiates the confusion of ει and η before a back vowel¹²⁰ as seen from the context of this verse: *απαγγειλάτε Ιωαννη α ειδετε* (Lk 7:22).¹²¹ Teodorsson considers this variation frequent in Ptolomaic Koine.¹²² In this phonetic environment ει did not merge phonologically with ι as early as it did in other environments.¹²³ Instead, it maintained the sound /e:/. Additionally, there is evidence that the spirant /h/ was lost by the period of Koine.¹²⁴ So the word following *ιωαννη* would be pronounced /a/, meaning that the final vowel of *ιωαννη* would precede a back vowel. Consequently, both of the variants ει and η in this instance would be pronounced /e:/. In this passage, 179 contains the ι-variant *ιωαννι*. Yet this is a manuscript that contains a high degree of ι ~ η confusion and bears witness to a later time when ει before a vowel had become /i/. So this ει ~ η variation need not be evidence for the pronunciation of η as /i/; rather it may lend support to the pronunciation of η as /e:/ in the fifth century CE and earlier.

5.000. ε ~ η

1. *βεθσαιδα* Theodoretus Cyrrhensis ~ *βηθσαιδα multi*: C E G K L M R V X Y Δ Λ Ξ Π
Ω 028 047 0115 0211 etc.; *Go baihthaidan*; *Lvg bethsaida* Lk 10:13
2. *ελησαβετ* G 0211 179 I859 I1074 (june 24) ~ *ηλησαβετ* I1074 (september 23); *Go aileisabaiθh*; *Lvg elisabeth* Lk 1:24

119. Threatte (1980), 379.

120. Ibid., 170.

121. 'Report to John what you saw.'

122. Teodorsson (1977), 219.

123. Threatte (1980), 171.

124. Sturtevant (1940), 72-73.

3. ελισαιου *multi*: S A B^C D G L U V Y Δ Ψ etc. ~ ηλίσαιου 0102; Go haileisaiu; Lvg heliseo Lk 4:27
4. νερει 983 ~ νηρει *multi*: p⁴ S A B E G H L M Y Γ Δ Θ Λ Ω 028 047 0102 0124 etc; Go nerins; Lvg neri Lk 3:27
5. σαλαθειλ 983 ~ σαλαθηλ *maxime*; Go salathielis; Lvg salithihel Lk 3:27

This variation was quite infrequent in the last two centuries BCE in Egypt. It declined from the higher frequency of the third century in Egyptian papyri.¹²⁵ Occasional examples of this confusion occur in Attic inscriptions of early and later Roman times.¹²⁶ Just as this variation was infrequent among first century BCE papyri, likewise it is among the manuscripts of the New Testament. Yet the variations from New Testament manuscripts all date to the seventh century CE or later. Only the citation from the fifth-century Church Father Theodoretus Cyrrensis exhibits this variation at an earlier date. Admittedly, the International Greek New Testament Project citation does not clearly indicate from which work of Theodoretus the quotation comes. Consequently, it is difficult to determine the date of the manuscript providing this citation. Yet modern editions of Theodoretus' commentaries on Daniel and the Psalms make use of an eighteenth century edition to provide their text.¹²⁷ Hence all the texts that manifest this

125. Teodorsson (1977), 217.

126. Threatte (1980), 160-161.

127. *Theodoret of Cyrus: Commentary on the Psalms 1-72, Vol. I*, trans. R. C. Hill (Washington, D. C.: The Catholic University Press, 2000) and *Theodoret of Cyrus: Commentary on Daniel*, trans. R. C. Hill (Atlanta, GA: Society of Biblical Literature, 2006) rely on *B. Theodoreti Opera Omnia*. eds. J. Sirmond and J. L. Schulze (Halaë: typis et impensis Bibliopolii Orphanotropei, 1769).

variant likely date to the seventh century or later. This means that η had likely merged with ι, both representing /i/. Yet Threatte considers such confusion in Roman-era Attic inscriptions evidence of the pronunciation of η as an e-vowel.¹²⁸ This was likely the case in Attica during Roman times and in the third century BCE in Egypt when the variation ε ~ η occurred in these respective corpora. Yet a different explanation may be needed for these much later variants. Gignac proposes that the variations ε ~ η and ε ~ ι were both effectively ε ~ /i/ in Roman and Byzantine papyri because these two variations occurred in some of the same phonetic environments.¹²⁹ The environments the two variations had in common were before a back vowel, adjacent to a nasal, before a liquid, in final position, and before the sibilant σ/ς.¹³⁰ Four of the five instances in §5.000 occur in these environments, namely before σ/ς, before a liquid, and adjacent to a nasal. So these variants may reflect the confusion of the mid front vowel ε with the close front vowel η /i/.

6.000. ι ~ η ~ α

1. ιωρημ S N U V 33 123 472 478 1012 1192 1313 1338 1347 1351 1355 1542 /1127 ~
 ιωρημ 6 27 477^c 517 669* 700 827 903 954 1009 1071 1077 1223 1342 1452
 1675 2757 /12 /70 /299 /1056 ~ ιωραμ Γ 22 892 1203 1210 1604; Go ioreimis;
 Lvg iorim Lk 3:29
2. ρισα 179 /1056 ~ ρησα *maxime* ~ ρασα 13; Go resins; Lvg resa; Lvg 3:27

128. Threatte (1980), 161.
 129. Gignac (1975), 248.
 130. Ibid., 242-255.

3. σαλαθηηλ *maxime* ~ σαλαθηηηλ 544 1854 ~ σαλαθαηηλ 472 1950; Go salathielis; Lvg salathihel Lk 3:27
4. βιθσαιδαν 69 115 1392 ~ βηθσαιδαν *multi*: p⁴⁵ S U W Γ etc. ~ βαθσαιδαν 788; Go baihhsaidan; Lvg bethsaida Lk 10:13

The last three of these four examples manifesting α may be explained by assimilation to an adjacent α. The first example could also be assimilation, given the many variants of this name, especially ιαραμ. Additionally, α are ω may be confused orthographically,¹³¹ meaning that this could be an assimilation with an error of orthography. Otherwise, the variant ιωραμ may indicate a knowledge of Hebrew on the part of the scribe. For this name in Hebrew is יְהוֹרָאם /yəhōrām/. But the most likely explanation of the variation ιωριμ ~ ιωραμ is harmonization with the genealogy in Matthew 1:8, where Tischendorf¹³² and Legg¹³³ have ιωραμ without any variants. In conclusion, none of these variants result from phonological confusion.

7.000. ι ~ ει ~ αι

1. εσλι *multi*: D K U V W X Π 0102 0124 etc. ~ εσλει *multi*: S A B E G H M Y Γ Δ Θ

131. H. A. Sanders and C. Schmidt, *The Minor Prophets in the Freer Collection and the Berlin Fragment of Genesis* (London: The MacMillan Company, 1927), 245.

132. C. Tischendorf, *Novum Testamentum Graece, Vol I* (Leipzig: Giesecke & Devrient, 1869), 2.

133. S. C. E. Legg, *Euangelium Secundum Matthaeum: Nouum Testamentum Graece Secundum Textum Westcotto-Hortianum* (Oxonii: E Typographeo Clarendoniano, 1940), 2.

- Λ Ω 028 047 etc. ~ εσλαι p⁴ vid; Go aizleimis; Lvg esli; Lk 3:25
2. ωριμ S N U V 33 123 472 478 1012 1192 1313 1338 1347 1351 1355 1542 /1127 ~
 ωρειμ *multi*: A B D E G H K L M W X Y Δ Θ Λ Π Ψ Ω 028 047 0102 0124
 0211 ~ ωραιμ 1 1582; Go ioreimis; Lvg iorim Lk 3:29
3. λεγιων S* D* L Ψ ~ λεγειων B* ~ λεγατων S^C D^C; Go harjis; Lvg legio Lk 8:30
4. ματθου 179 ~ ματθειου /854~ ματθαιου G H 2 475 2766 /299; Go mattathiwis; Lvg
 matthathiae Lk 3:25

The variants showing αι demonstrate an orthographic error, not phonological confusion. Schmidt infers orthographic confusion of α and ε in a cursive text from the third century CE.¹³⁴ It is this kind of error that appears to be in evidence here, notably between αι and ει.

134. Sanders and Schmidt (1927), 244.

CHAPTER 3

THE VARIATION OF ο AND ω

Orthographic errors occur frequently in the manuscripts of the New Testament. Many of these result from the combination of the continuous development of the sounds of the Greek language and the conservatism of Greek orthography fixed some five hundred years earlier. The two most frequent sources of error are the confusions ι ~ ει (both pronounced /i(:)/) and αι ~ ε (both pronounced /ε/). Egyptian papyri and Attic inscriptions suggest that Greek lost its vowel quantity distinction in the third century BCE and the second century CE respectively.¹³⁵ Now, should the date of the loss of vowel quantity in the Christian communities have occurred within these dates, then one might expect a frequent confusion of the o-vowels, ο and ω, at least among the copyists, if not also among the writers. Yet this is not the case. For both the second/third century papyrus p⁶⁶ and the fourth century uncial Codex Sinaiticus (S) exhibit relatively few errors of this sort. In the Gospel of John from the Codex Sinaiticus, of the 470 vocalic errors there is only one instance of ο instead of ω and none of ω instead of ο.¹³⁶ Likewise, in the extant passages of the Gospel of John in p⁶⁶, four instances of ο instead of ω and one instance of ω instead of ο occur out of the 492 vocalic errors.¹³⁷ Compare this type

135. S.-T. Teodorsson, *The Phonology of Ptolemaic Koine* (Göteborg: Acta Universitatis Gothoburgensis, 1977), 238 and L. Threatte, *The Grammar of Attic Inscriptions, Vol. 1: Phonology* (Berlin: Walter de Gruyter 1980), 385-386.

136. C. Caragounis, *The Development of Greek and the New Testament* (Tübingen: Mohr Siebeck, 2004), 497, n. 108.

137. *Ibid.*, 514.

of confusion to the two aforementioned mergers. Codex Sinaiticus contains 350 errors of the type $\iota \sim \epsilon\iota$ and 110 of the type $\alpha\iota \sim \epsilon$.¹³⁸ Additionally, p⁶⁶ demonstrates the variation $\iota \sim \epsilon\iota$ 294 times and the variation $\alpha\iota \sim \epsilon$ 177 times. So how does one account for the discrepancy between the frequency of o-variation and the two front vowel variations, $\iota \sim \epsilon\iota$ and $\alpha\iota \sim \epsilon$?

One may consider whether the loss of vowel quantity is in evidence in the New Testament manuscripts. For this sound change would likely have occurred either before or during the time that these manuscripts were produced (the earliest manuscript considered here dates to around 200 CE). This deduction is conceivable since the change is demonstrable in the second century CE in the language communities of Egypt and Attica, as seen in the Egyptian documentary papyri and Attic inscriptions. Additionally, Modern Greek exhibits the change. Yet the low relative frequency of the o-type variations in the aforementioned second/third and fourth century CE manuscripts may indicate a preservation of vowel length, at least in certain communities even at such a late date. So it is appropriate to consider Greek vowel quantity both generally, and in New Testament manuscripts specifically.

Vowel quantity came to be regularly represented in writing during the archonship of Eukleides with the official acceptance of the Ionic alphabet.¹³⁹ That is, the alphabet now distinguished mid-vowel length with the incorporation of H and Ω. A need to disambiguate orthographically sounds that were distinct phonologically and phonemically motivated this change. In the Attic script E and O each represented two sounds, namely a

138. Ibid., 497, n. 108.

139. Threatte (1980), 26.

long and a short vowel. Yet it is not necessary that the long and short vowels in each instance be identical in quality. With regards to the o-sound, long ω represented an open-mid back vowel /ɔ:/ with a sound quality between α and o, as in English *saw*.¹⁴⁰ Sturtevant deduces this quality from the observation that the Ionic contraction of o + α and α + o both yield ω.¹⁴¹ In contrast, o was a mid back vowel. Allen sees no reason why o was ever otherwise, pronounced like German *Gott*.¹⁴² The e-type vowels also differed in quality. η represented an open-mid front vowel as seen in βῆ βῆ, the designation in Attic comedy of sheep bleating.¹⁴³ Whereas ε was likely similar to the mid front vowel of Modern Greek.¹⁴⁴ The vowel ι could be long or short with no orthographic distinction. And unlike the mid vowels, no clear distinction of quality between short and long is discernible.¹⁴⁵ Likewise, α could be long or short with no difference in quality.¹⁴⁶ In summary, Attic Greek of the fourth century BCE contained long and short vowels where the mid vowels differed in both quality and quantity.

Vowel quantity ceased to be phonemic over time, as is evidenced by the situation in Modern Greek. For Modern Greek no longer distinguishes between short and long e-sounds and o-sounds. Rather, the language demonstrates a nonphonemic lengthening of stressed vowels. So there remains only the question of when the change occurred.

140. W. S. Allen, *Vox Graeca* (Cambridge: Cambridge University Press, 1987), 79.

141. E. H. Sturtevant, *The Pronunciation of Greek and Latin* (Philadelphia, PA: Linguistic Society of America, 1940), 45.

142. *Ibid.*, 63.

143. ὄδ' ἡλίθιος ὥσπερ πρόβατον βῆ βῆ λεγὼν βαδίζει (Kratinos, F45 *Poetae Comici Graeci*).

144. Allen, *Vox Graeca* (1987), 63.

145. *Ibid.*, 65.

146. *Ibid.*

A number of phenomena from Hellenistic, Roman, and Byzantine times may suggest a merger of short and long vowel quantity. Given the diversity of the Greek-speaking world in these time periods, it is not surprising that this merger would become prevalent at different times in these communities.

The confusion between short and long ι as demonstrated by the variation of ι ~ ει may indicate a loss of length distinction. Prior to 350 BCE, ει represented the diphthong /ei/ as well as the long e-vowel resulting from compensatory lengthening of a short e-vowel.¹⁴⁷ These two sounds, represented by one grapheme, eventually merged to a long e-vowel,¹⁴⁸ likely being a close mid vowel.¹⁴⁹ The first evidence of this sound being confused with etymologically long ι in Attica comes from ca. 350 BCE, but this confusion is not frequent in Attic inscriptions until the end of the second century BCE.¹⁵⁰ The merger becomes so widespread that "it is unusual to find a large text dated after the end of the first century B.C. without some example of EI = ι."¹⁵¹ Now the instantiation of the ει for ĭ comes only later in Greek inscriptions, dating from the reign of Nero, and becoming more frequent after 150 CE.¹⁵² The later date for the inclusion of ĭ in the variation ει ~ ι may indicate a loss of quantity distinction in the speech community of Attica, although the variation with ĭ remains "fairly rare," at least until 300 CE.¹⁵³ In contrast, the Ptolemaic papyri show the variation ει ~ ĭ frequently even in some of the

147. Thraette (1980), 299.

148. Ibid., 172.

149. W. S. Allen, *Vox Graeca* (1987), 70.

150. Ibid., 195.

151. Ibid., 198.

152. Ibid., 200.

153. Ibid.

early documents, namely those from the first part of the third century BCE.¹⁵⁴ And the variation of ει with short ι becomes most frequent and general by the second century BCE. Hence these data indicate a loss of quantity distinction by the second century BCE in Egypt and in the second century CE among the inscriptions found in Attica.

Another possible indication of vowel isochrony is the predominance of a stress accent instead of a pitch accent. Since the pitch accent in Greek depends on the distinction of morae, Teodorsson suggests that the equalization of vowel quantity necessitated a change in accent.¹⁵⁵ Threatte and Allen support the converse view: the advent of a stress accent would result in a change in vowel quantity.¹⁵⁶

Gignac suggests a stronger stress accent in Egyptian Greek based on "considerable interchange of vowels in unaccented syllables."¹⁵⁷ Also, one finds the loss of vowels in unaccented syllables in Egyptian papyri, with these texts dating from the first century CE.¹⁵⁸ This situation parallels the stress accent of Latin characterized by vowel weakening and vowel loss.¹⁵⁹ Yet the phenomenon in Egyptian Greek is better explained as bilingual interference. For in Coptic, the strong stress accent causes vowel quantity to be indistinguishable in unaccented syllables.¹⁶⁰ The later Egyptian of about 1000 BCE

154. Teodorsson (1977), 91-98.

155. S.-T. Teodorsson, *The Phonemic System of the Attic Dialect: 400-340 B.C.* (Göteborg: Acta Universitatis Gothoburgensis, 1974), 294.

156. Threatte (1980), 385 and Allen, "The Development of the Attic Vowel System: Conspiracy or Catastrophe?" *Studies in Mycenaean and Classical Greek Presented to John Chadwick* (Salamanca: Ediciones Universidad Salamanca, 1987).

157. F. T. Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods, Vol. 1: Phonology* (Milano: Instituto Editoriale Cisalpino, 1975), 142.

158. Gignac (1975), 326.

159. Sturtevant (1940), 102.

160. Gignac (1975), 326.

which precedes Coptic shows the merger of unstressed vowels to schwa /ə/.¹⁶¹

Subsequently, the Coptic of 400 CE develops two secondary unstressed vowels,¹⁶² limited to certain environments.¹⁶³ So vowels often have little distinction in unstressed syllables in the native language of the Egyptian people. Additionally, the confusion and loss of unstressed vowels is much more common in Egyptian papyri than in the rest of Koine.¹⁶⁴ Therefore the evidence for a predominant stress accent in Egyptian papyri indicates not a shift from a tonal accent to a stress accent, but rather the influence of bilingual interference.

Likewise, one may derive evidence for the development of a stress accent from the rise of Byzantine verse alongside Hellenic verse. Hellenic verse depends on vowel quantity, light and heavy syllables, and has no fixed syllable count *κατὰ στίχον*, whereas Byzantine verse exhibits fixed accent within the line which resulted from paroxytone line end,¹⁶⁵ i.e. an accent fixed on the penultimate syllable of the line. From this starting point, the accents earlier in the line became fixed. Albrecht Dihle considers the first Byzantine verse in both Christian and pagan contexts to date from the fourth century CE.¹⁶⁶ Yet Maas places Byzantine poetry "in church hymns and folk poetry from about

161. A. Loprieno, "Egyptian and Coptic Phonology," in *Phonologies of Asia and Africa*, ed. A. S. Kaye (Winona Lake, IN: Eisenbrauns, 1997), 444.

162. *Ibid.*, 452.

163. *Ibid.*, 454.

164. Gignac (1975), 326

165. P. Maas, *Greek Metre*, trans. H. Lloyd-Jones (Oxford: Oxford University Press, 1972), 15.

166. A. Dihle, "Die Anfänge der griechischen akzentuierenden Verskunst," *Hermes* 82 (1954) quoted by R.B. Smith, *Empirical Evidences and Theoretical Interpretations of Greek Phonology: Prolegomena to a Theory of Sound Patterns in the Hellenistic Greek Koine* (Ann Arbor, MI: University Microfilms, 1973), 414.

A.D. 500."¹⁶⁷ Consequently, the development of this new verse form supports the loss of the tone accent by the fourth or sixth century CE.

Additionally, the confusion of *o* and *ω* may provide evidence for the loss of quantity distinction. In Attic inscriptions, the variation of these vowels occurred in crude specimens before the second century CE. Only after 150 CE does this variation become more numerous.¹⁶⁸ Even after this date, most of the errors are confined to a few lexical items.¹⁶⁹ In contrast, the Greek-speaking populations of Egypt commonly confused these sounds from the third century BCE in a variety of environments, including inflectional endings.¹⁷⁰ The variation *o* ~ *ω* offers evidence for loss of vowel quantity distinction by the third century BCE in Egypt and by the second century CE in Attica.

To gain a fuller understanding of the immediate effects of phonology on particular manuscripts, the manifestation of vocalic errata in portions of a number of early manuscripts will be considered. These include New Testament papyri and uncials from the second/third century CE to the fifth century CE.

Such an investigation raises a number of revealing questions concerning the low relative frequency of the *o* ~ *ω* alternation in the texts of Codex Sinaiticus and p⁶⁶. Is this phenomenon reflected in other manuscripts? Does *ει* exist as a variant of *ϛ* in these manuscripts, indicating a loss of vowel quantity? Are other less common variations comparable in relative frequency to the variation *o* ~ *ω*? These and other issues will be treated in what follows.

167. Maas (1962), 16.

168. Threatte (1980), 223.

169. Ibid., 228-229.

170. Teodorsson (1977), 151-159.

Certain methodological considerations have guided the survey of these manuscripts. As in the treatment of orthographic variation of names, only minimal pairs were considered to be viable demonstrations of a particular variation. Also, variations discovered to be explainable as a similar spelling from another dialect were excluded from the data since they may have resulted from dialect influence and not phonological confusion. For example, the variation εματισμενον (A) ~ ἴματισμένον (*Ausgangstext*) may result from the dialectal variants ἴμα ~ εἴμα.¹⁷¹ The "Register der Dialekte und anderer Sprachgruppen" from Fischer's edition of *Die Ekloge des Phrynichos* gives an indication of the many dialects that make up Koine Greek and the possible variations.¹⁷² In the *Ekloge*, the grammarian Phrynichos laments the intrusion of many non-Attic (e.g. Aeolic, Doric, Ionian, Macedonian, and Syracousian) forms into late-Roman Koine.¹⁷³ With regard to the editions of the manuscript, only facsimiles and respected transcriptions that aimed to set forth the original text were used out of a desire to exclude the correctors of the text from the tabulation of data. Such correctors might include the scribe himself, a διορθωτής, or some even later hand. Yet since such consideration is beyond the scope of this study, as far as it is possible, the data encompasses only the original writing of each manuscript. Consequently, one must discard transcriptions like Cronin's *Codex purpureus petropolitanus* of Codex N which incorporates corrections into the

171. J. H. Thayer, *Grimm's Wilke's Clavis Novi Testamenti* (USA: Zondervan, 1977), 302.

172. *Die Ekloge des Phrynichos*, ed. E. Fischer (Berlin:Walter de Gruyter, 1974), 140-141.

173. *Ibid.*

transcription without comment.¹⁷⁴ These guidelines serve to focus the information upon specific phonological issues at a particular point in time.

The manuscripts studied encompass papyri and uncials dating from the second/third century CE to the fifth century CE. These include the extant passages of the Gospel of John in the second/third century papyrus p⁶⁶.¹⁷⁵ One hundred fifty-six pages survive from this papyrus ranging from John 1:1-21:17 with nearly continuous text in the portions John 1:1-6:11 and 6:35-14:26.¹⁷⁶ Also, the extant sections of Luke 3-12 in the second/third century papyrus p⁷⁵ were examined.¹⁷⁷ This papyrus, although rather fragmentary from Luke 3:18-7:45, being nearly intact in Lk 7:46-12:59, contains enough text to yield significant results. Additionally, the following majuscules came under the purview of this study: the entirety of John's Gospel in the fourth century Codex Sinaiticus (S),¹⁷⁸ Luke 1-8 in the fifth century Codex Bezae (D),¹⁷⁹ and Luke 1-8 in the fifth century Codex Alexandrinus (A).¹⁸⁰ These manuscripts provide ample evidence of vocalic variation.

174. H. S. Cronin, *Codex Purpureus Petropolitanus* (Cambridge: Cambridge University Press, 1899).

175. One finds a list of all vocalic errors in p⁶⁶ from the Gospel of John in Caragounis (2004), 502-514.

176. P. W. Comfort and D. P. Barrett, *The Complete Text of the Earliest New Testament Manuscripts* (Grand Rapids, MI: Baker Books, 1999), 366.

177. The transcription with accompanying facsimile was consulted from V. Martin and R. Kasser *Papyrus Bodmer XIV-XV: Evangiles de Luc et Jean, Tome 1* (Köln: Bibliotheca Bodmeriana, 1961).

178. There is a summary of the vocalic variations of Codex Sinaiticus in Caragounis (2004), 496, n. 108.

179. Scrivener produced a transcription of Codex Bezae in which "all that appears in our printed pages...proceeded from the original writer of the manuscript." A reprint of this edition provides the text for this study. F. H. Scrivener, *Bezae Codex Cantabrigiensis* (Cambridge: Deighton, Bell, 1864; reprint, Pittsburgh, PA: The Pickwick Press, 1978).

180. E. M. Thompson, *Facsimile of the Codex Alexandrinus* (London: Trustees of the British Museum, 1879-1883), leaves 44-51.

The expected variations, in addition to other minor variants, manifested themselves in these manuscripts. In Table 1 below, one finds the frequency of all potentially significant phonological variants which occur more than once in any given manuscript. For example, the variation noted "ει for ι" indicates that the likely reading is ι (as in ἡγεμονίας Lk 4:25), but the manuscript shows ει (ηγεμονειας D Lk 4:25).

Those frequencies with a question mark come from the orthographic data of Caragounis, namely the variations $\alpha \sim \varepsilon$ and $o \sim \alpha$.¹⁸¹ One could infer from his book that these variations did not occur in the manuscripts he studied. However, it is also possible that he did not consider them as phonological variations. For Schmidt and Sanders conjectured that variations such as these found in the late third century Berlin Papyrus of Genesis resulted from orthographic confusion in a cursive ancestor.¹⁸² Yet these particular variations are quite distinct orthographically in the pertinent manuscripts except for $o \sim \alpha$ in p⁶⁶, which could conceivably be confused. However, when properly written, even o and α are distinct in p⁶⁶. Admittedly, the variation $\alpha \sim \varepsilon$ is unusual in Attic inscriptions,¹⁸³ yet it occurs frequently in the Egyptian non-literary papyri, even in accented syllables where vowels are more regular.¹⁸⁴ The variation $o \sim \alpha$ is frequent in Egypt, but is rare elsewhere.¹⁸⁵ These variations may or may not be phonological, but they should not be disregarded from the start.

181. Caragounis (2004), 497, 514.

182. H. A. Sanders and C. Schmidt, *The Minor Prophets in the Freer Collection and the Berlin Fragment of Genesis* (London: The MacMillan Company, 1927), 238, 244-245.

183. Threutte (1980), 120.

184. Gignac (1975), 278.

185. *Ibid.*, 288.

Table 1.

	p ⁷⁵ (Lk 3-12)	A (Lk 1-8)	D Lk (1-8)	p ⁶⁶ (Jn 1-21)	S (1-24)
ει for ι	36	40	104	139	32
ι for ει	3	28	12	155	318
αι for ε	0	19	16	165	100
ε for αι	0	10	7	12	10
ο for ω	3	1	1	4	1
ω for ο	0	1	1	1	0
ο for α	2	0	1	?	?
α for ο	0	1	1	?	?
α for ε	0	4	2	?	?
ε for α	0	5	0	?	?
ει for η	2	3	0	4	2
η for ει	0	0	0	5	0
η for ι	0	3	1	0	0
οι for υ	1	0	0	0	0
υ for οι	0	0	0	0	4
ι for υ	0	0	1	2	0
υ for ι	0	0	0	1	1
η for υ	0	0	0	2	0

First, let us consider a few initial observations about these variations. By far the most common variation is ει ~ ι. Notably, the high frequency of ει for ι in all these manuscripts shows that the merger of ει and ι has taken place in these communities at least by the time of these scribes. The mistake ει for ι is sure evidence of phonological

change, whereas ι for ει may merely indicate orthographic deletion.¹⁸⁶ The next most frequent variation was αι ~ ε. Most commonly this variation occurs in verbal endings as when the third singular medio-passive ποιεται is written instead of the plural imperative ποιειτε from Luke 3:4 of the Codex Alexandrinus. The variation occurs as well in other environments, yet it is absent in the selection from p⁷⁵. The amount of text considered from p⁷⁵ admittedly was the smallest, so it is possible that the sample was insufficient to manifest this error. In the introduction to the Bodmer publication of this papyrus, Martin and Kasser state "La confusion de ε and αι due à l'identité de prononciation est très rare," listing only a few examples.¹⁸⁷ So this confusion does occur in p⁷⁵, although less frequently than in the other manuscripts.

Next comes the treatment of the variation ο ~ ω. The uncials S, A, and D each contain only one or two instances of this variation. This is striking in comparison with the high frequency of the two previous variations. Given that this variation shows such low relative frequency, it is not obvious to conclude that these variations are the result of the merger of ο and ω.

The papyri demonstrate a higher number of ο ~ ω variations. This situation may be analogous to the difference between the evidence of Egypt and Attica. That is, Attic inscriptions show this variation in limited environments, mostly in certain lexical items;¹⁸⁸ whereas Egyptian papyri exhibit this variation frequently and in all

186. Threatte (1980), 195 and Teodorsson (1977), 214.

187. Martin and Kasser (1961), 20.

188. Threatte (1980), 224.

environments.¹⁸⁹ After removing non-phonological variants, the data will show that there is no significant distinction between New Testament papyri and the parchment codices.

The variation $\epsilon\iota \sim \eta$ provides a worthwhile comparison. Both the variations $o \sim \omega$ and $\epsilon\iota \sim \eta$ have a total of five instances in the three uncials S, A, and D combined. The latter variation occurs predominately before a vowel. It was most frequent in the second century BCE among the Egyptian papyri¹⁹⁰ and in the period 50 BCE to 50 CE among Attic inscriptions.¹⁹¹ Subsequently, $\epsilon\iota$ before a vowel shifted to /i/ in both dialects.¹⁹² So the variation $\epsilon\iota \sim \eta$, limited to a specific environment and likely on the wane, was just as frequent as the variation $o \sim \omega$ in the uncials.

Phonological merger is not the only possible cause for the variations in Table 1. Teodorsson lists a number of non-phonetic factors involved in variation.¹⁹³ They include morphological causes. For instance, the writer may confuse two or more morphemes, such as $\text{᾽}\Omega\rho\upsilon$ for $\text{᾽}\Omega\rho\omega$.¹⁹⁴ Additionally, morphological developments and morphological interference may underlie some of these variations. For instance, imperfect and weak aorist forms intermingled as in the second person singulars ἔγραψες for ἔγραψας and ἔγραφας for ἔγραφες , as well as the third plural imperfect ἔγραφαν for ἔγραφον .¹⁹⁵ Teodorsson also mentions "syntactic/contextual causes" such as the writer's

189. Teodorsson (1977), 151-159.

190. E. Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit. Vol. 1, Laut- und Wortlehre* (Leipzig: B. G. Teubner, 1906), 74.

191. Threutte (1980), 203.

192. Ibid., and Gignac (1975), 189-190.

193. Teodorsson (1977), 51-56.

194. Ibid., 53.

195. R. Browning, *Medieval and Modern Greek* (Cambridge: Cambridge University Press, 1983), 29.

misunderstanding of the syntax of a clause and "assimilation with graphic elements of an adjacent word."¹⁹⁶ Also, assimilations to a neighboring vowel likely caused some of these variants. Finally, Threatte mentions "careless omissions" and "inaccurate renditions of diphthongs."¹⁹⁷ For example, he posits this phenomenon to explain early instances of ι for ει.¹⁹⁸ All these causes may play a role in some of the variants listed above.

Variants more infrequent than those in Table 2 further illuminate the variation ο ~ ω. About half of these variants seem to result from an omission. These include ε ~ εϑ, ι ~ οι, ε ~ ει, αι ~ αια, ι ~ ια, and ε ~ εε. The digraphs οι, ει, and αι have ceased to be diphthongs. The dating of the phonetic change of εϑ to /ev/ is uncertain.¹⁹⁹ So εϑ could have signified /eu/ or /ev/ in our manuscripts. Hence, only the variation ε ~ εϑ may fall into the category "inaccurate renditions of diphthongs."²⁰⁰ Most, if not all, of these examples result from careless orthography.

The other minor variants consist of ε ~ ι, ο ~ ι, ε ~ ο, οι ~ ει, α ~ ω, and ε ~ η. Surely the first four variations did not result from phonological confusion, because the two variant elements in each of these variations were quite distinct. For example, the variation ο ~ ι involves the mid back vowel ο and the close front vowel ι.

The two vowels ε and η are much closer together in terms of point of articulation. In classical times ε was relatively more close than η, which was more open.²⁰¹ Yet ε became

196. Teodorsson (1977), 54.

197. Threatte (1980), 190.

198. Ibid.

199. Both Modern Greek and λεβεις for λευεις (Lk 5:29) in the twelfth century CE lectionary /80 demonstrate the fricativization of υ in εϑ. cf. Allen, *Vox Graeca* (1987), 94, n.8.

200. Ibid.

201. Ibid., 160.

more open, merging with monophthongized αι; and η, in the process of merging with close ι, became more close.²⁰² Consequently, the height of articulation of these two front vowels intersected at some time. Teodorsson places this intersection in the third century BCE in Egypt, based on the variation ε ~ η.²⁰³ However, in Attica this variation occurs both in early and late-Roman times.²⁰⁴ This seems to indicate that some community of Attic speakers had continued to pronounce η as /e(:)/ into the late-Roman period, while some may have begun to pronounce η as /i(:).²⁰⁵ Even though the phonological considerations for the confusion of ε and η seem favorable, at no time does this become a frequent variation. In fact, one may explain the known variants in these texts without recourse to phonology. Assimilation may explain the variants επηρεάζοντες for επηρεαζόντες (A Lk 6:28) and επηρηαζοντων for επηρεαζόντων (D Lk 6:28). The next form is less certain: δεχεται for δέχεται in ος εαν δεχεται (p⁷⁵ Lk 9:48). One may posit confusion between subjunctive and indicative by the scribe resulting from the coincidence of forms like λύεις and λύης, λύει and λύη, λύομεν and λύωμεν in pronunciation.²⁰⁶ Yet there is little evidence for the pronunciation of η as /i/ = ει in the second/third century among the New Testament manuscripts.²⁰⁷ In an indefinite relative clause with ὃς ἐάν, one would expect a verb in the subjunctive.²⁰⁸ Yet perhaps the

202. Teodorsson (1977), 218.

203. Ibid.

204. Threatte (1980), 160-161.

205. Ibid.

206. Browning (1983), 31.

207. F. Blass and A. Debrunner, *A Greek Grammar of the New Testament and Other Early Christian Literature*, trans. R. W. Funk (Chicago, IL: University of Chicago Press, 1961), 14.

208. D. B. Wallace, *Greek Grammar Beyond the Basics: An Exegetical Syntax of the New Testament* (Grand Rapids, MI: Zondervan, 1996), 660.

confusion of ὄς and ὄστις evidenced in the Gospels²⁰⁹ led to a confusion of mood.

Otherwise, δεχεται may have arisen from assimilation. None of these instances of ε ~ η are explainable only through phonological confusion, but may have arisen because of other factors.

The variation α ~ ω, also close in articulation, occurs in only a few instances in both Ptolemaic Koine²¹⁰ and in Attic inscriptions.²¹¹ The one example from our corpus of selected manuscripts seems to have resulted from assimilation: χαρα for χώρα (D Lk 2:8). Consequently, the variation α ~ ω, like ε ~ η, likely did not result from phonological confusion.

All the variations less frequent than ο ~ ω are better explained by causes other than phonological confusion. Most of the infrequent variants result from assimilation and careless omissions. In each of the instances where a sound merger is possible, other potential causes present themselves, weakening the argument for a merger. Based on this evidence, the ο ~ ω variation is either the most infrequent phonological confusion or not one at all.

To determine whether the leveling of vowel quantity manifests itself in these manuscripts, one may ask if the variation ει for ῥ occurs in each of the manuscripts. To observe this would be probable evidence for the sound change. Admittedly, Allen has made the argument that the variation ει for ῥ does not necessarily indicate a loss of vowel quantity distinction, it may merely indicate an equivalence of the graphemes ει and ι

209. Ibid., 152-153.

210. Teodorsson (1977), 170.

211. Threatte (1980), 233-234.

originating from the equivalence of εἰ and ῑ.²¹² Yet this seems a less likely explanation than the leveling of vowel quantity. So now the relative frequency of εἰ for ῑ and εἰ for ῑ will be considered.

The variation εἰ for ῑ gives the clearest indication of vowel length in our manuscripts. The length of ι in the likely reading of each word may be determined through etymology, discussions of grammarians, as well as usage in poetry. Only p⁶⁶, p⁷⁵, A, and D are accessible to interpretation in this regard since Caragounis does not offer an elaboration of the data in S, only the summary statistics.²¹³ First, consider the fourth century uncial Codex Alexandrinus (A). It contains 40 instances of εἰ for ι in Luke 1-8. Nine of these certainly contain short ι and 3 forms are uncertain. The secure forms are:

<i>Varia Lectio</i>	<i>Ausgangstext</i>	Note
1. Lk 3:1 ηγεμονειας	ἡγεμονίας	abstract substantive in -ια ²¹⁴
2. Lk 4:20 εκαθεισεν	ἐκάθισεν	s-aorist from √sed ²¹⁵
3. Lk 5:3 καθεισας	καθίσας	s-aorist from √sed
4. Lk 5:17 δυναμεις	δύναμις	i-stem noun, δυναμ-ι-ς ²¹⁶
5. Lk 5:24 κλινειδιω	κλινίδιω	diminutive -ιδ-ιω ²¹⁷

212. Allen, *Vox Graeca* (1987), 94.

213. Caragounis (1999), 497.

214. H. W. Smyth, *Greek Grammar*, rev. G. Messing (Cambridge, MA: Harvard University Press, 1956), 235.

215. É. Boisacq, *Dictionnaire Étymologique de la Langue Grecque* (Heidelberg: Carl Winter Universitätsverlag, 1950), 369.

216. *Ibid.*, 304.

217. Smyth (1956), 235.

6. Lk 7:12 ηγγεισεν	ἠγγισεν	s-aorist to a verb in -ίζω
7. Lk 7:15 ανεκαθεισεν	ἀνεκάθισεν	s-aorist from √sed
8. Lk 8:15 οιτεινες	οἴτινες	*-k ^w i- > -τῖ- ²¹⁸
9. Lk 8:44 ρυσεις	ῥύσις	i-stem noun, ρυσ-ῖ-ς

With this many of the 40 ει for ι variations coming from short ι, it seems likely that vowel quantity was not distinguished by the writers of this manuscript. Additionally, one of the uncertain forms in our selection from the Codex Alexandrinus is worthy of comment,

<i>Varia Lectio</i>	<i>Ausgangstext</i>	Note
1. Lk 8:38 εδεειτο	ἐδεῖτο	ει treated as ε-ι

One may explain the reading εδεειτο by resyllabifying ἐ-δεῖ-το as ἐ-δε-ι-το. This unconventional syllabification could yield either a long or a short ι. Also note that ἐδεῖτο is the Attic form, but Koine possessed another form in parallel to this one. For Phrynichos warns against the use of the Ionic form ἐδέετο, thus indicating its use.²¹⁹

Both of these forms are present in the manuscript tradition for this verse.²²⁰

Consequently, the Ionic form may have influenced the syllabification of the Attic form.

218. A. L. Sihler, *New Comparative Grammar of Greek and Latin* (Oxford: Oxford University Press, 1995), 386, 389, 399.

219. *Die Ekloge des Phrynichos*, ed. E. Fischer (Berlin: Walter de Gruyter, 1974), 340 and "Antiatticist" in *Anecdota Graeca, Vol. 1*, ed. I. Bekker (Berolini: Apud G. C. Nauckium, 1814-1821), 94.

220. ἐδέετο S* S^C C* E G H K M R S U V Γ Δ Λ Π ~ ἐδεῖτο S^A B C².

In Luke 1-8 of the Codex Bezae, ninety-nine instances of εἰ for ι manifest themselves. Thirty-three of these instances are υμειν / ημειν for ὑμῖν / ἡμῖν. Of the remaining sixty-six, seventeen represent words that contain short ι-vowels. Such evidence in the Codex Bezae demonstrates vowel isochrony in this manuscript as well. The evidence is the following:

<i>Varia Lectio</i>	<i>Ausgangstext</i>	Note
1. Lk 1:13 δεησεις	δεήσις	i-stem noun, δεησ-ῖ-ς ²²¹
2. Lk 1:15 κοιλειας	κοιλίας	abstract substantive in -ιᾶ ²²²
3. Lk 1:23 λειτουργειας	λειτουργίας	abstract substantive in -ιᾶ
4. Lk 1:41 κοιλεια	κοιλία	abstract substantive in -ιᾶ
5. Lk 1:60 αποκρειθεισα	ἀποκριθεῖσα	aurist passive -κρῖ- ²²³
6. Lk 3:16 βαπτεισει	βαπτίσει	future to a verb in -ίζω
7. Lk 5:12 μεια	μιᾶ	*(s)m-iyə > μιᾶ ²²⁴
8. Lk 5:29 οικεια	οἰκία	abstract substantive in -ιᾶ
9. Lk 6:17 επει	ἐπί	locative ending ²²⁵
10. Lk 6:42 υποκρειτα	ὑποκριτά	cf. κρῖτος ²²⁶
11. Lk 6:48 οικειαν	οἰκίαν	abstract substantive in -ιᾶ

221. Smyth (1956), 304.

222. Ibid., 235.

223. H. G. Liddell and R. Scott, *A Greek English Lexicon* rev. H. S. Jones (Oxford: Clarendon Press, 1996), 996.

224. H. Frisk, *Griechisches etymologisches Wörterbuch, Band I: A - Ko* (Heidelberg: Carl Winter Universitätsverlag, 1960), 471.

225. Sihler (1995), 368.

226. Ibid., 517.

12. Lk 6:48 οικεια	οἰκία	abstract substantive in -ιᾶ
13. Lk 6:49 οικειαν	οἰκίαν	abstract substantive in -ιᾶ
14. Lk 6:49 οικειας	οικιας	abstract substantive in -ιᾶ
15. Lk 7:2 τιμειος	v. l. τιμός	adjectival suffix -ιο, -ιᾶ ²²⁷
16. Lk 7:6 οικειας	οἰκίας	abstract substantive in -ιᾶ
17. Lk 7:38 θριξει	v. l. θριζί	dative plural in -σι ²²⁸

In the extant portions of Luke 3-12 from p⁷⁵, five of the thirty-six instances of ει for ι show an initial short ι. So it is likely that the copyists and potentially the writer of the *Vorlage* of this manuscript did not distinguish between ι and ἰ.

<i>Varia Lectio</i>	<i>Ausgangstext</i>	Note
1. Lk 6:38 πεπεισμενον	πεπιεσμένον	πῆζω ²²⁹
2. Lk 7:22 απ[ο]κρει[θεις]	ἀποκριθείς	aoist -κρῖ- ²³⁰
3. Lk 10:27 αποκρειθεις	ἀποκριθείς	aoist -κρῖ-
4. Lk 12:3 σκοτεια	σκοτία	abstract substantive in -ιᾶ ²³¹
5. Lk 12:42 σιτ[ο/]μετρειον	σιτομέτριον	adjectival suffix in -ιο, -ιᾶ to form a substantive ²³²

227. Smyth (1956), 236.

228. Ibid., 58.

229. Liddell and Scott (1996), 1402.

230. Liddell and Scott (1996), 996.

231. Ibid., 235.

232. Smyth (1956), 236.

In the extant passages of John's Gospel in p⁶⁶, there are one hundred thirty-nine instances of ει for ι.²³³ Nearly half of these are of the type υμειν/ημειν for ὑμῖν/ἡμῖν. Additionally, twelve occurrences show ει for ῖ. The frequency of this phenomenon offers strong evidence for vowel isochrony in this manuscript as well.

<i>Varia Lectio</i>	<i>Ausgangstext</i>	Note
1. Jn 1:33 ειδης	ἴδης	zero-grade form of √weid-, *(w)id-
2. Jn 4:36 μεισθον	μισθόν	*mizdho-, cf. Iranian mižda-, Old Indic mīḍhā-, Gothic mizdo ²³⁴
3. Jn 4:42 λαλειαν	λαλιάν	adjectival suffix in -ιο, -ιᾶ to form a substantive ²³⁵
4. Jn 5:6 ειδων	ἰδών	zero-grade form of √weid-, *(w)id-
5. Jn 6:51 τεις	τις	*k ^w is, cf. Latin quis
6. Jn 8:28 εδειδαξεν	ἔδειδαξεν	present reduplication with ῖ ²³⁶
7. Jn 8:44 επιθυμειας	ἐπιθυμίας	abstract substantive in -ιᾶ ²³⁷
8. Jn 10:10 εινα	ἴνα	short everywhere in Greek ²³⁸
9. Jn 10:33 βλασφημειας	βλασφημίας	abstract substantive in -ιᾶ
10. Jn 12:47 εινα	ἴνα	short everywhere in Greek

233. Caragounis (1999), 514.

234. H. Frisk, *Griechisches etymologisches Wörterbuch, Band II: Κρ - Ω* (Heidelberg: Carl Winter Universitätsverlag, 1970), 244.

235. Smyth (1956), 236.

236. Sihler (1995), 487.

237. *Ibid.*, 235.

238. Frisk (1960), 726.

11. Jn 14:12 πειστευων πιστεύων denominative verb of πίστος (zero-grade formation related to πείθομαι)
12. Jn 16:11 κεκρείται κέκριται zero-grade form of perfect middle²³⁹

With these facts in mind, it is fitting to consider in detail the manifestations of ο ~ ω in our manuscripts. p⁷⁵ contains the following variations:

p ⁷⁵	<i>Varia Lectio</i>	<i>Ausgangstext</i>
Lk 7:4	ο	ὦ
Lk 10:13	σιδονι	σιδῶνι
Lk 12:58	παραδοσει	παραδώσει

In Luke 7:4, the context of the variant in p⁷⁵ is αξιος εσ[τι]ν ο παρεξ[η του]/[τ[ο]] whereas the United Bible Societies' fourth edition has 'Αξιός ἐστιν ὦ παρέξη τοῦτο.²⁴⁰ One interpretation may explain the syntax in p⁷⁵. The sense of the verse could be the following, ἄξιός ἐστιν τούτου ὃ παρέξη,²⁴¹ but the antecedent was incorporated into the relative clause and attracted to the relative. Lk 19:37 displays this construction, περι πασῶν ὧν εἶδον δυνάμεων.²⁴² Yet this is an unusual construction and in this instance

239. Sihler (1995), 577.

240. K. Aland, B. Aland, *et al.*, *The Greek New Testament* (Stuttgart: Deutsche Bibelgesellschaft, 1998), 223. This phrase is a Latinism according to Blass and Debrunner (1961), 6 - *dignus est cui hoc praestes* - 'he is worthy that you should grant this to him.' cf. my introduction, 9.

241. 'He is worthy of this which you should grant.'

242. Blass and Debrunner (1961), 153-154 - 'on account of the miracles which they had seen.'

unsupported by any manuscripts prior to the eighth century CE.²⁴³ So this example seems to be a probable instance of the confusion of the sounds o and ω.

The next example involves the name of the town Sidon. p⁷⁵ has σιδωνι with only one other manuscript prior to the eighth century containing -o-, namely the fourth/fifth century majuscule W. Additionally, the next verse in p⁷⁵ has σειδωνι. Regardless of which form may be considered correct, the appearance of both -o- and -ω- nearby in the same manuscript may indicate an uncertainty about this loan word. The Hebrew vowel ḥôlem in שִׁימֹן²⁴⁴ (sometimes written שִׁימֹן)²⁴⁵ indicates a long vowel,²⁴⁶ although the words of Jerome give caution:

Nec refert, utrum Salem, an Salim nominetur, cum uocalibus in medio litteris
perraro utantur Hebraei et pro uoluntate lectorum ac uarietate regionum eadem
uerba diuersis sonis atque accentibus proferantur. *Ep.* 73.8²⁴⁷

Otherwise, this could simply be a confusion of o and ω.

243. *The Gospel According to Luke, Part One: Chapters 1-12*, eds. American and British Committees of the International Greek New Testament: R. H. Lightfoot, A. Souter, *et al.* (Oxford: Clarendon Press, 1984), 140.

244. Gn. 10:15; 10:19; 49:13, etc.

245. Jos 11:8, 19:28, etc.

246. D.R. Vance, *An Introduction to Classical Hebrew* (Boston: Brill Academic, 2004), 9.

247. "It is of no consequence whether [the word Shalem] is pronounced Salem or Salim, because Hebrew very rarely uses vowel letters in the course of words, and according to the discretion of readers and the different regions the same word is pronounced with different sounds and accents." trans. G. A. Rendsburg, "Ancient Hebrew Phonology," in *Phonologies of Asia and Africa: Vol. 1*, ed. A. S. Kaye (Winona Lake, IN: Eisenbrauns, 1997), 76.

The last variant in p⁷⁵ has the dative singular noun παραδοσει - 'handing down, surrender'²⁴⁸ instead of the likely reading παραδώσει, a future of the verb παραδίδωμι in Lk 12:58. The reading in p⁷⁵ yields virtual nonsense, και ο κριτης σε παραδοσει τω πρακτορι και ο πρακτωρ σε βαλει εις φυλακην. With this reading, there is no explanation for σε and one loses the parallelism of these two clauses. Much preferred is the reading, ὁ κριτής σε παραδώσει τῷ πράκτορι καὶ ὁ πράκτωρ σε βαλεῖ εἰς φυλακὴν.²⁴⁹ Phonological confusion is the most probable explanation since the aforementioned causes do not apply. Albeit p⁷⁵ contains only three examples of ο ~ ω, still the most likely explanation for these variations is phonological confusion.

Next, the variation ο ~ ω will be considered in the papyrus p⁶⁶ based on the study by Caragounis.²⁵⁰ He discovered five variations from this text:

p ⁶⁶	<i>Varia Lectio</i>	<i>Ausgangstext</i>
Jn 7:3	θεορησωσι	θεωρήσουσι
Jn 8:57	εορακας	ἔώρακας
Jn 19:23	αν]οθεν	ἄνωθεν
Jn 20:18	εορακα	ἔώρακα
Jn 5:29	εκπορευσωνται	ἐκπορεύσονται

248. Liddell and Scott (1996), 1309.

249. Aland, Aland, *et al.* (1998), 260 - 'The judge will hand you over to the bailiff, and the bailiff will throw you into prison.'

250. Caragounis (2004), 502-514.

Now, the two examples of εορακα(ς) for ἑώρακα(ς) do not necessarily result from phonological confusion, for these two forms existed side by side.²⁵¹ The original form was ἑώρακα from *FεFορ-, but was remade after the imperfect form ἑώρων into ἑώρακα in Hellenistic Greek.²⁵² One may infer that the earlier form remained in use because the oldest LXX papyri have ἑώρακα.²⁵³ Since both of these forms were in use, these variants likely arose from dialectal interference and not phonological confusion.

Although the likely reading of John 7:3 is the future form θεωρήσουσι, the manuscript tradition does provide instances of the aorist subjunctive form θεωρησωσι (13 69 124 346). Hence θεωρησωσι likely arose from θεωρησωσι, showing variation in the stem θεωρε-. The only likely explanation for this instance is confusion of the sounds ο and ω.

αν]οθεν from John 19:23 could have resulted from phonological confusion, albeit the form of the restoration is not entirely certain. A substantial fragment of text is missing at this location, as seen here with the UBS fourth edition reading in the *lacunae*: ο χιτ [ὠν ἄραφος ἐκ τῶν ἄν] οθεν υφαν [τοῦ δι' ὅλου].²⁵⁴ Although Tischendorf,²⁵⁵ Merk,²⁵⁶ and Nestle-Aland²⁵⁷ give no variant to ἄνωθεν, the fact that the more-comprehensive critical edition of the Gospel of John by the International Greek New Testament Project has yet to be published prevents one from concluding that no such variant exists. And

251. Blass and Debrunner (1961), 37.

252. Ibid.

253. P. Katz, *Theologische Literaturzeitung* (1957), 111.

254. Aland, Aland, *et al.* (1998), 397 - 'a seamless tunic woven entirely from the top.'

255. C. Tischendorf, *Novum Testamentum Graece, Vol I* (Leipzig: Giesecke & Devrient, 1869), 944.

256. A. S. J. Merk, *Novum Testamentum* (Rome: Scripta Pontificii Instituti Biblici, 1964), 383-384.

257. Eb. Nestle and Er. Nestle, *Novum Testamentum Graece*, eds. K. Aland, M. Black, *et al.* (Stuttgart: Deutsche Bibelstiftung, 1898 and 1979), 312.

given the size of the first lacuna above, some other variation is quite possible. For -οθεν could be part of some other adverb of place, such as: ὀίκοθεν, ἄλλοθεν, αὐτόθεν, ὀμοθεν, etc.²⁵⁸ Admittedly, phonological confusion provides the most likely explanation for the reading in p⁶⁶.

The last example, εκπορευσωνται for ἔκπορεύσονται, is most likely a result of confusion between ο and ω. None of the causes for variation mentioned thus far apply to this instance. Moreover, the variant εκπορευσωνται presents an impossible form, a future subjunctive.²⁵⁹ Inflectional evidence is more indicative of change than lexical evidence because inflection tends to be more conservative in terms of orthography than word stems. Hence this is the strongest evidence yet for the merger of the two ο-type sounds.

In the Codex Bezae, only two instances of the variation ο ~ ω occur. They are the following:

D	<i>Varia Lectio</i>	<i>Ausgangstext</i>
Lk 2:15	γεγονως	γεγονός
Lk 4:26	σιδονιας	σιδωνίας

The variation of γεγονως for γεγονός in Luke 2:15 results either from an adverbial use of the participle or phonological confusion. The UBS fourth edition gives the following context, ἴδωμεν τὸ ῥῆμα τοῦτο τὸ γεγονὸς ὃ ὁ κύριος ἐγνώρισεν ἡμῖν.²⁶⁰ Codex

258. Smyth (1956), 99-100.

259. Blass and Debrunner (1961), 15.

260. Aland, Aland, *et al.* (1998), 201 - 'Let us see this matter that happened which the Lord revealed to us.'

Bezae differs in this passage only at the place of the aforementioned variant. Other New Testament passages show a lack of agreement between a noun and its participle. For example, a masculine participle may refer to a neuter noun that is a personal being, agreeing *ad sensum*, as in Mk 9:20, ἰδὼν αὐτὸν τὸ πνεῦμα.²⁶¹ Yet the passage in Luke is decidedly neuter in meaning. Another passage contains a masculine participle referring to the same neuter abstract ῥῆμα: οἴδατε τὸ γινόμενον ῥῆμα καθ' ὅλης τῆς Ἰουδαίας, ἀρχάμενος ἀπὸ τῆς Γαλιλαίας (Ac 10:37).²⁶² A number of early witnesses contain ἀρχάμενος, including p⁷⁴ S* A B C D; whereas p⁴⁵ and a number of minuscules contain ἀρχάμενον. However, the more difficult reading in the passage from Luke does not have this kind of manuscript support. Only D and h^{scr*} have the masculine participle γεγινώς according to Tischendorf.²⁶³ So this reading likely arose from a *Vorlage* with γεγινός. Also, the participle in Lk 2:15 as an attributive adjective is much more closely tied to its noun than the participle in Ac 10:37, a predicative participle separated by a prepositional phrase. By this reasoning, the "quasi-adverbial sense"²⁶⁴ of the participle in Ac 11:37 poorly explains the variant in Lk 2:15. Thus, phonological confusion of the scribe is the mostly likely explanation.

With regard to σιδονίας in the Codex Bezae, since it is difficult or impossible to determine the original form of this word, this instance is uncertain as a variant. The difficulty lies in the nature of the witnesses supporting both variants, σιδονίας and

261. Blass and Debrunner (1961), 74 - 'the spirit seeing him'

262. Aland, Aland, *et al.* (1998), 447 - 'you know the thing happening throughout all Judaea began from Galilee.'

263. Tischendorf (1869), 429.

264. Blass and Debrunner (1961), 76.

σιδωνιας. On the one hand, the majuscules D V^C (ninth century) Θ* (ninth century) along with *Odyssey* 4.84 and the *Sibylline Oracles* 3.451 support the reading σιδωνιας. On the other hand, the majuscules S A B^C C X Γ Θ^C Ψ with a fourth century BCE inscription,²⁶⁵ LXX, and Josephus support the reading σιδωνιας.²⁶⁶ Consequently, one cannot determine if σιδωνιας is the variant or the original form. Also, the variation may have resulted from dialectal usage of these two forms. It is uncertain whether the confusion of ο and ω played any role in the manifestation of this variant.

The Codex Alexandrinus contains two potential instances of the variation ο ~ ω. They are as follows:

A	<i>Varia Lectio</i>	<i>Ausgangstext</i>
Lk 3:14	ποιησομεν	ποιήσωμεν
Lk 8:45	οχλωι	ὄχλοι

The variants ποιήσωμεν and ποιήσωμεν may have resulted from phonological confusion or syntactic causes. The only uncials to show ποιησομεν are A C^C G U Ω; whereas all the others manifest ποιήσωμεν. In Luke 3:14 soldiers question Jesus, the Codex Alexandrinus (A) having επηρωτων δε αυτον...και ημεις τι ποιησομεν.²⁶⁷ This is a clear instance of a deliberative question. In such a case "the NT nearly always has the

265. *Sylloge Inscriptionum Graecarum*, ed. W. Dittenberger (Leipzig: Hirzelium 1915-1924), 185, 5.

266. W. Bauer, *A Greek-English Lexicon of the New Testament and Other Early Christian Literature*, eds. W. F. Arndt and F. W. Gingrich (Chicago, IL: University of Chicago Press, 1979), 750.

267. 'They were asking him...and we, what shall we do?'

subjunctive."²⁶⁸ However, there may be instances of deliberative questions in the New Testament using the future indicative. The best example of a deliberative future occurs in Romans 4:1, τί ἐροῦμεν εὐρηκέναι Ἀβραάμ τὸν προπάτορα ἡμῶν κατὰ σάρκα²⁶⁹ Less certain examples of deliberative questions with the future indicative are found in the New Testament at Ro 3:5, Lk 22:49, and Mk 6:37.²⁷⁰ Additionally, this kind of construction does occur in classical Greek, εἴπωμεν ἢ σιγῶμεν; ἢ τί δρασομεν;²⁷¹ So it is unclear whether this variation occurred because of syntax or phonology.

The apparent confusion of οἰ for ὄλοι is an uncertain instance of the ο ~ ω variation. For it is not necessarily a confusion of ο and ω at all. οἰ may have monophthongized in this community, as evidenced by the confusion of οἰ and υ in the first century CE among Egyptian papyri²⁷² and the complete unity of οἰ and υ in the Greek inscriptions from the Jewish catacombs of the second and third centuries CE.²⁷³ But Attic inscriptions distinguish οἰ and υ at least until the end of the second century CE.²⁷⁴ Additionally, our manuscripts show this variation only once in p⁷⁵. So our manuscripts appear to treat οἰ as a diphthong. With regard to ωι, the dative singular was no longer written or pronounced as the diphthong, as can be ascertained from the statement of Strabo, πολλοὶ γὰρ χωρὶς τοῦ ι γράφουσι τὰς δοτικάς, καὶ ἐκβάλλουσι δὲ

268. Blass and Debrunner (1961), 185.

269. 'What do we say that Abraham our ancestor found in the matter of flesh?'

270. Ibid.

271. Euripides, *Ion* 758 - 'Should we speak or be silent? Or do we do something?'

272. Gignac (1975), 201.

273. H. J. Leon, "The Language of the Greek Inscriptions from the Jewish Catacombs of Rome," *Transactions and Proceedings of the American Philological Society*, 58 (1927): 218, 224.

274. Threatte (1980), 323.

τὸ ἔθος φυσικὴν αἰτίαν οὐκ ἔχον.²⁷⁵ Since ωι had merged with ω, both could represent a long o-vowel. So the variants do not result from the variation of o and ω; rather, οχλωι for ὄχλοι represents a confusion of /o:/ and /oy/. More likely a scribal abnormality caused this variation. The fourth letter in οχλωι from the Codex Alexandrinus is half the width of other omegas in this manuscript. It is much more similar in shape to the omicron or sigma of this scribe. Perhaps a stray mark on an omicron resulted in a letter resembling an omega. Consequently, this variation is decidedly not phonological, arising rather from scribal negligence.

In summary, p⁶⁶, p⁷⁵, and Codex Bezae all contain instances of the variation o ~ ω likely resulting from phonological confusion, and Codex Alexandrinus contains a variant possibly owing to this same cause. For the purpose of the following summary, variants explainable only through phonological coincidence of o and ω were considered likely instances of phonological confusion, and those variants which may have arisen because of phonology or from some other cause are labeled possible instances of phonological confusion. p⁶⁶ contained two likely instances and one possible instance; p⁷⁵ exhibited three likely instances; A had one possible instance; and D manifested one likely instance of phonological confusion. One may not discern any clear separation between the two papyri from Egypt, p⁶⁶ and p⁷⁵, and the later parchment manuscripts, A and D, of unknown origin. For the number of o ~ ω variants in all these witnesses is quite low. One might have expected a higher frequency of o ~ ω variations in the papyri, since documentary papyri from the second century BCE onward show a high frequency of this

275. Strabo, *Geographica* 14.1.41 - 'For many write the datives without ι, and they reject the custom of writing ι, having no natural cause.'

variation in all environments²⁷⁶ in contrast to the limited nature of this variation in Attic inscriptions, even up to 300 CE.²⁷⁷ Yet the two papyri show comparably low instantiation of this variation as do the uncials.

The nature of the particular variants suggests that the merger of the sounds ο and ω was rather pervasive. For these variants do not come mainly from certain proper names, as is the case with Attic inscriptions. Rather they occur in a diverse group of lexical and inflectional elements in common words as well as a proper name. The most striking indication of the pervasiveness of this merger is the form εκπορευσωνται from Jn 5:29 in p⁶⁶. This would be a future subjunctive, an impossible form only acceptable as ἐκπορεύσονται. Therefore, the merger of ο and ω seems to be widespread by the second/third century CE, the time of the papyri p⁶⁶ and p⁷⁵.

Yet, given the widespread nature of the merger, it has surprisingly little effect on the manuscripts. Scribes producing these manuscripts did not compose an original work, instead they copied these texts from a *Vorlage*, itself probably a copy. That means the manuscripts embed a chronology from first composition, through a number of copies, and finally to these late-Roman manuscripts surviving to this day. Just as the language of Homer reflects multiple dialects over a course of time, these manuscripts likewise reflect the language of multiple communities spanning one to four centuries. So it is possible that all the agents producing texts of the *stemma codicum* may not have reflected the sound merger, but perhaps a portion or only one of the agents did so.

Assuming this possibility, the merger would have occurred in the community of the

276. Teodorsson (1977), 234.

277. Threatte (1980), 228.

scribe and not of the author, or vice versa. In the first case, certain variants may have appeared in the autograph. And afterward, a scribe not under the influence of the merger regularized some variants and perpetuated others. In the second case, the author may have consistently distinguished certain graphemes, either because the sound merger had not occurred in the author's speech community or through the author's conservative orthography. Then, the scribes copying this document, influenced by the sound merger in their speech communities, manifest the merger through variations between the *Vorlage* and its copies. These two scenarios may explain the lower than expected frequency of the o ~ ω variation.

A number of reasons make the second scenario, the one involving later manifestation of the variation, more probable. The phonology of Hebrew and Aramaic vowels in the first century CE is far from certain, yet they both seem to distinguish short and long o.²⁷⁸ Bilingual interference would thus not have hindered the distinction between o and ω. On the other hand, loanwords into Coptic manifest a confusion between Coptic o and ω.²⁷⁹ Also, the merger of o and ω in Attica occurred in the second century CE,²⁸⁰ after the composition of the Gospels of Luke and John but before the production of the papyri p⁶⁶ and p⁷⁵ in the second/third century CE. This means that one community continued to distinguish o and ω even after the composition of these two Gospels. The communities where the Gospels were written need not parallel the sound developments in Attica, but at

278. S. Segert, "Old Aramaic Phonology," in *Phonologies of Asia and Africa: Vol. 1*, ed. A. S. Kaye (Winona Lake, IN: Eisenbrauns, 1997), 120 and G. A. Rendsburg (1997), 77.

279. A. Böhlig, *Die griechischen Lehnwörter im Sahidischen und Bohairischen Neuen Testament* (München: Lerche, 1954), 140.

280. Threatte (1980), 228.

the same time they need not parallel those in Egypt either, where the merger of o and ω was much earlier. Additionally, the two papyri in question were likely copied in Egypt. Therefore, the language of the scribes producing p⁶⁶ and p⁷⁵ reflected the language in the documentary papyri from Egypt. o and ω merged in Egyptian Greek by the second century BCE,²⁸¹ resulting in very frequent confusion of these letters in all environments in the second and third centuries CE.²⁸² Surely the scribes who copied p⁶⁶ and p⁷⁵ did not distinguish o and ω in their speech. With regard to the uncials S, A, and D, the merger would assuredly have taken place in these communities of the fourth and fifth century CE as well. These reasons make it conceivable that these two Gospels were composed in communities not manifesting the variation of o and ω, but copied by scribes not distinguishing o and ω.

281. Teodorsson (1977), 234.

282. Gignac (1975), 275-277.

CHAPTER 4
THE PLACE OF NEW TESTAMENT MANUSCRIPTS IN
THE PHONOLOGY OF THE GREEK SPEAKING WORLD

One may not assume the vernacular papyri of Egypt more closely reflect the phonology of the early Gospel manuscripts than the so-called conservative orthography of Attic inscriptions. Threatte showed that inscriptions in Attica do not merely reflect a conservative orthography unrepresentative of the speech of those producing the inscriptions.²⁸³ Rather, the variations in these inscriptions accurately demonstrate Attic phonology. The correspondence of variants between inscriptions and more vulgar texts, specifically *dipinti*, *ostraca*, *defixiones* or curse tablets, and *graffiti*, supports this claim. Furthermore, the speech of Attica undergoes certain sound changes as much as three to five centuries after that of Egypt as seen in papyri and inscriptions. Given these distinctions, the question arises, which speech community does the phonology of the Gospel manuscripts more closely resemble, admittedly, most of the sound changes at issue have taken place in Attica and Egypt prior to the copying of these early Gospel manuscripts; nevertheless, some of the changes postdate the writing of the autographs. Also, the frequency of these variants in the Gospels can be informative. Certain vocalic variations will concord more closely with Attic inscriptions than with Egyptian papyri.

283. L. Threatte "The Alleged Conservatism of Attic Epigraphical Documents: A Different View" *Hesperia Supplements, Vol. 19, Studies in Attic Epigraphy, History, and Topography*. ed. E. Vanderpool (Princeton, NJ: American School of Classical Studies at Athens, 1982), 148-156.

The variation $\eta \sim \iota$, indicating the change of η from a mid vowel to a close vowel, in the Gospel manuscripts more nearly reflects the developments in Attica than in Egypt. In Egypt, the first instances of this variation date to the third century BCE,²⁸⁴ being very frequent in the Roman and Byzantine periods.²⁸⁵ In contrast, the variation $\eta \sim \iota$ is extremely rare in Attica prior to 150 CE and even later there are signs that these two sound did not merge in all communities.²⁸⁶ The Gospel manuscripts, clear evidence of onomastic variants of this type begins in the eighth century CE. According to this evidence, the merger of η and ι occurred in the eighth century CE or possibly the seventh century, given the fragmentary nature of seventh century manuscripts. Additionally, in the portions of the five Gospel manuscripts studied (the equivalent of 71 chapters of text), there were only four instances of this variation (three from Codex Alexandrinus and one from Codex Bezae). The second through fourth century CE manuscripts showed no instances of this variation and the two fifth century manuscripts show a total of only four instances. This kind of testimony more closely resembles the later development of this variation in the inscriptions of Attica.

Regarding the variation $o \sim \omega$, the Gospel manuscripts parallel the confusions in Attic inscriptions more than those from Egypt. In Attica after 150 CE, "examples become considerably more numerous."²⁸⁷ All the same, the orthography remains conservative in

284. Teodorsson *The Phonology of Ptolemaic Koine* (Göteborg: Acta Universitatis Gothoburgensis, 1977), 116-117.

285. F. T. Gignac *A Grammar of the Greek Papyri of the Roman and Byzantine Periods, Vol. 1: Phonology* (Milano: Instituto Editoriale Cisalpino, 1975), 235.

286. The confusion of η and ϵ indicates that some speakers still treated η as an e-vowel. L. Threatte, *The Grammar of Attic Inscriptions, Vol. 1: Phonology* (Berlin: Walter de Gruyter, 1980), 166.

287. Threatte (1980), 228.

most cases with a very small number of these instances involving inflection.²⁸⁸ Yet the Egyptian papyri show many instances of the interchange. Speaking of this variation in the papyri from the first century onward, Gignac says "This occurs very frequently in all phonetic conditions throughout the Roman and Byzantine periods."²⁸⁹ Furthermore, the confusion is frequent in the papyri from the third to first centuries BCE.²⁹⁰ In fact, it is one of the most common interchanges in the Ptolemaic period; only ει ~ ι, ηι ~ η, and ωι ~ ω are more common.²⁹¹ This means that the following interchanges were less common: αι ~ ε, οι ~ υ, η ~ ι, and η ~ ει.²⁹² In the Gospels, there are eight instances of the variation ο ~ ω that most likely resulted from phonological confusion in the five manuscripts studied. One of these confusions results in a future subjunctive, an impossible form.²⁹³ Two other instances yield syntax that is virtually unintelligible.²⁹⁴ Based on these examples, the most likely explanation for these variants is phonological confusion of ο and ω. Yet there are strikingly few instances of this variation. One scenario may explain these data: the writers of the autographs distinguished these two sounds but the scribes copying the texts exhibited the sound merger in their speech and writing, thus manifesting this variation. This situation would correspond much more closely to the development of these two back vowels in Attica. Not only do the Gospel manuscripts

288. These include *εκεινον* for *ἐκείνων* (ca. 175 CE), *Ἐυτυχο* for *Ἐυτυχω* (second century CE), and *ηκο* for *ἦκω* (Roman). Threatte (1980), 231-232.

289. Gignac (1975), 275.

290. Teodorsson (1977), 233-234.

291. Teodorsson aims to provide an exhaustive list of variants for this time period, making such a comparison possible. Teodorsson (1977), 62-208.

292. Ibid.

293. *εκπορευσονται* p⁶⁶ Jn 5:29

294. *και ο κριτης σε παραδοσει τω πρακτορι και ο πρακτωρ σε βαλει εις φυλακην* p⁷⁵ Lk 12:58 and *το ρημα τουτο το γεγονος ο ο κυριος εγνωρισεν ημιν* D Lk 2:15.

show a conservatism in this respect much like the Attic inscriptions, but also the proposed timing of the merger in the Gospel texts would correspond closely to the timing of the merger in the Attic texts. In contrast, the high frequency of this variation from the earliest Egyptian papyri is not useful for explaining this phenomenon in the Gospel manuscripts. Based on the merger of \omicron and ω in Attica, Egypt, and communities producing the Gospels, it is conceivable that the language demonstrated in the Gospels parallels the language of Attica more than that of Egypt.

The confusion of $\omicron\iota$ and υ in the Gospels likewise provides evidence similar to Attic phonology. The earliest evidence of this confusion in Attic inscriptions dates to the middle of the third century CE.²⁹⁵ But there is evidence of this interchange in Egypt from the third century BCE,²⁹⁶ being common in the second century BCE.²⁹⁷ Of the five Gospel manuscripts surveyed, only two show this variation, p⁷⁵ and Codex Sinaiticus. p⁷⁵ from ca. 200 CE contains one instance, $\sigma\iota$ for $\sigma\upsilon$ in $\rho\omicron\rho\epsilon\upsilon\omicron\upsilon$ και $\sigma\iota$ ποιει ομοιως Lk 10:37.²⁹⁸ This variant occurs before any of the Attic instances. It is probably best explained as Egyptian phonology manifesting itself in the transmission of this manuscript, a papyrus from the collection of Martin Bodmer. Codex Sinaiticus manifests four instances of υ for $\omicron\iota$. Since Caragounis only cites the summary statistics for this manuscript,²⁹⁹ one may make no definite conclusions in this case. Nevertheless, it dates to the fourth century CE, near in time to the merger of $\omicron\iota$ and υ in Attica. Finally, p⁶⁶, A,

295. Examples include $\omicron\alpha\lambda\alpha$ for $\acute{\upsilon}\alpha\lambda\alpha$ and $\acute{\alpha}\nu\upsilon\zeta\epsilon$ for $\acute{\alpha}\nu\omicron\iota\zeta\alpha\iota$. K. Meisterhans *Grammatik der attischen Inschriften* (Berlin: Weidmannsche Buchhandlung, 1888), 46.

296. Teodorsson (1977), 140.

297. Threatte (1982), 149.

298. 'Go and do likewise.'

299. Caragounis (2004), 496, n. 108.

and D exhibit no instances of this variation. These data suggest a phonology much more like that which one deduces from the Attic inscriptions where this variation is rare. The lack of variation in these three manuscripts is decidedly not suggestive of the Egyptian documentary papyri of the Roman and Byzantine periods where the variation $\alpha\iota \sim \upsilon$ is the third most frequent variant after only $\epsilon\iota \sim \iota$ and $\alpha\iota \sim \epsilon$.³⁰⁰

The confusion of $\epsilon\iota$ for $\check{\iota}$ in the Gospel manuscripts may also exhibit greater similarity to the Attic inscriptions. This variation was frequent from the third century BCE in the papyri.³⁰¹ Not only was this variation frequent, but it even became as numerous as the variation $\epsilon\iota$ for $\bar{\iota}$. The latter confusion occurred 185, 128, and 92 times in the third through first centuries BCE respectively whereas the former confusion occurred 94, 167, and 55 times.³⁰² This means that the confusion $\epsilon\iota$ for $\check{\iota}$ was slightly more numerous than $\epsilon\iota$ for $\bar{\iota}$ in the second and first centuries BCE combined. In contrast, the Attic inscriptions manifest $\epsilon\iota$ for $\check{\iota}$ only after 100 CE and it remains rare even after 150 CE³⁰³ while the use of $\epsilon\iota$ for $\bar{\iota}$ is widespread even in inflectional terminations.³⁰⁴ Now consider the relative frequency of $\epsilon\iota$ for $\check{\iota}$ and $\epsilon\iota$ for $\bar{\iota}$ in the Gospel manuscripts. Only 5 of the 36 instances of $\epsilon\iota$ for ι in p⁷⁵ involve short ι . Likewise, 12 of 139, 9 of 40, and 17 of 99 instances of this variation involve short ι in our selections of p⁶⁶, A, and D respectively. At the very least, this relative frequency is significantly less than that of papyri in the last two centuries BCE. It may be more comparable to the Attic inscriptions, but a lack of precise

300. Gignac (1975), 197.

301. Teodorsson (1977), 213.

302. Ibid., 82-98.

303. Threatte (1980), 200.

304. Ibid., 198.

information in this regard prohibits a more exact conclusion. Also, the variation $\epsilon\iota$ for $\check{\iota}$ in our manuscripts does not occur in inflectional endings except to confuse singular and plural i -stems, e.g. $\delta\upsilon\lambda\alpha\mu\epsilon\iota\varsigma$ for $\delta\acute{\upsilon}\lambda\alpha\mu\iota\varsigma$ in A Lk 5:17. This parallels the tendency in Roman-era Attic inscriptions to avoid the confusion of $\epsilon\iota$ for $\check{\iota}$ in inflectional endings.³⁰⁵ But in the papyri of the first century BCE, one finds forms such as $\pi\alpha\sigma\epsilon\iota$, $\epsilon\iota\mu\epsilon\iota$, and $\tau\epsilon\iota$.³⁰⁶ In summary, the nature of the variations $\epsilon\iota$ for $\check{\iota}$ and $\epsilon\iota$ for $\bar{\iota}$ in early Gospel manuscripts more closely reflects the variants from Attic inscriptions.

The variation of υ and η also shows a closer similarity to Attic inscriptions than to Egyptian papyri. In the Ptolemaic papyri, this confusion is almost entirely limited to the lexemes $\eta\mu\epsilon\check{\iota}\varsigma$ and $\acute{\upsilon}\mu\epsilon\check{\iota}\varsigma$.³⁰⁷ Subsequently, the Roman and Byzantine papyri confuse υ and η "frequently in all phonetic conditions."³⁰⁸ However, this phenomenon seems to appear in Attic inscriptions only due to "graphic mistakes."³⁰⁹ Now, in the New Testament manuscripts, few instances of the variation occur. Names in Luke 1-12 exhibit this variation beginning in the eighth century CE³¹⁰ and only adjacent to resonants. And in our five manuscripts, only p⁶⁶ contains this interchange on two occasions. As such, these two variants could have resulted from Egyptian phonology and not be reflective of New Testament phonology more generally. Hence this is yet another interchange in which the Gospel manuscripts do not mirror Egyptian Greek but contemporaneous Attic inscriptions.

305. Ibid.

306. Teodorsson (1977), 97-98.

307. Ibid., 135-136.

308. Gignac (1975), 262.

309. Threatte (1980), 267.

310. 13 69 348 579* 1424 l80 l547 l1016 l1056 show this variation.

The phonology of the Gospel manuscripts more closely reflects Attic inscriptions because the Egyptian papyri manifest a level of bilingual interference unseen in the other two corpora. One may explain the confusions $\eta \sim \iota$, $\omicron\iota \sim \upsilon$, and $\upsilon \sim \eta$ through Coptic influence. Yet the fact that the variations $\omicron \sim \omega$ and $\epsilon\iota \sim \check{\iota}$ occur frequently so much earlier in Egypt is not explicitly the result of bilingual interference. Rather, the loss of vowel quantity distinction in the second century BCE played a more explicit role. Yet, even with respect to vowel quantity distinction, bilingual interference may be the underlying cause. For the earliest Egyptian texts show vowel equalization in "some minor groups of literate speakers."³¹¹ From here vowel equalization spread to the rest of Egyptian Greek. These "minor groups" did not receive a Greek language exhibiting vowel isochrony since Egyptian Greek manifested this change earlier than other regions. Instead, their native language influenced their use of Greek. So all five of the aforementioned variations arose in Egypt at an earlier date due to bilingual interference. This means that the Gospel manuscripts more closely resemble Attic inscriptions than Egyptian papyri because the papyri are so distinct from the Greek of other regions.

311. Teodorsson (1977), 238.

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