## VARIATION AND STANDARDISATION

# A COMPARATIVE STUDY OF THE GRAPHEMIC REALISATIONS OF THE VOWEL-GLIDES BETWEEN THREE EARLY SAHIDIC MANUSCRIPTS AND CLASSICAL SAHIDIC 

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#### Abstract

The high degree of graphemic variation in the Sahidic literary manuscripts of the $4^{\text {th }}$ and $5^{\text {th }}$ centuries CE reflects a written language in a state of flux at a time when the orthographic rules were not fixed. This thesis offers a comparative typological study of regular and free variation exhibited in the graphemic realisations of the vowel-glides $/ \mathrm{i} / \sim / \mathrm{j} /$ and $/ \mathrm{u} / \sim / \mathrm{w} /$ in the early manuscripts of the $4^{\text {th }}$ and $5^{\text {th }}$ centuries and in those representing the classical, or standard, Sahidic of the $6^{\text {th }}$ and $7^{\text {th }}$ centuries. The corpus includes three $4^{\text {th }}-5^{\text {th }}$ century literary manuscripts: British Library Or. 7594; Papyrus Bodmer XVIII; and Papyrus Bodmer XXIII. Chester Beatty Mss. 813 and 814 have been selected as the comparanda, being excellent representatives of standard Sahidic. A synchronic and diachronic comparison of the respective typologies allows one to gain valuable insight into the dynamic state of the written language and the process by which the orthography becomes standardised. The questions addressed in this thesis seek to complement previous scholarship on the state of the language of early Sahidic, particularly the linguistic studies on the Nag Hammadi codices. By providing valuable data which may serve as comparanda, and by developing a reliable method based on the recent theories and methodologies of historical linguistics and language change, this thesis seeks to lay the foundation for future research into Coptic orthography.


## DECLARATION

I, Susan Price, certify that this thesis has not been submitted for a higher degree to any other university or institution.

Signature:
Date:

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## ABBREVIATIONS AND SIGLA

| A | Akhmimic |
| :--- | :--- |
| $A^{2}$ | Subakhmimic (Lycopolitan) |
| $B$ | Bohairic |
| $B L$ | British Library Or. 7594 |
| C | consonant |
| CB | Chester Beatty Mss. 813 and 814 |
| $E S$ | early Sahidic |
| F | Fayumic |
| G | glide |
| IPA | International Phonetic Alphabet |
| 1. | lege (read) |
| $L$ | Lycopolitan |
| M | Mesokemic |
| n. | note |
| NH | Nag Hammadi Codex |
| P | Dialect P |
| P.Bodm. 6 | Papyrus Bodmer VI |
| P.Bodm. 18 | Papyrus Bodmer XVIII |
| P.Bodm. 23 | Papyrus Bodmer XXIII |
| S | Sahidic |
| Sa | Sahidic with Akhmimic tendency |
| V | vowel |
| var. | variant |
| vs. | versus |

## 1. INTRODUCTION

Late antique Egypt was a period of immense change both linguistically and culturally. The $3^{\text {rd }}$ and $4^{\text {th }}$ centuries CE witnessed two major developments in Egypt. The first, the creation of the new Coptic alphabet: the logograms, phonograms, and so forth of the hieroglyphic, hieratic and demotic writing systems had eventually been replaced by an alphabetic system of writing based on the Greek alphabet. With the addition of several other letters derived from demotic, the Egyptians now had a script which represented more closely their native spoken language. This new linguistic development coincided with the second major development, the rise of Christianity and its competing religious sects in Egypt, and the foundation of the institution of monasticism. Since Christianity relies on the authority of Scripture, biblical and other religious texts began to be translated and copied using this new script into a number of regional dialects, the most well-attested dialects being Sahidic, Bohairic, Fayumic, Lycopolitan (previously designated Subakhmimic), Akhmimic, and Mesokemic (or Middle Egyptian), all of which were located along the Nile valley, the Fayum oasis, and the Delta. ${ }^{1}$

By the $4^{\text {th }}$ century the southern dialect of Sahidic emerged as the pan-Egyptian lingua franca, becoming the standard literary language of all Egypt. ${ }^{2}$ This privileged position was achieved probably due to its dialectal neutrality, most of its isoglosses being shared with those of the other dialects. This resulted in the potential to be understood by speakers of those dialects. ${ }^{3}$ The realisation of this neutrality can be understood as the assimilation of features from the other dialects and the suppression of distinctive traits. ${ }^{4}$ Sahidic, therefore, can be considered a dialectal 'average', a Mischdialekt or a middle dialect, as Mink has coined, and has pertinently described as a conglomeration of linguistic characteristics which are only imperfectly and unevenly standardised. ${ }^{5}$ Mink's remarks apply particularly to the period of

[^0]'early' Sahidic, the primitive stage of the dialect to which the literary manuscripts of the $4^{\text {th }}$ and $5^{\text {th }}$ centuries attest, and in which we find an orthography in a state of flux, characterised by variation, and rich in graphemic options.

It was not until the $6^{\text {th }}$ century that we see, in what has become known as 'classical' Sahidic, ${ }^{6}$ a remarkably standardised orthography, coinciding with the time when the scriptoria, in which the literary texts were produced, had become almost exclusively monastic. ${ }^{7}$ Within these scriptoria the process of standardising the orthography strengthened, a process which involved the progressive elimination of variant forms in the writing. The high degree of variation attested in the early manuscripts, however, reflects a period before the dominance of these monastic scriptoria, at a time when there was no institutional authority or orthographic regulator.

What we have in the early Sahidic manuscripts is an orthography that encodes a phonological system, a system about which we have little understanding. We can only seek to understand this phonological system by scrutinising the standards that the scribes have laid down for us in their orthography, including, most importantly, every variation. ${ }^{8}$ A comprehensive study of the orthography of early Sahidic has never been undertaken. We do not have the anatomy of Sahidic between the $4^{\text {th }}$ and $6^{\text {th }}$ centuries. The traditional grammars tend to disregard the variants in the literary texts as 'scribal corruption' or 'dialectal contamination', and, instead, present a standardised idiom, an ideal, or idealised state of the language. ${ }^{9}$ They fail to represent faithfully the reality of the language, that which was actually written. Yet, since we can expect variation to have a certain degree of regularity, at least at the

[^1]scribal level, the orthography should be able to be described, even if more complex patterns come to light. ${ }^{10}$ The task remains to explain, first, what the early Sahidic orthographic system prescribed, and second, what the system tolerated. Examining the manuscripts themselves, alongside well-worked editions, makes it possible to construct a more nuanced description of the language.

Taking the two vowel-glides $/ \mathrm{i} / \sim / \mathrm{j} /$ and $/ \mathrm{u} / \sim / \mathrm{w} /$ as a case study, the focus of this project is to introduce a sound and rigorous methodology which will permit a description of an orthographic system that includes variation. The aim is to formulate functional typologies of the graphemic realisations of these phonemic elements by analysing both regular and free variation attested in three $4^{\text {th }}-5^{\text {th }}$ century biblical manuscripts: British Library Or. 7594, Papyrus Bodmer XVIII, and Papyrus Bodmer XXIII. Such a schema will involve a synchronic comparison, along with a diachronic comparison with the so-called 'standard' or 'classical' Sahidic of the $6^{\text {th }}$ century, as represented by the Chester Beatty Mss. 813 and 814 .

The principle underpinning the method of analysis is that of 'free variation' as proposed by Roquet. ${ }^{11}$ Free variation is observed in the fluctuation between alternative graphemic forms of the vowel-glides which coexist as options, not only within a presumed synchronic corpus of manuscripts, but also within one and the same manuscript and by one and the same scribe. ${ }^{12} \mathrm{~A}$ comparison of the nature and frequency of free variation occurring with the vowel-glides in the early Sahidic manuscripts with their correspondences in the classical texts allows us a glimpse into the process of standardisation, as the relative frequency of one graphic form increases or decreases with respect to the other in the various phonological environments, and finally becomes resolved in the standardised rules of distribution.

[^2]This project will build on the previous linguistic studies on the Nag Hammadi codices undertaken by Funk, ${ }^{13}$ Cherix, ${ }^{14}$ and Ghica, ${ }^{15}$ and will contribute to our understanding of early Sahidic orthography, first, by adding to the corpus of early Sahidic linguistic studies regarding the vowel-glides, and second, by developing a systematic methodology which will initially produce functional typologies of one graphemic element, the vowel-glides, and which can, in the future, be extended to include all phono-graphemic, morpho-syntactic and lexical items.

[^3]
## 2. LITERATURE REVIEW

### 2.1 Scholarship On Early Sahidic

The orthography of early Sahidic has been a neglected area of research in the scholarship. Confronted with the problem of variation exhibited in the early manuscripts of the $4^{\text {th }}$ and $5^{\text {th }}$ centuries CE, much of the previous scholarship has focussed its attention on attempting to determine the dialectal status of the texts. More recently, however, a number of scholars have shifted the focus to view variation in terms of the natural processes of language change, and standardisation emerging as a result of such forces. ${ }^{1}$ The application of newly articulated theories and methodologies derived from the field of historical linguistics provides a counterpoint to the notion of dialectal influences, bringing to the fore the role of variation in the standardising of Sahidic. ${ }^{2}$

Variation was first highlighted in Paul Kahle's monumental 1954 publication, Bala'izah, in which he noted that virtually all $4^{\text {th }}$ century Sahidic manuscripts displayed, to at least some extent, what he called 'archaisms' or 'misspellings'. ${ }^{3}$ An extensive chapter was devoted to a rich collection of material on 'dialectal variation' and 'dialectal misspellings' in Sahidic non-literary texts, along with $4^{\text {th }}$ and $5^{\text {th }}$ century literary texts, that he classified as early Coptic manuscripts. ${ }^{4}$ Kahle's terminology here is instructive. Archaisms and misspellings, according to Kahle, are to be attributed to dialectal influences. Such an interpretation had a powerful influence on subsequent scholars who assumed that variation apparent in the early Sahidic manuscripts was solely the result of dialectal contamination.

Since Kahle's publication, most of the research on early Sahidic has been carried out on the Nag Hammadi codices. Dated to the $4^{\text {th }}$ century, these comprise copies of translations from the Greek, most of them in Sahidic, some in Lycopolitan, but exhibiting varying degrees

[^4]of deviation from the classical standard. ${ }^{5}$ Much of the discussion on the state of the language of the Sahidic Nag Hammadi texts has, therefore, been concentrated on these non-Sahidic features. The earlier studies have investigated the language of the texts through the lens of dialectology, from which various interpretations emerged and new labels applied. Nagel, in his analysis of NH II, on the graphemic, phonological, morphological, and syntactic levels, noted that most of the variants corresponded to Lycopolitan, some to Akhmimic, but there were others which he linked to dialect $P$, the Theban dialect attested in P.Bodm. 6, considered to be the earliest stage of Sahidic. ${ }^{6}$ He argued that the Coptic of this codex represented the Gnostic sociolect of Upper Egypt, which he termed 'Upper Egyptian Sahidic'. ${ }^{7}$ Layton turned his attention to the deeper level of syntax in his study of the Hypostasis of the Archons in NH $I I$ which, he asserted, provides a clearer picture of the underlying dialect of the translator. ${ }^{8} \mathrm{He}$ concluded that the syntactic structure was Subachmimic (Lycopolitan) and, consequently, the text was translated by a native speaker of Lycopolitan trying to conform to the prestigious and orthodox dialect of Sahidic. ${ }^{9}$ The more superficial phono-graphemic variants, on the other hand, were due to subsequent copies by scribes of various origins. The term 'CryptoSubachmimic' (Crypto- $A^{2}$ ) was thus coined to characterise the language. ${ }^{10}$

Although each of these interpretations has brought new insights to the question of nonSahidic traits in the individual codices, the application of sub-dialectal labels had the result of overgeneralising the dialectal influence. ${ }^{11}$ More importantly, two problems arise from their approach. First, the definition of the problem in terms of dialectal influences would naturally demand an answer in such terms. If you look for dialectal correspondences, no doubt you will find them. Second, none of these studies brought to the question secure comparanda. On what criteria are their comparisons based? Is it valid to compare these $4^{\text {th }}$ century texts with the Sahidic of the standard grammars? Do these grammars actually reflect the reality of the Sahidic of the $4^{\text {th }}$ century? And is it valid to make assertions about non-Sahidic traits without

[^5]comparing them, first, with the other texts in the corpus, then, with other contemporary biblical texts? In fact, we do not have a systematic description of early Sahidic, nor of any of the other dialects, for that matter.

Indeed, Shisha-Halevy added a note of caution in classifying texts according to "subdialects, transition dialects or 'dialectules'". ${ }^{12}$ Reducing the "textual admixtures or blendings of dialects" to the category of subdialect oversimplifies the issue and "only creates new fictions". ${ }^{13}$ In the case of the Nag Hammadi codices, by treating them as a corpus, a "strictly internal corpus-grammar", or as a language unity, he has introduced the notion of 'idiolect', which he termed 'Gnostic' Sahidic. ${ }^{14}$ Applying this notion to the idiom of Shenoute, ShishaHalevy maintained that the Akhmimic-like alternations in Shenoute's writings were due to his linguistic background, rather than a mixed dialect, or a Sahidic-Akhmimic sub-dialect. Fully aware that the problem of occasional Akhmimic vocalisation in early Sahidic was still unsolved, he ventured to attribute the vocalic variants present in the manuscripts to the insufficient establishment of an orthographic standard and a scribe slipping into his own vernacular. ${ }^{15}$

Funk, too, advocated the consideration of the texts of the Nag Hammadi library as a corpus, but not as a linguistic unity, as Shisha-Halevy suggested, rather, in light of their diversity. ${ }^{16}$ Highlighting the limitations of the past endeavours of Nagel and Layton, Funk took a different approach and proposed a methodological framework for a full-scale analysis of all the texts. ${ }^{17}$ Instead of looking for non-Sahidic forms, Funk called for, in the first place, a systematic description of the state of the language of each of the texts, followed then by a comparison with each other. Using dialectally relevant variables, and applying a method of seriation and cluster analysis, trends would emerge which would result in the establishment of 'groups', not necessarily dialectal, but sharing linguistic characteristics. ${ }^{18}$ The results of the application of this method confirmed that the linguistic diversity was largely conditioned by

[^6]dialectal geography along the north-south axis. ${ }^{19}$ This method has provided a much more complex picture of the dialectal affiliations of the codices, along with the adoption of some more sub-dialectal labels: crypto-Bohairic, crypto-L6, crypto- $A$. ${ }^{20}$ A number of twodimensional models have mapped out the geographical provenance (the translation from Greek) of the texts along one axis, and the process of Sahidicisation (the editorial work) along the other, the two being indicative of the history of transmission. ${ }^{21}$ This process of Sahidicisation is seen at the level of orthography, whereby the scribes strive for uniformity. It is at this level, the orthography of the codex, Funk maintained, that valuable insights might be gained which would necessitate, for any comparative study, the availability of a comprehensive orthographic analysis of not only the Nag Hammadi corpus, but of other $4^{\text {th }}$ century texts as well. ${ }^{22}$

Such a detailed and systematic typological study was undertaken by Pierre Cherix in his doctoral thesis on variation in the Nag Hammadi Codex VI. ${ }^{23}$ The contribution of his study to our understanding of the language of the Sahidic of the Nag Hammadi texts lies in, on the one hand, his bifocal perspective, and on the other, his comparative method. Cherix looked at the texts, not only in terms of dialectal affiliation, but also with regard to the chronological stage of the language. Applying a statistical comparison to both regular and free variation, alongside their classical Sahidic correspondences, his objective was to bring to the debate new data which could be subjected to descriptive analysis, rather than venture new solutions. ${ }^{24}$ As a result of his analysis, Cherix has offered some valuable interpretations as to the state of the language of this codex, based on whether a variant was a dialectism or an archaism, set within the context of contemporary Sahidic and Lycopolitan texts. ${ }^{25}$ Although there is a lack of clarity in his conclusion due to some confusion throughout the study as to what is considered an archaism or a dialectism, ${ }^{26}$ Cherix has thrown new light on the role of variation in our understanding of these early texts. He concluded that the Sahidic of the $4^{\text {th }}$ century orthodox

[^7]Christian communities was coloured, according to the scriptoria, by the local dialects that gave the texts their 'idiolectal' character; and similarly, within the circle of heterodoxy, the variants were due to the linguistic milieu of the scribes in which Lycopolitan manuscripts were copied, at a time when the orthography was not yet fixed. ${ }^{27}$

Underlying both Cherix's and Shisha-Halevy's arguments that the Nag Hammadi texts and the corpus of Shenoute were copied or written at an early stage of Sahidic, reflected by the fluidity of the orthography, are the theories and methodologies of historical linguistics and language change, as proposed by Gerard Roquet. ${ }^{28}$ In his assessment of the language of the Nag Hammadi texts, Roquet consciously turned his attention away from the interdialectal focus to the principle of 'free variation', which can be interpreted as a sign of the language in the process of transformation, rather than an indication of interdialectality. ${ }^{29}$ Linguistic variation is an inherent characteristic of language and the material by which language changes. ${ }^{30}$ Roquet defined free variation as the hesitation between alternative forms, at every level of the language, in the same text, by the same scribe, or in the same corpus. ${ }^{31}$ These alternative forms coexist in a linguistic community, and gradually, the relative frequency of one form increases with respect to the other. This is the process of standardisation. Standard or classical Sahidic, according to Roquet, would be the final outcome of this gradual elimination of alternative forms, resolved into the rules of grammar. ${ }^{32}$ The numerous variant traits in the Nag Hammadi codices, therefore, indicate an early, dynamic, state of the written language, before the rules were largely fixed. This mechanism is well illustrated not only in the Nag Hammadi codices, but also in the other early Sahidic texts of the $4^{\text {th }}$ century.

Based on his observations on variation in the linguistic features of contemporary Sahidic literary manuscripts dated to the $4^{\text {th }}$ and $5^{\text {th }}$ centuries, Victor Ghica, in his doctoral thesis on NH VI. 1, situated the Nag Hammadi corpus within the pre-classical period of the Sahidic dialect, not only chronologically, but also linguistically, the orthographic anomalies

[^8]arising from a situation of diglossia as suggested by Satzinger, ${ }^{33}$ and the operation of free variation proposed by Roquet. ${ }^{34}$ What the previous scholarship termed 'dialectisms' or 'archaisms', Ghica attributed to the effects of diglossia. ${ }^{35} \mathrm{He}$ argued that in a sense these dialectisms are a reality, but to name them as such conceals the fact that they had been assimilated into the inclusive koine Sahidic of this period. ${ }^{36}$

The Sahidic dialect can be understood as a dialectal mean, or a middle dialect, characterised by its neutrality which resulted from both the assimilation of features from other dialects and the suppression of distinctive characteristics. ${ }^{37}$ According to Ghica, and rightly so, the Sahidic dialect achieved its neutrality and emerged as the lingua franca along the Nile as a result of numerous dialectal influences: "Le sahidique véhiculaire du début du $4^{\text {th }}$ siècle, tel que nous le révèlent les manuscrits de l'époque, brasse, tout comme le fleuve qui dessine son aire de dispersion, tous les parlers de la Vallée." ${ }^{38}$ The so-called non-Sahidic traits present in NH VI. 1 are assumed by Ghica to be variant regional forms admissible and tolerated in a primitive Sahidic orthography, an orthography striving for homogeneity and neutrality. ${ }^{39}$ The orthography of this manuscript represents a state of permeability; at times a rudimentary written language, at times reflecting the classical forms, and at times assuming the features of other dialects, most particularly Lycopolitan and Akhmimic, the two with which Sahidic shares most of its isoglosses. ${ }^{40}$ The graphemic and phonographemic variations are, therefore, to be interpreted as the mark of an orthography and phonology undergoing progressive neutralisation and synthesis. ${ }^{41}$ The notion of diglossia and free variation proposed by Ghica in his study of NH VI. 1 is arguably the most reasonable interpretation of the language of this text, an interpretation which can be extended to the other Sahidic texts of this period.

[^9]
### 2.2 SCHOLARSHIP ON THE VOWEL-GLIDES

No comprehensive description of Sahidic orthography has ever been published. The Coptic grammars tend to describe a standardised idiom rather than the orthographic reality which is reflected in the manuscripts. ${ }^{42}$ Much of the scholarship on the vowel-glides in Sahidic is restricted to these grammars and to the texts describing Coptic phonology, in which the rules of the distribution of the various graphemes (regular variation) are defined in terms of the so-called standard. ${ }^{43}$

An important contribution to our general understanding of the orthography of the vowel-glide $/ \mathrm{i} / \sim / \mathrm{j} /$ is that of Quecke. ${ }^{44}$ Quecke's focus was on the alternative writing of the single grapheme $\mathbf{I}$ and the digraph $\mathbf{\epsilon} \mathbf{I}$; an extensive and wide-ranging survey of the graphic forms used in the various dialects over different periods of time. Such a broad scope has its limitations and these were expressed from the outset: a comprehensive and systematic formulation of the rules for each of the dialects, and for each stage of the language, was beyond the scope of his study. ${ }^{45}$ Instead, the broader and more general perspective highlighted the complexities of this one element of the alphabet. The starting point for Quecke was Till's Achmîmisch-koptische Grammatik, concerning the problem of ambiguity in the realisation of the digraph $\mathrm{et}^{\text {I }}$, which could represent either $/ \mathrm{i} / \sim / \mathrm{j} /$, or $/ \mathrm{e} . \mathrm{i} / \sim / \mathrm{e} . \mathrm{j} /{ }^{46}$ Quecke's objective was to determine the extent to which the ambiguous rendering of this vowel-glide may have caused problems for those reading the text and in what ways the scribes attempted to control such ambiguities. The value of Quecke's study lies in his observations on the use and the various forms of the trema and the circumflex along with the wide range of manuscripts he brought forward to illustrate his points.

Pertinent statements regarding the irregularity of graphemic realisations of the vowelglides in early Sahidic are generally limited to the introductions of the critical editions. The most important of these that enumerate the cases of variation, to a greater or lesser degree of

[^10]analysis, are: the collection of Bodmer papyri, edited by Kasser; ${ }^{47}$ the editions of Mark, Luke and John, edited by Quecke; ${ }^{48}$ and the edition of Acts by Hintze and Schenke. ${ }^{49}$ The value of these lists lies in the 'real' data that is made available, upon which further investigations can build.

The three studies that deal more systematically with the orthography of the vowelglides in early Sahidic are those of Funk, in his linguistic treatment of NH VI. 2, ${ }^{50}$ Cherix, in his Variantes, ${ }^{51}$ and Ghica, in his study on NH VI. $1 .{ }^{52}$ Funk employed a synchronic approach, following the structural model of Hintze, ${ }^{53}$ in his formulation of orthographic rules applied to the vowel-glides by the scribe of the NH VI. 2 manuscript. This involved the construction of matrices describing the conditions under which the different graphemic forms were prescribed, including the variant forms which were tolerated. He avoided making any distinction between the vocalic and consonantal functions of the vowel-glides because of the lack of scholarly consensus regarding their phonetic value, adding that such a differentiation would be unnecessary for a purely orthographic description. ${ }^{54}$ However, relevant phonological comments have been included in his detailed analysis of the scribal tendencies. The adoption of such a method for a synchronic analysis of the orthography of this text would certainly offer the way forward, as Funk would wish, for a linguistic study of all the manuscripts of this period. ${ }^{55}$ However, although synchronic analysis of vowel-glides, or any phono-graphemic element of the orthography, is essential, it does little to shed light on the process of language change and standardisation.

Cherix, on the other hand, has taken a combination of a synchronic and diachronic perspective. He established a classification of variation at the graphemic, phono-graphemic, morphological, syntactic, and lexical levels, and statistically analysed these in all the manuscripts of NHVI in comparison with their correspondences from classical Sahidic, as

[^11]attested in the Chester Beatty biblical texts. ${ }^{56}$ Rather than formulating rules for the graphemic distribution of the vowel-glides, Cherix's focus was on variation within the rules. Relative attestations of the variants for each text of the codex allowed for both a synchronic and a diachronic comparison. Cherix took the further step of comparing $N H V I$ with other contemporary $4^{\text {th }}$ century biblical texts, however, only a small selection of variants were chosen for comparison, and unfortunately, the vowel-glides were not among this selection. Unlike Funk's detailed descriptive analysis of the vowel-glides, Cherix's was limited to statistics. The strength of Funk's method lies in the level of detail in his classification and analysis, whereas Cherix's comparative method has the advantage of giving us a more accurate picture, through his statistics, of the extent of variation in these manuscripts.

Like Funk, Ghica restricted his investigation to a synchronic description of the linguistic traits of $N H$ VI. 1, but like Cherix, 'free variation' was the underlying methodological principle in his description of the graphemic, phono-graphemic, morphosyntactic, and lexical features attested in the text. The data for the vowel-glides were organised following the rules of distribution defined by Funk. ${ }^{57}$ Variant graphemic forms were highlighted with reference to other early Sahidic manuscripts, particularly the Bodmer papyri, and accompanied by an analysis, tracing and critiquing that of Funk. The results of all three studies confirm the prevalence of free variation, but not random variation. Distinct patterns of distribution emerged where free variation occurred predominantly only in certain phonological environments, emphasising the struggle for priority between the variant forms in an orthography striving for homogeneity. These studies have provided rich data for our understanding of the vowel-glides in early Sahidic, and the methods employed have furnished a sound methodological foundation for the study of variation.

[^12]
### 2.3 CONCLUSION

In summary, each of the studies discussed has highlighted the challenges faced when dealing with scribal variation in this early period of the Coptic writing system. Nevertheless, each attempt at solving the problem, through different perspectives and various methodologies, has made a valuable contribution to our understanding of early Sahidic. Although the written texts may provide less than perfect evidence for the spoken language, they do offer excellent evidence for the written language, the scribal habits of the various communities. All of the research has implicitly, and in some cases, explicitly, underlined the need for a comprehensive and systematic description of the orthography of these early manuscripts as a first step. The present study is building on these previous studies and, in particular, the methodological premises of Cherix and Ghica, by adding to the corpus of early Sahidic texts to be studied synchronically and implementing secure comparanda in order to achieve more reliable results diachronically.

## 3. METHODOLOGY

### 3.1 METHODOLOGY DISCUSSION

Funk highlighted the task faced when attempting to describe the phonological system of a dead language, by quoting Polotsky: ${ }^{1}$

What we have before us is an orthography in which, around the year 300, an anonymous linguistic scholar laid down his phonological analysis of Sahidic. We cannot do more than seek to understand his analysis. If he happens to do a bad job, we cannot go far beyond him: phonetic recordings of speech, which could be used to correct him in certain details or for us to try our own analysis, do not exist. It is an error to believe that unorthographic texts eo ipso are also 'phonetic', although it can be admitted in certain cases they may suggest, or allow one to draw, certain conclusions. ${ }^{2}$

Labov once described the task as "making the best use of bad data". ${ }^{3}$ Yet, it can be argued that the manuscripts we have available to us can offer 'good data', if we scrutinise the data on their own terms, not as the representations of the spoken language in the first place, but as representations of the written language, which is what they are. ${ }^{4}$ The description of the standards of orthography, the patterns of written conventions, which necessarily includes variation, nevertheless, remains the foundation for the reconstruction of a phonological system. ${ }^{5}$

Most of the previous studies on early Sahidic have been approached synchronically, influenced by the concepts of linguistic structuralism, whereby the underlying structure of a language can be described as a static, homogenised system. ${ }^{6}$ On this basis, heterogeneity, or

[^13]variation, could only be attributed to dialectal influences. Roquet, on the other hand, challenged this approach by introducing the principle of 'free variation', whereby alternative forms of a linguistic element (graphemic, phonemic, morpho-syntactic, and lexical) may be tolerated within the language system. ${ }^{7}$ The high degree of free variation in the early Sahidic texts points to a dynamic state of the written form of the language, an orthography in the process of change, in the process of standardisation.

Roquet's approach has been supported by theories from the fields of historical linguistics and sociolinguistics, that stress that variation is an inherent aspect of language and one that motivates language change. ${ }^{8}$ Weinreich, Labov and Herzog's seminal article on the theory of language change sought to span the divide between synchronic and diachronic perspectives by elaborating an approach that could be both structural and historical. ${ }^{9}$ Based on this theory, the solution to the question of heterogeneity, or variation, in the early Sahidic texts lies in dissolving "the identification of structuredness with homogeneity" ${ }^{10}$ and constructing a methodology, whereby "orderly differentiation"" ${ }^{11}$ can be accepted and described. The method of analysis adopted for my research project is based on Weinreich et al.'s theory of 'structured heterogeneity', and the principle of 'free variation', proposed by Roquet, and applied by Ghica ${ }^{12}$ and Cherix. ${ }^{13}$

The aim of the present study is to formulate functional typologies of the vowel-glides in early Sahidic by describing, first, what the early Sahidic orthographic system prescribed for the vowel-glides (regular variation), and second, what the system tolerated (free variation). This typology will then be compared with that of classical Sahidic. By doing so, it makes it possible to construct a more nuanced description of the written Sahidic dialect and provides new insights into the mechanisms involved in the process of its standardisation.

[^14]
### 3.2 RESEARCH APPROACH

The research will, therefore, take both a synchronic and a diachronic approach to answer the following research questions:

- How does each scribe, in both early and classical Sahidic, graphically represent the vowel-glides in different phonological environments (regular variation)?
- To what extent does graphemic alternation occur between and within the manuscripts (free variation)?
- Under what conditions does variation occur?
- What are the similarities and differences between early and classical Sahidic in regard to the graphemic realisations of the vowel-glides?
- What role does free variation play in the process of standardisation?


### 3.3 CORPUS

The corpus comprises three $4^{\text {th }}-5^{\text {th }}$ century Sahidic biblical manuscripts: British Library Or. 7594 edited by Budge (1912) and collated by Thompson (1913); Papyrus Bodmer XVIII edited by Kasser (1962c); and Papyrus Bodmer XXIII also edited by Kasser (1965). The $6^{\text {th }}$ century Chester Beatty Mss. 813 and 814 edited by Thompson (1932) will serve as the comparanda for classical Sahidic. This small corpus of texts is an appropriate size and length for this Masters research project. The British Library and Bodmer manuscripts were chosen to represent early Sahidic due to their substantial length, their good condition, and the availability of photographs, which allows a large amount of reliable data to be yielded. There are also very good text editions with informative introductions. The Chester Beatty codices are similarly substantial, in perfect condition, and are considered to be the best examples we have of classical Sahidic. I also have access to photographs of these manuscripts.

Any attempt to describe the standards of orthography found in these ancient manuscripts must be based, as precisely as possible, on the secure dating and provenance of the manuscripts. If the circumstances of discovery are unknown, the tools of palaeography must be relied on to date the documents. Coptic palaeography, however, is a relatively new
discipline, and Coptic manuscripts are, therefore, difficult to date using these techniques. ${ }^{14}$ It has previously been assumed that Coptic manuscripts could be dated by comparing them to dated Greek texts. Such an approach has been questioned by Kahle who noted a lack of consistency between contemporary Greek and the Coptic scripts that had been dated on external evidence. ${ }^{15}$ Kasser, too, advised caution since "in Coptic practice Greek scripts appear as a borrowed element and are frequently related diachronically to the same scripts evolving in Greek usage, so a Coptic script that possesses the same graphic characteristics as a Greek one may nevertheless be of a clearly later date". ${ }^{16}$ Consequently, judgements concerning the dating of the manuscripts in this present study, which are, in most cases, based on palaeographic analysis, should be made cautiously, especially when their dating has been based on comparisons with Greek documents. The provenance and dating of each of the manuscripts are discussed below.

## British Library Or. 7594 (BL)

Edition: Budge, E.A.W. (1912), Coptic Biblical Texts in the Dialect of Upper Egypt, London.

Collation: Thompson, H. (1913), The New Biblical Papyrus. A Sahidic Version of Deuteronomy, Jonah, and Acts of the Apostles from Ms. Or. 7594 of the British Museum, London.

Catalogue: Layton, B. (1987), Catalogue of Literary Manuscripts in the British Library Acquired since 1906, London, 3-5.
Date : 350 CE (Budge); 350-450 CE (Orsini)
Provenance: Egypt - Hermopolis (El-Ashumein) [found and written]
Material: papyrus

British Library Or. 7594 is a papyrus codex written in literary uncials and comprising a miscellany of incomplete Old and New Testament books: Deuteronomy, Jonah and Acts. Following Acts there are fragmentary extracts from the Apocalypse of Elijah (identified by Schmidt in 1925), ${ }^{17}$ written in the Coptic language, but with a cursive hand. The dating of this

[^15]codex to the mid- $4^{\text {th }}$ century, the terminus ante quem, was originally determined by Kenyon "with practical certainty", based on the comparison of a large number of dated Greek papyri with the cursive script of the colophon. ${ }^{18}$ Hebbelynck also favoured an early dating, based on the handwriting, the materials, and also the archaic character of the orthography. ${ }^{19}$ Orsini, more recently, brought the terminus ante quem forward to the mid- $5{ }^{\text {th }}$ century, asserting that palaeographic comparisons can be made with documentary material from the first half of the $4^{\text {th }}$ century to the late $5^{\text {th }}$ century. ${ }^{20}$ The covers of the codex were made up of fragments of Greek papyri documents, mainly accounts and contracts, which were dated to the late $3^{\text {rd }}$, early $4^{\text {th }}$ century by Bell from the Department of Manuscripts at the British Museum. ${ }^{21}$ This dating was confirmed for Bell by an examination of the coinage mentioned in the documents. ${ }^{22}$

Budge states that the manuscript "was found in Upper Egypt, and was acquired ... in the spring of ... 1911". ${ }^{23}$ More detail about the discovery was provided in a later publication by Budge in which he related the story of being taken by the man who discovered the manuscript to the tomb near El Ashmunein (Hermopolis), where it was originally found, wrapped in linen between the feet of a mummy. ${ }^{24}$ According to Thompson, the documents found in the binding confirm that it was bound in Hermopolis at an early date. ${ }^{25}$ Thompson concluded that, although Acts was written in pure Sahidic, Deuteronomy exhibited features of the dialect of Hermopolis. ${ }^{26}$

Due to the considerable differences in the handwriting, it appears that there were two hands: the first hand wrote Deuteronomy and Jonah; the second, Acts. ${ }^{27}$ Budge concluded that the codex was a copy which was used for private purposes. ${ }^{28}$

[^16]
## Papyrus Bodmer XVIII (P.Bodm. 18)

Edition: Kasser, R. (1962c), Papyrus Bodmer XVIII. Deutéronome I - X, 7 en sahidique, Cologne-Geneva

Catalogue: K. Schüssler, K. (1995), Biblia Coptica = Die koptischen Bibeltexte, 1.1, Wiesbaden, 83

Date: $4^{\text {th }}$ century CE (Kasser); 350-399 (Orsini)
Provenance: Upper Egypt (Kasser (1962c)); Debba (Kasser (1988)); Dishna, Upper Egypt (Robinson)

Material: papyrus

## Papyrus Bodmer XXIII (P.Bodm. 23)

Edition: Kasser, R. (1965), Papyrus Bodmer XXIII. Esaïe XLVII, 1 - LXVI, 24 en sahidique, Cologne-Geneva.

Catalogue: Schüssler, K. (1996), Biblia Coptica = Die koptischen Bibeltexte, 1.2, Wiesbaden, 106.

Date: $4^{\text {th }}$ century CE (Kasser); 350-450 CE (Orsini)
Provenance: Upper Egypt, north of Thebes (Kasser 1965); Debba (Kasser 1988); Dishna, Upper Egypt (Robinson 2011)

Material: papyrus
P.Bodm. 18 and P.Bodm. 23 belong to the Bodmer papyri, a collection of Greek and Coptic manuscripts on papyrus and parchment, the majority of which were acquired by Martin Bodmer, the Swiss bibliophile and collector, and founder of the Bibliotheca Bodmeriana (now the Fondation Martin Bodmer). ${ }^{29}$ With the absence of assured archaeological evidence, the provenance of the Bodmer papyri has been a matter of debate, and information regarding their discovery and marketing has been veiled in a shroud of secrecy. Kasser, in his introductions to P.Bodm. 18 and P.Bodm. 23 could only go as far as proposing Upper Egypt, or a little to the north of Thebes, as their place of origin. ${ }^{30}$ Later, however, he claimed that the dealer who supplied most of the collection, on his death bed, had confided in him, revealing that the manuscripts were found in 1950-51 in Debba, a few miles

[^17]from Nag Hammadi. ${ }^{31}$ Robinson, on the other hand, who had spent many years of investigation and dozens of interviews, uncovered information which suggested that the manuscripts were found near the village of Dishna, 22 kilometres north-east of Nag Hammadi, and not far from the Pachomian monastery at Phbow, where they were probably originally housed in the library. ${ }^{32}$

Kasser dates both manuscripts to the $4^{\text {th }}$ century. ${ }^{33}$ Orsini asserts that the handwriting in P.Bodm. 18 is consistent with the graphic characteristics of the second half of the $4^{\text {th }}$ century, and he attributes the hand of P.Bodm. 23 to the period between the end of the $4^{\text {th }}$ and beginning of the $5^{\text {th }}$ century. ${ }^{34}$

## Chester Beatty Mss. 813 (CB Epistles) and 814 (CB Acts)

Edition: Thompson, H. (1932), The Coptic Version of the Acts of the Apostles and the Pauline Epistles in the Sahidic Dialect, Cambridge.

Catalogue: Schüssler, K. (2001) Biblia Coptica = Die koptischen Bibeltexte, 1.3, Wiesbaden, 36-39.

Codex A: Epistles Copt. Ms. 813
Date: c. 600 CE (Thompson); 500-550 CE (Orsini)
Provenance: Monastery of Apa Jeremiah, Saqqara [found and written]
Codex B: Acts of the Apostles Copt. Ms. 814
Date: c. 600 CE (Thompson); 525-574 CE (Orsini)
Provenance: Monastery of Apa Jeremiah, Saqqara [found and written]
Material: parchment

Three biblical manuscripts (Copt. Mss. 813, 814 and 815), in excellent condition, were acquired by Chester Beatty in 1924-1925 on the antiquities market in Cairo, and although statements of provenance from such a source are rarely reliable, the purported circumstances of their discovery may help in assigning a date to them. ${ }^{35}$ They were alleged to have been found in a pot near the Giza pyramids buried with some coins from the reigns of Justinian I

[^18](527-565 CE), Justin (565-578 CE), and perhaps Maurice (582-602 CE), which would suggest that they were buried around the turn of the $6^{\text {th }}-7^{\text {th }}$ century. ${ }^{36}$

Whatever their archaeological context, internal evidence suggests that the codices belonged to the Monastery of Apa Jeremiah at Saqqara, and that they were written in the same scriptorium. ${ }^{37}$ Each codex was written by a different hand, but the script and format display a family likeness, and, according to Thompson, were probably not written far apart, Codex A being the earliest, followed by Codex B and C. ${ }^{38}$ Taking into account both the external and internal palaeographic evidence, Thompson dates the codices the late $6^{\text {th }}$, early $7^{\text {th }}$ century. ${ }^{39}$ Orsini, on the other hand, dates the earliest codex to the first half of the $6^{\text {th }}$ century based on the characteristics of the handwriting, and Codex B perhaps some years later. ${ }^{40}$

### 3.4 METHOD

The first part of this study is devoted to formulating functional typologies of the graphic forms, including all variant forms, of the vowel-glides for each of the manuscripts. These are presented in tables, with pertinent comments, and can be found in the Appendices. The second part is a synchronic comparison of vowel-glide typologies of the three $4^{\text {th }}-5^{\text {th }}$ century manuscripts, followed by a diachronic comparison with their correspondences in classical Sahidic. This will constitute the body of this thesis.

## A. Data Collection

 $0 \gamma \sim \mathcal{Y} \sim \hat{\gamma} \sim \hat{O}$ ) in each of the manuscripts, both the early and classical Sahidic manuscripts, will be identified, although not every instance will necessarily be included in the typologies, generally only examples for each phonological environment. Every occurrence of variation,

[^19]however, will be listed.

## B. Classification

The graphemes representing the vowel-glides in each of the texts will be classified according to their syllabic/phonological environment and presented in tables. Their vocalic and consonantal function will be treated separately. Therefore, there will be four tables of typology for each text, one for each $/ \mathrm{i} /, \mathrm{j} /$, /u/, and /w/.

For the Chester Beatty codices the tables of typology include the following:

- Case (or rule) number;
- Syllabic context;
- Allograph (and variant/s) for each codex;
- Examples and phonemic transcriptions (IPA).

For the three early Sahidic manuscripts the tables of typology include the following:

- Case (or rule) number;
- Syllabic context with examples from classical Sahidic (CB Acts);
- Allograph (and variant/s) for each manuscript;
- Examples.


## C. Variants

Tables of variants, when applicable, are included: the left hand column is used for the standard grapheme (or the norm for the particular text); the right hand column is used for the variant form. For each lexeme/morpheme listed, the reference in the text is given in brackets (biblical book, chapter, verse). A percentage of attestations is noted (excluding lacunae).

## D. Comparative Typologies

- Discussion on the phonemic value of vowel-glides and the graphic options available for rendering them;
- Comparative analysis of the graphemic distribution of the vowel-glides in the early Sahidic manuscripts, including variation both between, and within, each;
- Comparative analysis of their graphemic distribution, and variation, in the two Chester

Beatty codices;

- Diachronic comparison between the early and classical manuscripts.
- Discussion on the trends over time on the distribution of the vowel-glide graphemes, and the role of free variation in the process of orthographic standardisation.


## 4. COMPARATIVE TYPOLOGIES OF THE VOWEL-GLIDES

### 4.1 INTRODUCTION

The orthography of the $4^{\text {th }}-5^{\text {th }}$ century Sahidic manuscripts, which are considered in this study, reflects an early stage of the written dialect. Graphemic variation is a characteristic feature of these manuscripts, which clearly indicates a period when the Sahidic orthography had not yet become fully standardised. This is particularly evident in the case of the two vowel-glides that exhibit variation both in the distribution of the allographs between the manuscripts, and in the choice of allograph within the same environment (free variation). The progressive elimination of variation demonstrates the mechanism by which the written language becomes more stable, indeed, standardised. Having said that, it must be understood that what is termed the 'standard' Sahidic orthography is not necessarily defined as a static or fixed system, but rather a dynamic one, in which earlier variant writings may persist, and others disappear. A comparison of the early Sahidic graphic representations of the vowelglides with those of the so-called 'standard', or classical, correspondences should illuminate this process.

Before addressing the dynamics of the graphemic realisations of the vowel-glides in early Sahidic and the process of standardisation, it is first necessary to explain the meaning of 'vowel-glides', and to define the relationship between the vowels and their corresponding glides. 'Glides' are also known as 'semi-vowels' or 'semi-consonants', terms highlighting the blurring of the distinction between their vocalic (syllable nucleus) or consonantal (nonnucleus) values. Vowels and consonants can, in general, be distinguished by the degree of constriction of airflow by the lips and tongue, the constriction being greater with consonants than with vowels. There is an obvious distinction between most vowels and consonants. But in the case of the vowel-glides, there is little articulatory difference between the two, that is, the two high vowels, $/ \mathrm{i} /$ and $/ \mathrm{u} /$, are produced in the same place of articulation as the respective glides $/ \mathrm{j} /$ and $/ \mathrm{w} /$, the only difference being the degree of constriction. These vowels are therefore often phonetically indistinguishable from their consonantal counterparts, the difference generally being imposed by their phonological environment, or their position
within the syllable. ${ }^{1}$

Thus, when dealing with a dead language, as Coptic is, we are faced with significant difficulties when attempting to distinguish the phonetic value of these two phonemes in certain situations. ${ }^{2}$ Furthermore, the orthographic practices of the scribes do not always help the reader since the same graphemes can be used for both the vowel and the glide in the
 suggested that, for the Coptic scribes, there was no need to distinguish the vowel-glides graphically because in their "phonetic conscience" there was no real opposition between them, there being only one phoneme, clearly vocalic, and only rendered as a glide under certain circumstances. ${ }^{5} \mathrm{He}$ introduced the novel hypothesis that the graphemes (e)ıiri and (o) Y , on the one hand, represented the syllabic vowels of slow, laboured speech which would have been articulated as such in the process of writing ('bradysyllabation'), but on the other hand, were pronounced as glides in normal rapid speech ('tachysyllabation'). ${ }^{6}$ However, the use of the different graphemic forms of the vowel-glides, as can be seen in the tables presented in this study, may indicate that there was an attempt in many cases to distinguish the opposition between the two phonemes in the writing system, dependent more on their phonological environment than on the speed of articulation.

The scholarly consensus holds that these graphemes realise both vowels and consonants in the written system, but there is no absolute agreement as to whether a vocalic or consonantal value should be assumed in individual cases. ${ }^{7}$ Although in the original Egyptian system of writing vowels were not indicated, hieroglyphs did exist for the glides, $i / \mathrm{j} /$ and $w / \mathrm{w} /$, which, since they were so closely related to their corresponding vowels, were

[^20]sometimes treated as unessential, as were the vowels, and frequently omitted. ${ }^{8}$ Some scholars suggest that these consonants "may have developed into Coptic vowels where the syllable structure suggests this", ${ }^{9}$ or the graphemes functioned as consonants "wherever they were such in Egyptian ... which does not exclude the possibility that phonologically $/ \mathrm{j} / \mathrm{and} / \mathrm{w} /$ may at times be phonetically realised as vowels. ${ }^{\prime 10}$ Although there are difficulties in determining the vocalic or consonantal value of the vowel-glides in certain circumstances, for this present study I have attempted to make this distinction between the two phonemes in the orthographic description, and as such have followed the phonological reconstructions which have been proposed by Peust. ${ }^{11}$

The basic graphemes which represent the vowel-glides in Sahidic include the single iota $\boldsymbol{I}$ and the digraph $\mathrm{e}_{\mathrm{I}}$ for $/ \mathrm{i} / \sim / \mathrm{j} /$, and the single upsilon $\gamma$ and the digraph $\mathrm{O} \gamma$ for $/ \mathrm{u} / \sim / \mathrm{w} /$. In the Chester Beatty codices the form of the omicron sitting between the two branches of the upsilon $(\dot{\gamma})^{12}$ is also seen at the end of a line. ${ }^{13}$ In addition to these alphabetic signs two additional marks, or diacritics, the trema (or diaeresis) and the circumflex can be employed. These two diacritics differ in both their position and function, but both appear to reduce ambiguity for the reader. ${ }^{14}$

The trema appears as two dots, rarely as one dot, almost exclusively over the iota (i). The upsilon rarely carries a trema, being restricted to Greek loan words, ${ }^{15}$ and the only instance of this type in the manuscripts studied here occurs in the Hebrew name m由 $\ddot{\gamma} \mathbf{C H C}$

[^21](M $\omega \ddot{u} \sigma \tilde{\eta} \varsigma){ }^{16}$ The grapheme $i ̈$ is used extensively in early and classical Sahidic, and generally serves as an alternative form of the digraph $\mathrm{e}_{\mathrm{I}}$ in its function as rendering the glide $/ \mathrm{j} /$. It most commonly follows a vowel and indicates the individuality of the two sounds, the vowel and the glide, thus signalling that the two do not constitute a diphthong.

The circumflex, on the other hand, is rarer and its function is more obscure. It can also be used in more varied situations and over a variety of graphs, written over single vowels or linking pairs of graphemes. In the case of the vowel-glides, et and $\mathrm{O} \mathrm{\gamma}$ ( $\widehat{\mathrm{E}} \mathrm{and} \widehat{\mathrm{OY}}$ ), it seems to designate the graphic unity of the two characters. The form and position of the circumflex can vary between manuscripts. It can have a clear angular form, like a gable, or it can take the form of a curved, oblique line, or even a straight line similar to a superlinear stroke. It can appear above the digraph ( $\widehat{\mathrm{EI}}$ and $\widehat{\mathrm{OY}}$ ) or a little to right, or covering only the single iota or upsilon ( $\hat{\imath}$ and $\hat{\gamma}$ ). In cases of crasis, where the omicron is dropped, the circumflex can also span another vowel ( $\widehat{\lambda \mathcal{Y}}$ and $\widehat{\mathcal{H Y}}$ ). The critical editions do not always accurately reflect the placement of the diacritics. In the edition of the Chester Beatty codices, Thompson avoids including the circumflex altogether, apart from a few exceptions, where they do, in fact, appear throughout the manuscript, mostly as an oblique line. ${ }^{17}$ Budge and Kasser, while including all the diacritical marks, locate the circumflexes over the iota in their editions in the cases where they are placed over the digraph in the manuscripts. ${ }^{18}$ Given that each scribe is subject to the usual fluctuations in the execution of these characters, for this present project, the most common form of the circumflex used by each scribe is represented in the data. In contrast to the trema, which is used relatively consistently in both early and classical Sahidic, the circumflex is used much less consistently, which raises questions as to the understanding of its practical function.

It should be noted that in the Song of Moses, Deut. 32-34, in the British Library manuscript, there is evidence that diacritics were added to the text by a later hand, possibly,

[^22]according to Budge, for singing purposes. ${ }^{19}$ Such accents include the acute accent and the circumflex which appear on many of the vowels, as well as the vowel-glides. ${ }^{20}$ In this part of the text, many of the circumflexes are formed differently to the earlier ones, and the ink is of a lighter colour, indicating a later addition.

Mention must also be made of words of Greek origin because of their extensive use in the Coptic texts. ${ }^{21}$ Greek words transcribed into Sahidic generally preserved their original orthography, but the forms became fixed, having been freed from the various declension and conjugation endings. During the Hellenistic and Roman periods the spoken Greek language underwent significant changes, particularly with the reduction of distinctive vowel phonemes. However, the literary texts continued to be written in, and copied with, the classical Greek orthography and accordingly, in the early Sahidic literary manuscripts, the Copto-Greek words generally observed the classical Greek spelling, although non-classical koine spellings were not absent from these manuscripts, reflecting the common pronunciation. In the koine Greek of the Roman period, the graphemes $\iota$ and $\varepsilon \iota$ both realised the vowel $/ \mathrm{i} /$, and consequently the alternation between these two graphemes was common, not only in the written Greek, but also in the Sahidic manuscripts, where the optionality between $\mathbf{I}$ and $\mathbf{e}$ was widespread. ${ }^{22}$ The use of the Coptic grapheme $\gamma$ in Copto-Greek words renders the Greek grapheme $v$, but also occasionally $\eta$ or unstressed $\varepsilon \iota^{23}$

[^23]Table 1: Comparative typology of the vowel /i/

| Case | Syllabic <br> Context <br> *Examples | Early Sahidic |  |  |  | Classical Sahidic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | P.Bodm. 18 | P.Bodm. 23 | BL Deut./Jon. | BL Acts | CB Epistles | CB Acts |
| A1 | $\begin{gathered} \# ' \mathbf{V} \\ \text { eı } \end{gathered}$ | $\begin{gathered} \mathrm{el} \\ (\text { var. } \widehat{\text { €i~ï }}) \end{gathered}$ | $\begin{gathered} \text { Eı } \\ (\text { var. } \mathrm{e} \mid \sim \mathbf{l}) \end{gathered}$ | $\begin{gathered} \text { eı } \\ (\text { var. } \widehat{\text { el~i }}) \end{gathered}$ | $\begin{gathered} \mathrm{e} \mathbf{I} \\ (\text { var. } \mathrm{e} \ddot{\sim} \sim \mathfrak{i} \sim \mathbf{i}) \end{gathered}$ | $\begin{gathered} \text { eı } \\ \text { (var. } \left.\begin{array}{c} \text { ei } \sim 1 \sim \mathbf{i} \end{array}\right) \end{gathered}$ | $\begin{gathered} \text { €ı } \\ (\text { var. } \mathrm{el} \sim \mathbf{i}) \end{gathered}$ |
| A2 | \#(')VC <br> eic- | EI | EI | EI | €ı | Eı (var. ¢ì) | EI |
| A3 | $\begin{gathered} (')(\mathrm{C}) \mathrm{C} \mathbf{V} \\ \times .1 \end{gathered}$ | $\begin{gathered} \mathrm{I} \\ \left(\mathrm{var} . \mathrm{EI}^{\prime}\right) \end{gathered}$ | $\begin{gathered} 1 \\ \left(\text { var. } \mathrm{e}_{\mathrm{l}} \sim \widehat{\mathrm{e} \mathrm{l}}\right) \end{gathered}$ | $\begin{gathered} \mathrm{I} \\ (\text { var. } \mathrm{E} \mathbf{I} \sim \widehat{\mathrm{E}}) \end{gathered}$ | $\begin{gathered} \mathbf{l} \\ (\operatorname{var} . \mathbf{\epsilon} \sim \mathbf{i}) \end{gathered}$ | $\begin{gathered} \mathbf{I} \\ (\text { var. } \mathbf{\epsilon} \sim \mathbf{I} \sim \mathbf{i}) \end{gathered}$ | $\begin{gathered} \mathbf{I} \\ \text { (var. } \mathbf{e l} \sim \epsilon \mathbf{i}) \end{gathered}$ |
| A4 | $\begin{gathered} (')(\mathrm{C}) \mathrm{CVC}(\mathrm{C}) \\ \text { NIM } \end{gathered}$ | $\begin{gathered} \mathrm{I} \\ (\text { var. } \mathrm{\epsilon ı}) \end{gathered}$ | $\begin{gathered} \mathrm{I} \\ (\text { var. } \mathrm{e} \mathrm{I}) \end{gathered}$ | $\begin{gathered} \mathbf{l} \\ (\text { var. } 1 \text { í } \mathbf{e}) \end{gathered}$ | $\begin{gathered} \mathrm{I} \\ (\text { var. } \mathrm{e} \mathrm{I}) \end{gathered}$ | $\begin{gathered} \mathbf{\prime} \\ \text { (var. } \mathbf{e} \mathbf{I} \text { ) } \end{gathered}$ | $\begin{gathered} 1 \\ \left(\text { var. } \mathrm{et}_{1}\right) \end{gathered}$ |
| A5 | $\begin{aligned} & \text { '(C)GV } \\ & \text { oץeı } \end{aligned}$ | EI | $\begin{gathered} \text { €ı } \\ (\text { var. } \widehat{\text { él }} \text { ) } \end{gathered}$ | $\begin{gathered} \text { eı } \\ \text { (var. êt) } \end{gathered}$ | €ı | $\begin{gathered} \text { eı } \\ \left(\text { var. } \mathrm{eìi}^{2}\right) \end{gathered}$ | ¢ı |
| A6 | '(C)GVC <br> w) | EI | EI | EI | €ı | $\begin{gathered} \text { еı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \text { еı } \\ \text { (var. ï) } \end{gathered}$ |

Key
$\mathrm{V}=$ vowel
$\mathrm{G}=$ glide
$\mathrm{C}=$ consonant
(C) = possibility of one or more consonants
\# = segment boundary
' = accented syllable
. = syllable divider
Ø = no occurrences
*Examples - taken from classical Sahidic (Chester Beatty Acts)

Table 2: Comparative typology of the glide /j/

| Case | Syllabic Context Examples |  | Early Sahidic |  |  |  | Classical Sahidic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | P.Bodm. 18 | P.Bodm. $23$ | $B L$ <br> Deut./Jon. | BL Acts | CB <br> Epistles | CB Acts |
| B1 | $\begin{gathered} \text { \#'GV } \\ \text { EICD } \end{gathered}$ |  | $\begin{gathered} \text { eı } \\ (\text { var. } \mathbf{\imath \sim i}) \end{gathered}$ | $\begin{gathered} \text { Eı } \\ (\text { var. } 1 \sim i) \end{gathered}$ | $\begin{gathered} \text { eı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \text { €ı } \\ \text { (var. ı~i) } \end{gathered}$ | $\begin{gathered} \text { еı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \text { €ı } \\ \text { (var. } \mathbf{\imath \sim i}) \end{gathered}$ |
| B2 | $\begin{gathered} \text { \#' } \mathbf{G V C}(\mathrm{C}) \\ \text { еıळт } \end{gathered}$ |  | $\begin{gathered} \text { eı } \\ \text { (var. I) } \end{gathered}$ | $\begin{gathered} \text { еı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \mathrm{e} \mathbf{ı} \\ (\text { var. } \widehat{\text { el }} \boldsymbol{i}) \end{gathered}$ | $\begin{gathered} \text { eı } \\ \text { (var. I) } \end{gathered}$ | $\begin{gathered} \text { eı } \\ \text { (var. ו) } \end{gathered}$ | $\begin{gathered} \text { еı } \\ \text { (var. ï) } \end{gathered}$ |
| B3 | '(C)CGV <br> 21H |  | $\begin{gathered} \mathrm{I} \\ (\text { var. } \mathrm{El}) \end{gathered}$ | 1 |  | 1 | 1 | 1 |
| B4 | (C)CGVC 2ıеıв |  | 1 | 1 | $\begin{gathered} \mathrm{I} \\ (\operatorname{var} . \mathrm{el}) \end{gathered}$ | 1 | 1 | 1 |
| B5 |  | $\mathrm{V}=\mathrm{H}$ | €ı | $\begin{gathered} \mathrm{\epsilon} \mathrm{\prime} \\ (\text { var. } \widehat{\text { el }} \text { ) } \end{gathered}$ | $\begin{gathered} \text { еı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \ddot{i} \\ (\text { var. } \mathbf{\epsilon 1 \sim}) \end{gathered}$ | $\begin{gathered} \ddot{i} \\ (\text { var. } \mathbf{e l} \sim \mathbf{e} \mathbf{i}) \end{gathered}$ | ï |
|  |  | $\mathrm{V}=\mathrm{O}$ | EI | $\begin{gathered} \text { eı } \\ (\operatorname{var} . \ddot{i} \sim 1) \end{gathered}$ | $\begin{gathered} \text { €ı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \ddot{\mathrm{i}} \\ \text { (var. €ı~1) } \end{gathered}$ | $\begin{gathered} \ddot{i} \\ (\text { var. } \mathbf{\epsilon i \sim E i}) \end{gathered}$ | $\begin{gathered} \ddot{\mathrm{i}} \\ (\mathrm{var} . \mathrm{e} \mathrm{I}) \end{gathered}$ |
|  |  | $\mathrm{V}=\boldsymbol{\omega}$ | Ø | EI | EI | $\begin{gathered} \ddot{\mathrm{i}} \\ (\text { var. } \mathrm{eı}) \end{gathered}$ | i | i |
|  |  | $\mathrm{V}=\mathrm{O} \gamma$ | ï | $\begin{gathered} \text { Eı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \text { еı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \ddot{i} \\ (\text { var. } \mathrm{\epsilon} \text { ) } \end{gathered}$ | i | ï |
|  |  | $\mathrm{V}=\boldsymbol{\lambda}$ | $\begin{gathered} \ddot{i} \\ (\operatorname{var} . \hat{\imath} \sim \mathbf{\imath} \sim \mathbf{\epsilon}) \end{gathered}$ | $\begin{gathered} \ddot{i} \\ (\operatorname{var} . \operatorname{el} \sim \mathbf{I}) \end{gathered}$ | $\begin{gathered} \ddot{\mathrm{i}} \\ \text { (var. } \mathrm{\epsilon} \mathbf{I}) \end{gathered}$ | $\begin{gathered} \ddot{i} \\ (\text { var. } \mathbf{e l \sim 1}) \end{gathered}$ | $\begin{gathered} \ddot{\mathrm{i}} \\ (\mathrm{var} . \mathrm{ei}) \end{gathered}$ | ï |
|  | $\begin{gathered} \text { (C)VG\# } \\ \text { גї- } \\ \text { eï- } \end{gathered}$ | $\mathrm{V}=\boldsymbol{\lambda}$ | $\begin{gathered} \ddot{i} \\ (\operatorname{var.} \hat{i} \sim \mathbf{e}) \end{gathered}$ | $\begin{gathered} \text { еı } \\ (\operatorname{var} . \ddot{i} \sim \mathbf{I}) \end{gathered}$ | ï | $\begin{gathered} \ddot{i} \\ (\text { var. } \mathbf{\epsilon} \mathbf{1 \sim} \sim \mathbf{i}) \end{gathered}$ | $\begin{gathered} \ddot{\mathrm{i}} \\ (\mathrm{var} . \mathrm{ei}) \end{gathered}$ | i |
|  |  | $\mathrm{V}=\mathrm{e}$ | EI <br> (var. $\ddot{i} \sim \hat{\imath}$ ) | $\begin{gathered} \text { еı } \\ (\text { var. ©i~i) } \end{gathered}$ | $\begin{gathered} \ddot{\mathbf{i}} \\ (\text { var. } \mathrm{I}) \end{gathered}$ | $\begin{gathered} \ddot{\mathbf{i}} \\ (\text { var. } \mathrm{I}) \end{gathered}$ | $\begin{gathered} \ddot{i} \\ (\text { var. } \mathbf{e l \sim e \grave { i } )} \end{gathered}$ | ï |
| B6 | '(C)VG.CV(C) <br> 2oïne |  | $\begin{gathered} \mathrm{V}=\mathrm{O} \\ \mathrm{el} \end{gathered}$ | $\begin{gathered} \text { eı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \mathrm{V}=\mathrm{O}, \mathrm{H} \\ \mathrm{e} \mathbf{I} \end{gathered}$ | $\begin{gathered} \mathrm{V}=\mathbf{O}, \mathbf{H} \\ \mathrm{\epsilon} \quad(\text { var. } \ddot{i} \sim \mathbf{l}) \end{gathered}$ | $\begin{gathered} \mathrm{V}=\mathbf{O}, \mathbf{H} \\ \ddot{\mathrm{i}}(\text { var. } \mathbf{\epsilon} \mathbf{I}) \end{gathered}$ | $\mathrm{V}=\mathrm{O}$ <br> ï (var. ©ı) |
|  |  |  | $\begin{gathered} V=\lambda \\ \ddot{i} \end{gathered}$ |  | $\begin{gathered} V=\boldsymbol{\lambda} \\ \ddot{\mathrm{i}}(\mathrm{var} . \mathrm{\epsilon} \mathbf{ı}) \end{gathered}$ | $\begin{gathered} V=\lambda \\ \epsilon \mathbf{l} \end{gathered}$ | $\begin{gathered} V=\lambda \\ i \end{gathered}$ | $V=\boldsymbol{\lambda}, \mathbf{H}$ ï |
| B7 |  |  | ¢ı | ¢I | $\begin{gathered} \text { €ı } \\ (\operatorname{var} . \mathrm{i}) \end{gathered}$ | €ı | $\begin{gathered} \text { еı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} \text { еı } \\ (\operatorname{var} . \mathrm{i}) \end{gathered}$ |
| B8 | $\begin{array}{r} \mathrm{CVO} \\ \text { PM } \end{array}$ |  | Ø | Ø | Ø | €ı | EI | ¢1 |
| B9 | $\begin{gathered} \text { '(C)V. } \\ \text { (C)V.' } \\ x \end{gathered}$ | V(C) <br> V(C) <br> ie | ¢ı | $\begin{gathered} \text { еı } \\ \text { (var. ï) } \end{gathered}$ | $\begin{gathered} V=\mathrm{O} \gamma \\ \mathrm{\epsilon} \boldsymbol{\prime} \\ \mathrm{~V}=\boldsymbol{\lambda}, \mathrm{\epsilon} \end{gathered}$ ï | $\begin{gathered} \epsilon \mathbf{1} \\ (\operatorname{var} . \ddot{\mathrm{i} \sim \mathbf{1})} \end{gathered}$ | $\begin{gathered} \mathrm{e} \mathbf{I} \\ (\mathrm{var} . \ddot{i} \sim \mathbf{e i}) \end{gathered}$ | $\begin{gathered} \ddot{i} \\ (\text { var. } \mathrm{El} \sim \mathrm{Ei}) \end{gathered}$ |

## Comparative Typology of the Vowel-Glide /i/~/j/ (Cf. Tables 1 and 2)

 dependent on its phonological environment. Free variation, however, is the characteristic feature of the early Sahidic manuscripts. The distribution of the allographs is not fully fixed and may vary from manuscript to manuscript and scribe to scribe. Furthermore, one and the same scribe may fluctuate between alternative graphic forms in the same environment, not only in the manuscripts under investigation in this present study, but also in other early manuscripts. ${ }^{24}$ In the later, classical manuscripts, although the extent of free variation diminishes, in certain environments it resists complete standardisation, and indeed, variation sometimes becomes a regular and predictable feature in that environment.

## 1. /i/~/j/ lexeme-initial (Cf. Appendices: Cases A1, A2 and B1, B2)

At the beginning of a lexeme the vowel-glide $/ \mathrm{i} / \sim / \mathrm{j} /$ is generally represented by the digraph $\epsilon_{1}$ in both early and classical Sahidic. The digraph functions as a vowel, unless it is followed by a vowel in the same syllable, in which case it assumes the value of a consonant (glide): for example, eIpe /'i.ro/, and eict /'jot/. Proper nouns of Hebrew origin are the exception to this rule, and in this case $i \boldsymbol{i}$ is regular, whether it has a vocalic or consonantal value: for example, їслдк, їдкав.

In the manuscripts considered here, the common variant form, the digraph surmounted by a circumflex $\widehat{\text { el }}$ (var. $\mathbf{\epsilon i}$ ), occurs to a greater or lesser extent, depending on the scribe, with the lexeme-initial vowel /i/, in particular, with the verb ei~ê ( $\mathbf{\epsilon i}$ ) "to come". In BL 7594, the scribe of Deuteronomy uses the digraph with the circumflex with this word on all but one occasion, and in Jonah it is consistently employed. On the other hand, the scribe of Acts never

[^24]uses the circumflex, on this, or at the beginning of any other word. Rather, we see a trema appearing on two occasions (less than $2 \%$ of the time) over the iota of the digraph, eï ( $B L$ Acts $1.8,7.34) .{ }^{27}$ Is this a variant or a lapsus calami? As we shall see, the scribe of Acts makes use of the trema in other unexpected situations. The scribe of P.Bodm. 23 employs the circumflex only on this word in lexeme-initial position, and prefers it to the bare digraph, with et occurring 73\% of the time. ${ }^{28}$ It occurs only once in P.Bodm. 18 (Deut. 1.20). Several other lexemes also display this feature in $B L$ 7594, but only in Deuteronomy, where the scribe fluctuates between the two forms: eipe~êpe, eine êine, eibe~êibe, eime~ême. ${ }^{29}$ This scribe tends to employ the circumflex only when it functions as a vowel in this and other positions. ${ }^{30}$

The variable use of the circumflex persists into the $6^{\text {th }}$ century in the Chester Beatty codices with the scribe of the Epistles who employs it with the vowel in this position, but not the glide. ${ }^{31}$ In CB Acts, the later and more standardised of the two codices, it appears relatively consistently with the verb "to come" but rarely elsewhere.

When preceded by the definite article, or other preformative clitic, the digraph is retained, with a few exceptions. On rare occasions in the $B L$ manuscript, the digraph of the glide is replaced by $̈:$ еїоl[pд] $2 \overline{\mathrm{c}}$ "to see it" (BL Deut. 28.68), плїшт (BL Deut. 26.5), eү̈̈op $\bar{M}$ (BL Acts 28.6), and the unusual neï.入.Dגon "to idols" (BL Acts 15.20). This occurs once in the Chester Beatty codex of Acts. ${ }^{32}$ In most of these cases the ï follows a vowel (except ©ү̈̈OpM).

On other occasions, the epsilon of the vocalic and consonantal digraph is sometimes dropped when preceded by a consonant, particularly the definite article: mire (P.Bodm. 23 Isa. 50.2); пוepol (P.Bodm. 23 Isa. 48.18) (BL Acts 16.13); пוшт (BL Acts 1.4, 1.7, 28.8);

[^25] 5.7) for $\boldsymbol{\lambda c c I}$ "she came"; and in the case of qıдт $\bar{\kappa}$ (P.Bodm. 18 Deut. 3.27, 4.19), for qıeıat $\bar{\kappa}$, the vowel and glide coalesce, resulting in syntagmatic resyllabification, or modification of the syllable structure, thus /fi.' jat/ >/'fjat/.

This phenomenon also occurs in classical Sahidic: пו| $\boldsymbol{\omega т}$ (Rom. 15.6), пוшт (Eph.
 Cor. 8.7); пıєıв (l Cor. 15.56) and пекıєıв (l Cor. 15.55); пıєро (Acts 16.13). According to Funk, the writing of пוшт rather than пеı由т is an example of syntagmatic resyllabification, /'jot/ > /pi.' ot/ ${ }^{33}$ Such a modification can be seen quite clearly in cases where a word is divided at the end of a line, as in mul由т (Rom. 15.6), however, in other cases it is difficult to prove, since the rules of Coptic syllabification allow both пеıळт and пוшт to be realised /'pjot/. The representation of the vowel-glide in this context is analogous with the following rule ( $/ \mathrm{i} / \sim \mathrm{j} /$ following a consonant), where both the vowel and the glide take the form of $\mathbf{I}$ when preceded by a consonant, and as such, in the examples above, the lexicalisation of the spelling seems to have resulted. ${ }^{34}$

It should be noted in the case of cnap-êepboone (BL Deut. 28.56) and peqea)eiepbooone (BL Deut. 18.10), it is possible that resyllabification may have taken place as a result of the addition of the preformative morphemes, the phonemic value of the digraph being modified to a vowel: /sna.ri.ər.' $\beta \supset$ :.nə/ and /rə. fə.fi.ər.' $\beta \circ .$. nə/. This interpretation is based on the assumption that this scribe tends to only use the digraph carrying a circumflex if its phonemic value is vocalic. ${ }^{35}$ It is interesting to note that the form of the circumflex in both these cases reflects the style of the first hand of Deuteronomy.

This lexicalisation of the orthography is clearly demonstrated, in the early and the classical manuscripts, when the definite article precedes the biblical proper nouns which begin with the vowel-glide $\ddot{i}$. This $\ddot{i}$ is similarly replaced by the simple iota: mop._.anhc "Jordan" (passim); пеєвоүсаıос "the Jebusite" (passim); пісрднд "Israel" (passim); өiepoүсдлнм "Jerusalem" (P.Bodm. 23 Isa.66.10), but өїєроүсланм (P.Bodm. 23 Isa.

[^26]34 Funk (1995b), p. 31.
35 The only other possible case of êrepresenting the glide is ne2êcıs (BL Deut. 32.14), but resyllabification may have occurred here too.
49.15); пוоү.ㅅ.גї (CB Rom. 2.10, 2.17, $2.28 \times 2,2.29 \times 2,3.1,10.12$ ). It is interesting to note that there is one occurrence with the plural definite article $\mathbf{N -}$ (without the superlinear stroke), mıOY.入.גї /nju.' daj/ (CB Rom. 3.9), in contrast to the usual plural article $\overline{\mathbf{n}}$, where the trema is regularly retained, as is its syllabification, N̄ïoү.ㅅ.גї /n.ju.' daj/.


In the post-consonantal position the vowel-glide $/ \mathrm{i} / \sim / \mathrm{j} /$ is generally represented by the grapheme $\mathbf{1}$. The iota functions as a vowel, unless it is followed by a vowel in the same syllable, in which case it functions as a consonant: for example, X:I /ci/, mice /'mi.sa/, nIM /'nim/, гıн /'hje/, тсıо /'tsjo/, гıоме /'hjo.mə/, гıєıв /'hjiß/, евıнн /д.' $ß$ jen/.

The graphic realisation of the glide $/ \mathrm{j} /$ in this position is fairly stable. The variant e ו occurs twice in P.Bodm. $18^{36}$ and three times in BL 7594, ${ }^{37}$ once with a circumflex: ne2êeıв (BL Deut. 32.14) vs. оү2ıєıв (BL Deut. 14.20). The case of 2êeıs is an interesting example in that two adjacent vowel-glides are both rendered by the digraph, the first carrying a circumflex. It appears that this scribe is attempting to distinguish the two phonemes, and since he tends to only use the circumflex when the digraph functions as a vowel, it could suggest that he is reading here /'hij $\beta$ / rather than the usual /'hji $\beta /{ }^{38}$ There is one example in this manuscript where ï appears in this environment: $\sigma$ ïe "goat" (BL Deut. 32.14).

In classical Sahidic there is no variation with the graphic representation of the glide in this environment.

The vowel /i/ in this position is also quite stable with little variation. With native Egyptian words in a closed syllable there is no variation. In an open syllable, however, the

36 Tameio $(\Rightarrow)($ P.Bodm. 18 Deut. 9.16, 10.1) vs. TAMIO $(\Rightarrow)($ P.Bodm. 18 Deut. 4.23, 4.25, 9.12).
 (BL Deut. 22.29) vs. ө̄̄віо (BL Deut. 26.6, 26.7).
38 Cf. Peust (1999), p. 260. In cases where two vowel-glides are adjacent it is sometimes difficult to decide between their vocalic or consonantal values. In this case, the long form of the definite article, which is used with this word (nezieis), would normally indicate that the word begins with a consonant cluster, therefore, the first vowel-glide would otherwise have a consonantal value. The same rule can also be extended to гIOME (ne 2 IOME) /'hjo.mə/.
variant digraph occurs, most particularly with the word cel~cê~cl "to become satisfied". In the BL manuscript the scribe of Acts is consistent with the rule and writes cı (Acts 27.38). On the other hand, the scribe of BL Deut. alternates between ceı (67\%) and cê (33\%). ${ }^{39}$ In P.Bodm. 18 ct is written once (Deut. 6.11) and ceı twice (Deut. 8.10, 8.12). In P.Bodm. 23 cê is regular. The opposition of these allographs in this lexeme is resolved in classical Sahidic where the digraph (with and without the circumflex) has become the standard, defying the prescribed rule for this domain: ceı (Rom. 15.24) (Col. 2.23); ceì (Acts 27.38) (Phil. 4.12).

In the early manuscripts, apart from cei~cê, the digraph is rarely employed. On two occasions only in BL Deut. the digraph is used: өeıme "the wife" (Deut. 5.21), and neice
 The variant is found more often in the lengthier Chester Beatty codices, especially in the Epistles where the digraph is employed, most commonly at the end of the line. ${ }^{40}$

There are several instances where the scribe of BL Acts adds a trema (a typical feature of this scribe): n $\subset \ddot{i}$ (Acts 19.33, 22.30); M̄ni- (Acts 20.27, 20.33) - the trema with one point (40\%); and x.גїOүג (Acts 19.37), which is either a variant spelling of $x .10 \gamma \boldsymbol{\lambda}$ (Acts 18.5), or perhaps a scribal error, the trema triggered by the preceding vowel $\lambda$ (cf. Case B6). The trema in this position does not appear in the Chester Beatty manuscripts.

In words of Greek origin the Greek vowels t and $\varepsilon \iota$, representing the phoneme $/ \mathrm{i} /$, exhibit some variation, as in the Greek, when transcribed into Sahidic, with the interchangeability of the Coptic graphemes $\mathbf{I}$ and $\boldsymbol{\epsilon}$. In general, the tendency is to follow the Greek orthography in the early manuscripts: Greek $\iota>$ Sahidic $\mathbf{I}$, and Greek $\varepsilon \iota>$ Sahidic $\mathbf{e}$ ı. Most of these scribes uniformly render Greek $\mathfrak{l}$ with Sahidic $\mathbf{I}$, with only a few exceptions. Variation, however, is most prominent in BL Deut., particularly highlighted with the Greek

 fluctuation between $\boldsymbol{\imath}$ and $\epsilon$ ı with the Sahidic form of $\pi$ ó $\lambda \iota \varsigma$, which is written no八ıc $84 \%$ of

[^27]the time and noлeıc $16 \%$ in BL Deut. and noxeıc always in Jonah. ${ }^{42}$ Similarly, in P.Bodm. 18 half the time поліс is written, the other half, полеıс. ${ }^{43}$ The scribes also generally respect the Greek spelling with the digraph $\varepsilon \iota$, except the scribe of Acts who prefers the single iota to transcribe both $\mathrm{\iota}$ and $\varepsilon \mathrm{c}$.

Exceptionally, in the case of Greek lexemes ending in $\varepsilon \tau \alpha$, the Greek diphthong $\varepsilon \iota$ is always rendered with the single iota in early Sahidic: for example, вонөiл ( $\beta$ оо́ $\theta \varepsilon \iota \alpha$ ),
 Sahidic.

With regard to Copto-Greek verb endings, derived from the contract verbs $-\varepsilon \in \omega /-\varepsilon ́ o \mu \alpha$ t (imperative $-\varepsilon \mathrm{t}$, or infinitive $-\varepsilon \tilde{\imath} v,-\varepsilon \tilde{\imath} \sigma \theta \alpha \mathrm{\iota})^{44}$ the digraph is maintained in P.Bodm. 18, P.Bodm. 23 (but клнроnomı (Isa. 57.13), кдтапатı (Isa. 63.6)), and BL Jon. In contrast, the scribe of BL Deut. alternates freely between the two forms ( $177 \%$ of the time and $\mathrm{er}_{1}$ $23 \%$ ), ${ }^{45}$ and the later of the $B L$ scribes, the scribe of Acts, always employs the iota (but apxeı (Acts 11.15)), having assimilated the Greek orthography into the emerging rules of Sahidic orthography in this environment.

This situation continues into the classical period, with the alternation of $\mathrm{e} \boldsymbol{\mathrm { I }}$ and I in Copto-Greek words in an open syllable. In a closed syllable, however, the iota is regular, even where the Greek has the digraph $\varepsilon$. The scribe of the Epistles, the earlier of the two manuscripts, exhibits the greater variation and frequently renders the vowel /i/ ( 1 or $\varepsilon \iota$ ) with the digraph, particularly at the end of a word. This is illustrated well with the verb endings where he uses $6 \boldsymbol{5} 54 \%$ of the time and $\mathbf{I} 46 \% .{ }^{46}$ Variation with the writing of the vowel in the Copto-Greek words is also not uncommon in CB Acts, the manuscript which is the most standardised. While largely favouring $\mathbf{I}$, the digraph appears, mainly at the end of certain verbs: -K

[^28]demonstrate, on the one hand, the resistance of the Greek orthography, and on the other, the strength of the forces of standardisation in this environment being imposed on the Greek loan words.

## 3. /i/ following a glide

(Cf. Appendices: Cases A5, A6)
$E S$ : eı (var. ©ı)
CB: el (var. €i~i~)

When the vowel /i/follows a glide, in contrast to a pure consonant as in the previous case, the digraph is employed: oүeı /'wi/, oүeıne /'wi.nə/, zOүеıTe /'hwi.tə/, woүeit /'Swit/, гıеıв /'hjiß/.

In an open syllable the only variation occurs with the use of the circumflex. The scribe
 of P.Bodm. 23. The one occurrence in P.Bodm. 18 (Deut. 4.42) does not show a circumflex. The circumflex is also employed consistently with this lexeme by the scribe of the Epistles in the Chester Beatty codex: oreì (1Cor 7.2 x2) (Gal. 4.24). There are no occurrences of this lexeme in CB Acts. The only other example of the use of the circumflex in this domain is


In a closed syllable there is no variation in the early Sahidic manuscripts. In the Chester Beatty codices, however, both scribes have the option to make use of the iota with the trema to shorten the word if it comes at the end of a line: 由) Yü̈T (Eph. 4.17, 5.6), and A..ㄱ̈... (Acts 1.16). This is an interesting development in the orthography of the vowel in this environment. Although the iota with a trema is occasionally employed to represent the vowel /i/ in the early Sahidic manuscripts, the use of this grapheme in this environment is not seen in any of the early manuscripts that I have looked at.

In all the aforementioned cases the graphemic distribution of the vowel-glides is highly standardised in the three $4^{\text {th }}-5^{\text {th }}$ century manuscripts under investigation: eI for lexemeinitial $/ \mathrm{i} /$ and $/ \mathrm{j} /$, and $\boldsymbol{i}$ for biblical names; $\boldsymbol{ı}$ for $/ \mathrm{i} /$ and $/ \mathrm{j} /$ following a consonant in the same syllable; $\mathrm{et}_{\mathrm{I}}$ for the vowel $/ \mathrm{i} /$ following the glides $/ \mathrm{j} /$ and $/ \mathrm{w} /$. Alternative forms exist and are used in free variation by all the scribes, especially the digraph carrying a circumflex. Indeed,
these variants persist into the classical period, some of which became the norm: for example, cei~cei becomes the standard for this word, contrary to rule of distribution; the use of the circumflex over the word "to come" ( $\mathrm{\epsilon}_{\mathrm{i}}$ ) has become the standard for the scribe of CB Acts, the more standardised of the two Chester Beatty codices. At the same time, the circumflex drops out of use in Acts in other environments where it appeared in early Sahidic.

The situation becomes more complex when a vowel precedes the vowel-glide in the same syllable, in which case the grapheme functions as a glide. The graphemic distribution varies according to the type of vowel, and the glide's position within the syllable, and within the word. Moreover, the distribution varies according to the scribe. The rules are more fluid, and this flexibility prevails in the $6^{\text {th }}$ century. Free variation is a characteristic feature of the glides in contact with vowels, and in these environments, highly resistant to standardisation.

## 4. $/ \mathrm{j} /$ at the end of a segment or syllable following the vowels $\mathrm{H}, \mathrm{o}, \omega$, and $\mathrm{o} \mathrm{\gamma}$

(Cf. Appendices: Cases B5, B6)
$E S:$ €ı~ї (var. Єิ~レ~î) $C B:$ ï (var. eı~eì)

When the glide follows the vowels $\mathbf{H}, \mathbf{o}$, and $\omega$, at the end of a segment (Case B5), or closing a syllable at a syllable boundary (Case B6), the majority of the early manuscripts favour the use of the digraph: for example, Heı /'ej/, х:оеı /'coj/, 2ıх心=eıı/hi.'coj/, zOeine /'hoj.nə/. P.Bodm. 18 is the most consistent in this regard, always using the digraph with no variant forms. The scribe of BL Acts, while using the digraph when the glide occurs at the end of a syllable within a segment, prefers the grapheme $i$ at the end of a segment: for
 glide is avoided in the $B L$ manuscript, ${ }^{48}$ P.Bodm. 18, and used only rarely in P.Bodm. 23. ${ }^{49}$
 greatest variation. In P.Bodm. 23 the digraph carries a circumflex with the lexeme неı~не̂i in $29 \%$ of occurrences; elsewhere the plain digraph is used. ${ }^{50}$ In the $B L$ manuscript the scribe of Deuteronomy writes нєı 30 times (never with the circumflex), but нï once (BL Deut. 5.21).

[^29]On the other hand, in this manuscript the scribe of Acts writes нї $68 \%$ of the time and неו elsewhere. ${ }^{51}$ This scribe occasionally omits the trema in cases where it is expected, in this and in other environments. ${ }^{52}$

Included in this domain is the $1^{\text {st }}$ person singular pronominal suffix, which the scribes of P.Bodm. 18, BL Deut. and BL Jon. invariably render with the digraph. The scribe of P.Bodm. 23 uses the variant ï three times, and ו without the trema once. ${ }^{53}$ The scribe of $B L$ Acts, in contrast, always writes the suffix pronoun with the allograph $\ddot{i}$ (occasionally without
 $\boldsymbol{\epsilon} \times \mathbf{X}=\mathbf{\epsilon}$ (Acts 8.24).

When the glide follows vocalic $\mathrm{O} \gamma$ the digraph is favoured in P.Bodm. 23 (except in the case of the suffix pronoun, nOY $=\ddot{\mathrm{i}}$ (Isa. 66.2)), and in Deuteronomy and Jonah in the $B L$ manuscript (except koүï (Deut. 28.38)). On the other hand, the iota with the trema is consistent in BL Acts. There is only one example in P.Bodm. 18: $\mathfrak{\kappa}[\mathrm{o} \gamma] \mathrm{i}$ (Deut. 1.17).

At the end of a syllable, but not at the end of a segment (Case B6), following these vowels, the digraph predominates and is used consistently in P.Bodm. 18, P.Bodm. 23, BL Deut. and Jon. without variation: for example, coeire, zoeite, doeice. It is striking that the scribe of $B L$ Acts, who prefers the grapheme $i$ it render the glide following these vowels elsewhere, in this environment it is only utilised on three occasions. ${ }^{54}$

It is most interesting to observe that the distribution of the allographs in this environment in the British Library Acts is very similar to the Chester Beatty codex of Acts. Indeed, the opposition between $\mathbf{\epsilon \sim \sim} \mathcal{\epsilon}$ and $\ddot{i}$ (following the vowels $\mathbf{H}, \mathrm{O}, \omega$, and vocalic $\mathrm{O} \gamma$ ) begins to be resolved in the Chester Beatty codices, the dominance of the digraph realising the glide in the majority of the early manuscripts gradually being superseded by ï. Although ï is generally the preferred option in the Epistles, free variation continues to persevere: for

[^30]example, with the particular word $\mathbf{H \in I \sim H \in i \sim H i ̈ l ~ t h e ~ d i g r a p h ~ r e s i s t s ~ s t a n d a r d i s a t i o n ~ a n d ~ a p p e a r s ~}$ неı $44 \%$, неі̀ $33 \%$, and нї $23 \%$ of occurrences. ${ }^{55}$ In contrast to the early manuscripts where the circumflex on the digraph functioning as a glide only occurs on the word hê (rarely elsewhere), the scribe of the Epistles uses it frequently whenever the digraph has a consonantal value.

The allograph ï finally becomes fixed in CB Acts, with only a few exceptions, most of which occur at the end of a syllable followed by another syllable: 2Oerte (Acts 11.15); zoleite (Acts 14.14); zoleine (Acts 10.23, 11.20). The latter are good examples of syntagmatic resyllabification (in 'bradysyllabation'): 2O|eite /'ho.i.tə/ (Acts 14.14) vs. 2Oїl'тe /'hoj.tə/ (Acts 22.20, 22.23) (1 Tim. 2.9); and 20|eıne /'ho.i.nə/ (Acts 10.23, 11.20) vs. 2Oïlne /'hoj.nə/ (Acts 19.31) (Rom. 11.25) (Gal. 2.12) (2 Tim. 2.18, 2.20).

## 5. $/ \mathbf{j} /$ at the end of a syllable following the vowels $\boldsymbol{\lambda}$ and $\boldsymbol{\epsilon}$

(Cf. Appendices: Cases B5, B6)


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\(C B:\) ï (var. el~eì)
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When the glide $/ \mathrm{j} /$ follows the vowel $\boldsymbol{\lambda}$ in accented syllables the preference is for the allograph $\ddot{i}$ (occasionally $\mathbf{1}$ ) at the end of a segment, with little variation, in all the early manuscripts. In P.Bodm. 18, the variant eı occurs once in a lexeme: c)ıaeı (Deut. 3.11). The iota with a circumflex appears on a few occasions in this manuscript where a trema would be expected: for example, пגı̂ (Deut. 7.16, 8.10, 9.3); тגî (Deut. 4.6, 9.5); גف) גî (Deut.1.11, 8.13). ${ }^{56}$ In P.Bodm. 23 the variant et occurs occasionally, most particularly with the demonstrative pronoun тaï, where Tatı occurs $18 \%$ of the time. ${ }^{57}$ Similarly, in the $B L$ manuscript the variant eı appears rarely: 2Tá́ıı (Deut. $32.15 \times 2$ ), [ג] C) גeı (Deut. 7.22), ad) $\operatorname{leı}$ (Acts 6.1).

At the end of a syllable followed by another syllable (Case B6) the distribution varies. The grapheme $\mathbf{i}$ is consistent in P.Bodm. 18, and in BL Deut. and Jon., with one exception:

[^31]caeipe (BL Deut. 32.14). In contrast, there is a preference for eı in P.Bodm. 23: kaeice (Isa. 53.9, 57.2), 2дєıвєc (Isa. 51.16, 57.5) vs. өдївєс "the shade" (Isa. 49.2). There is only one example in BL Acts and the digraph is used, as it is in the case where the glide follows the other vowels in this environment: 2גeıbec (Acts 5.15).

There is no evidence of variation at the end of a segment or syllable by the scribe of Acts in the Chester Beatty codex, in which case the iota with the trema is always used. In the Epistles the variant is only employed twice: גїュєì (Phil. 1.20, 2 Cor. 10.15) vs. дїдї (Eph. 4.16, Col. 2.19).

In an unaccented syllable, however, with the demonstrative articles, and the $1^{\text {st }}$ person singular pronoun of the conjugation bases, the distribution of the allographs varies between the manuscripts. Unlike the preference for $i \boldsymbol{i}$ in an accented syllable, the scribe of P.Bodm. 23 inclines towards the use of the digraph following the vowel $\boldsymbol{\lambda}$ in an unaccented syllable, yet exhibiting considerable fluctuation between $\mathrm{EI}_{\mathrm{I}}$ and $\ddot{i}^{58}$ Following the vowel e he almost exclusively uses the digraph (пеї- (Isa. 65.3) being the one exception). Twice the circumflex is used: eêma- (Isa. $57.16 \times 2$ ). Following the vowel $\boldsymbol{\lambda}$, P.Bodm. 18 has a clear preference for the iota carrying the trema (once with a circumflex) with only a few variations: $\boldsymbol{\lambda E I -}$ (Deut. 1.20, 3.2), entaci- (Deut. 1.35). Following the vowel $\epsilon$ this scribe favours the digraph, like the scribe of P.Bodm. 23, but with considerable free variation ( $\mathbf{\epsilon} \mathbf{I}-65 \%, \mathbf{i}-35 \%$ ). ${ }^{59}$ Again, the circumflex replaces the trema on rare occasions. The scribes of the $B L$ manuscript choose ï to represent the glide after both $\boldsymbol{\lambda}$ and $\boldsymbol{\epsilon}$ without variation, apart from the sporadic omission of the trema in Acts, and the unusual spelling, on a few occasions, of the demonstrative article where $\boldsymbol{\lambda}$ is substituted for $\epsilon \cdot{ }^{60}$ In this case the variant form ( $\epsilon ı$ rather than $\bar{i}$ ) follows: naeı(Acts 6.14, 7.7, 9.14), TaEı- (Acts 1.17). ${ }^{61}$

In classical Sahidic, after the vowel $\boldsymbol{\lambda}$ in the conjugation bases, the scribe of the Epistles always renders the $1^{\text {st }}$ person singular pronominal subject with $\ddot{i}$, except in one instance which occurs at the end of the line (nTacil- (Phil. 2.16)). Following the vowel $\mathrm{\epsilon}$ in the conjugation bases, however, the iota with the trema is employed $68 \%$ of the time, and the

58 Cf. Appendix 4, Table 87.
59 Cf. Appendix 3, Table 73 and 74.
60 Thompson (1913), p. 13: A peculiar characteristic of this scribe is the substitution of $\boldsymbol{\lambda}$ for $\boldsymbol{\epsilon}$.
61 Cf. Appendix 2, Table 54.
digraph, with or without the circumflex, $32 \% .{ }^{62}$ The realisation of the glide in the demonstrative articles is distributed almost equally ( $52 \%$ for $\ddot{\mathrm{i}}$, and $48 \%$ for el or ei ). The use
 and $\overline{\mathbf{N} T E G I 2 E \sim \bar{N} T G E I 2 E(64 \%) .}{ }^{63}$ Overall, in the case of the glide following the vowel e in an unaccented prefix, this scribe has a tendency to utilise the circumflex $59 \%$ of occurrences. The scribe of CB Acts is consistent with his use of $\boldsymbol{i}$ after both $\boldsymbol{\lambda}$ and $\boldsymbol{\epsilon}$. There was always a very strong preference for the use of $\ddot{i}$ after the vowel $\boldsymbol{\lambda}$ in the early manuscripts (except P.Bodm. 23), and this becomes even more stable in classical Sahidic. On the other hand, variation was more prevalent following the vowel $\epsilon$, the digraph persisting as a variant into the classical period.

In summary, the distribution of the allographs at the end of a segment or syllable when a vowel precedes the glide (Cases B5 and B6), follows:

- P.Bodm. 23 favours $\mathbf{\epsilon} \mathbf{I}$, except after $\boldsymbol{\lambda}$ in an accented syllable at the end of a segment;
- P.Bodm. 18 favours $\mathbf{\epsilon 1}$, except after $\boldsymbol{\lambda}$ in an accented and unaccented syllable;
- BL Deut. favours $\mathbf{\epsilon}$, except after vowels $\boldsymbol{\lambda}$ and e ;
- BL Acts, on the other hand, favours ï after all the vowels at the end of a segment, but prefers $\boldsymbol{\epsilon} \boldsymbol{I}$ at the end of a syllable, not a segment;
- CB Epistles prefers ï over the digraph, but the digraph persists;
- CB Acts uses ï without variation, except after the vowel o.


## 6. /j/ between a vowel and a consonant (Cf. Appendices: Case B7)

 $E S:$ eı (var. ï) CB: eı (var. ï)When the glide lies between a vowel and a consonant, in the 'covered' position, the digraph is employed in both the early Sahidic manuscripts and the Chester Beatty codices: for
 oyoeic) /'wojj/, xoeic /'cojs/. The variant ï is only used in BL Deut., CB Acts and Epistles, and it occurs at the end of a line, most probably due to lack of space. On a few occasions only in the Chester Beatty codices ï replaces eı elsewhere on the line. ${ }^{64}$

[^32]
## 7. /j/ beginning a syllable (not a segment)

$E S:$ eı (var. ï)
$C B:$ €ı~̈ (var. $\ddot{\mathbf{i} \sim \mathbf{\epsilon}}$ )

There are only two examples of this case where the preceding syllable is closed, PMein /rm'je/ and PMeioofe /rm'jo.wa/, and the digraph is always used in early and classical Sahidic, in the same way it is used at the beginning of a lexeme.

In the intervocalic position, when the preceding syllable is open, the early manuscripts, in most cases, prefer the digraph: for example тдеıо /ta.' $\mathbf{j o}$, тоүеıо /tu.' $\mathbf{j} \mathbf{\sigma} /$, x.деıе /'ca.jə/. P.Bodm. 18 uses it exclusively. P.Bodm. 23 has one exception: naїдт= (Isa.56.2). BL Acts fluctuates between the two allographs, using the digraph $80 \%$ of the time. ${ }^{65}$ $B L$ Deut., on the other hand, always employs the allograph ï when following the vowel $\boldsymbol{\lambda}$ or $\mathbf{\epsilon}$ of the preceding syllable, and et after vocalic or (moүeıooye (BL Deut. 5.8) and тоүеıн (BL Deut. 33.15)). The choice of allograph, in this case, corresponds with its use in Case 5: ï after $\boldsymbol{\lambda}$ or $\mathbf{\epsilon}$, and $\mathrm{\epsilon}$ after $\mathrm{O} \gamma$.

It is in this domain that the two scribes of the Chester Beatty codices differ in the preferred choice of allograph. The scribe of the Epistles prefers the digraph, like most of the early scribes, but switches quite frequently between the two allographs, specifically when the preceding vowel is $\boldsymbol{\lambda}$, in which case he uses the digraph (occasionally with the circumflex) $68 \%$ of the time, and the iota with the trema $32 \% .{ }^{66}$ The scribe of CB Acts renders the glide in this environment with $i$, the only exception occurring with the following word: oyeeienin (67\%) vs. оүєїєнin (33\%).

[^33]
### 4.3 TYPOLOGIES OF THE VOWEL-GLIDE /u/~/w/

Table 3: Comparative typology of the vowel /u/

| Case | Syllabic Context Examples | Early Sahidic |  |  |  | Classical Sahidic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | P.Bodm. 18 | P.Bodm. 23 | BL Deut./Jon. | BL Acts | CB Epistles | CB Acts |
| C1 | $\begin{gathered} \text { \#(')V } \\ \text { OYNAM } \end{gathered}$ | $\begin{gathered} \text { OY } \\ \text { (var. } \gamma \text { ) } \end{gathered}$ | $\begin{gathered} \mathrm{O} \mathrm{\gamma} \\ (\text { var. } \gamma \text { ) } \end{gathered}$ | OY <br> (var. $\hat{Y} \sim \widehat{O}$ ) | $\begin{gathered} \mathrm{OY} \\ (\text { var. } \gamma \text { ) } \end{gathered}$ | $\begin{gathered} \text { OY } \\ (\text { var. } \gamma \text { ) } \end{gathered}$ | $\begin{gathered} \text { OY } \\ (\text { var. } \gamma \text { ) } \end{gathered}$ |
| C2 | (')(C)CV $\mathrm{MO} \gamma$ | OY | OY | $\begin{gathered} \mathrm{OY} \\ \text { (var. } \mathrm{OY} \text { ) } \end{gathered}$ | OY | OY | OY |
| C3 | $\begin{gathered} \text { '(C)CVC(C) } \\ 20 Ү \mathrm{~N} \end{gathered}$ | OY | OY | $\begin{gathered} \mathrm{OY} \\ \text { (var. } \mathrm{OY} \text { ) } \end{gathered}$ | OY | OY | OY |

Table 4: Comparative typology of the glide /w/

| Case | Syllabic Context Examples |  | Early Sahidic |  |  |  | Classical Sahidic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { P.Bodm. } \\ 18 \end{gathered}$ | P.Bodm. 23 | BL Deut./Jon. | BL Acts | CB Epistles | CB Acts |
| D1 | $\begin{gathered} \#(') \mathbf{G V} \\ \text { orג } \end{gathered}$ |  | OY | $\begin{aligned} & \mathrm{o} \mathrm{\gamma} \\ & \text { (var. } \gamma \text { ) } \end{aligned}$ | $\begin{aligned} & \mathrm{o} \mathrm{\gamma} \\ & \text { (var. } \gamma \text { ) } \end{aligned}$ | $\begin{aligned} & \text { or } \\ & \text { (var. } \gamma \text { ) } \end{aligned}$ | OY | OY |
| D2 | $\begin{gathered} \text { \#(')GVC(C) } \\ \text { оүшм } \end{gathered}$ |  | Or | $\begin{aligned} & \mathrm{o} \mathrm{\gamma} \\ & \text { (var. } \gamma \text { ) } \end{aligned}$ | $\begin{aligned} & \mathrm{o} \mathrm{\gamma} \\ & \text { (var. } \gamma \text { ) } \end{aligned}$ | $\begin{aligned} & \mathrm{o} \mathrm{\gamma} \\ & \text { (var. } \gamma \text { ) } \end{aligned}$ | $\begin{gathered} \text { or } \\ \text { (var. } \gamma \text { ) } \end{gathered}$ | $\begin{aligned} & \mathrm{o} \mathrm{\gamma} \\ & \text { (var. } \gamma \text { ) } \end{aligned}$ |
| D3 | '(C)CGV гоүeite |  | OY | OY | OY | OY | OY | OY |
| D4 | '(C)CGVC () оүеाт |  | Or | OY | OY | OY | OY | OY |
| D5 |  | $\mathrm{V}=\mathrm{o}$ | Or | or | $\begin{gathered} \mathrm{OY} \\ (\text { var. } \widehat{O \mathcal{Y}}) \end{gathered}$ | $\begin{aligned} & \mathrm{o} \mathrm{\gamma} \\ & \text { (var. } \gamma \text { ) } \end{aligned}$ | OY | OY |
|  |  | $\mathrm{V}=\omega$ | or | or | or | or | or | or |
|  |  | $\mathrm{V}=\mathrm{O} \gamma$ | $\varnothing$ | $\varnothing$ | or | or | or | or |
|  |  | $\mathrm{V}=\mathrm{H}$ | $\gamma$ | $\begin{gathered} o \gamma \\ (\text { var. } \gamma \sim \hat{\gamma}) \end{gathered}$ |  | $\begin{gathered} \gamma \\ \text { (var. } \mathrm{O} \text { ) } \end{gathered}$ | $\gamma$ | $\gamma$ |
|  |  | $V=\lambda$ | $\gamma$ | $\begin{gathered} \gamma \\ (\text { var. } \mathrm{o} \mathrm{\gamma}) \end{gathered}$ | $\begin{gathered} \gamma \\ (\operatorname{var} . \mathrm{OY}) \\ \operatorname{AY}(\widehat{\lambda Y} \sim \hat{Y}) \end{gathered}$ | $\gamma$ | $\gamma$ | $\gamma$ |
|  |  | $\mathrm{V}=\mathrm{e}$ | $\begin{gathered} \gamma \\ \text { (var. } \mathrm{OY} \text { ) } \end{gathered}$ | $\gamma$ | $\begin{gathered} \gamma \\ (\text { var. } \mathrm{o} \mathrm{\gamma} \sim(\hat{\gamma}) \end{gathered}$ | $\gamma$ | $\gamma$ | $\gamma$ |
|  |  | $\mathrm{V}=\mathrm{oo}$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ |
| D6 | (C)V.'GV(C) <br> '(C)V.GV(C) <br> кооүе <br> x.ioye <br> гвнүе <br> ${ }^{\boldsymbol{A}}{ }^{\circ} \mathrm{\omega}$ <br> меєүе | $\mathrm{V}=0$ | OY | OY | Or | Or | Or | OY |
|  |  | $\mathrm{V}=1$ | Or | Or | Or | or | Or | or |
|  |  | $\mathrm{V}=\mathrm{H}$ | $\begin{gathered} \gamma \\ (\text { var. } \mathrm{O} \mathrm{\gamma}) \end{gathered}$ | $\begin{gathered} \gamma \\ (\operatorname{var} . \hat{\gamma} \sim 0 \gamma) \end{gathered}$ | $\begin{aligned} & \mathrm{o} \mathrm{\gamma} \\ & \text { (var. } \gamma \text { ) } \end{aligned}$ | $\gamma$ | $\begin{gathered} \gamma \\ \text { (var. } \mathrm{o} \mathrm{\gamma} \text { ) } \end{gathered}$ | $\gamma$ |
|  |  | $V=\lambda$ | $\gamma$ | $\gamma$ | $\begin{gathered} \gamma \\ \Delta \gamma(\sqrt{\gamma}) \end{gathered}$ | $\begin{gathered} \gamma \\ \text { (var. } \mathrm{O} \mathrm{\gamma} \text { ) } \end{gathered}$ | $\gamma$ | $\begin{gathered} \gamma \\ \text { (var. } \mathrm{O} \mathrm{\gamma} \text { ) } \end{gathered}$ |
|  |  | $\mathrm{V}=\mathrm{e}$ | $\gamma$ | $\gamma$ | $\begin{gathered} \gamma \\ (\text { var. } \mathrm{O} \mathrm{\gamma}) \end{gathered}$ | $\gamma$ | $\gamma$ | $\gamma$ |

## Comparative Typology of the Vowel-Glide /u/~/w/ (Cf. Tables 3 and 4)

In contrast to the vowel-glide $/ \mathrm{i} / \sim / \mathrm{j} /$, the field of distribution of the $/ \mathrm{u} / \sim / \mathrm{w} /$ vowel-glide $\mathrm{O} \gamma \sim \gamma$ is more limited, yet variation is still common. ${ }^{67}$ Apart from certain conditions, described below, the grapheme or represents the vowel $/ \mathrm{u} /$ at the beginning, end, or middle of a segment consistently from early to classical Sahidic. The glide $/ \mathrm{w} /$ is also regularly realised $\mathrm{O} \gamma$ at the beginning of a word and following a consonant. Variation in the distribution of $\mathrm{O} \gamma \sim \gamma$, however, occurs when the glide follows a vowel: $\mathrm{O} \gamma$ when following $\mathbf{o}, \omega$ and $\mathbf{O} \gamma ;$ and $\gamma$ following $\lambda, \epsilon$, оо and $\mathbf{н}$. The latter vowel, $\mathbf{H}$, provokes the greatest variation.

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1./u/~/w/ lexeme-initial (Cf. Appendices: Cases C1 and D1, D2)
    ES: o\gamma (var. O人~\gamma) CB: o\gamma (var. Ү)
```

At the beginning of a lexeme the vowel-glide is written or, or in the case of BL Deut., once with a circumflex ( $\widehat{\mathcal{O}}$ BL Deut. 32.20): for example, o千/'u/, oүве /'u.ßə/, oү'NAM /



This rule stands (with certain exceptions listed below) even when the initial or is preceded by a proclitic segment ending in the vowel $\boldsymbol{\lambda}$ or $\boldsymbol{\epsilon}$ (where it would in other environments be rendered by $\gamma$ ), such as prepositions (eg. е, єтве, (1)ג, $\overline{\mathbf{N} C \lambda}$ ), proclitic

 (CB Acts 2.34), шдоүмдөнтнс (CB Acts 21.16). This is standard in the two Bodmer papyri and the Chester Beatty codices. ${ }^{68}$ In the $B L$ manuscript, in both Deuteronomy and Acts, however, the variant form of $\gamma$ is employed on several occasions when the lexeme-initial glide is prefixed by one of these segments, particularly preceding the lexemes ord and

[^34]oүeı:

- with the preposition e: eүeı (BL Deut. 19.5, 19.11), eүд (BL Acts 7.24) vs. eofa (BL Acts 23.17, 21.8);
- with the Perfect I conjugation base: a $\gamma \boldsymbol{\lambda}$ (BL Acts 5.25);
- the adjective кє: кєүд "another one" (BL Deut. 28.30), and (BL Acts 1.20, 4.12, 23.6) vs. кєоүд (BL Acts 8.34).

In the following cases, in early and classical Sahidic, variation may occur under the influence of certain preformative clitics:

- The indefinite article $\mathrm{O} \boldsymbol{\gamma}^{-}$, which otherwise maintains the digraph after prepositions and the conjugation bases, is regularly reduced to $-\gamma$ - when preceded by the preposition $\epsilon$, and the Perfect I conjugation nominal base $\boldsymbol{\lambda}$. For example: e $\boldsymbol{\gamma} \boldsymbol{\lambda} \boldsymbol{\lambda} \boldsymbol{\lambda} \mathbf{O c}$ (Rom. 10.21) "to a people" גyMaein (Acts 4.16) "a sign has...".
- A few of the nouns beginning with or (OYO)H "night", oynor "hour", or2OOP "dog"), are preceded by the long form of the definite article prompting crasis and resyllabification: Tеү(1)H, TEYNOY, neү2OOp. ${ }^{69}$ Two other nouns exhibit fluctuation between the long and short article: o YOeic) "time" and o o $x . \lambda$ "health". In the case of $o \gamma x \times \lambda i ̈$, the early manuscripts and $C B$ Acts are consistent with the use of the short form of the definite article, whereas the scribe of the Epistles alternates equally between the short and the long form. ${ }^{70}$ When the long form is used crasis occurs provoking syntagmatic resyllabification: поүххаї /pu.'caj/ vs. пеүхх.גї /pəw.'caj/. The lexeme oyoeid) exhibits a greater degree of divergence between the scribes, and a greater frequency of fluctuation between the long and the short form of the article, and the long form $+\mathrm{O} \gamma$ and the long form $+\gamma$ (cf. Table 5).

[^35]Table 5: Forms of oyocıc) with the definite article

|  | Short form поүOEICD/NOYOEIC) /'pwoj.j/ /n.' woj.j/ | Long form пеоүOєIC)/neOүOGIC) /pə' wəjJ/ /nə.' wəjJ/ | Long form with crasis пеүОєІс/nеүOєIC) /pəw'0jJ// /nəw'गjJ/ |
| :---: | :---: | :---: | :---: |
| P.Bodm. 18 | 0\% | 100\% | 0\% |
| P.Bodm. 23 | 33\% | 0\% | 67\% |
| BL Deut. | 0\% | 0\% | 100\% |
| BL Acts | 11\% | 11\% | 78\% |
| CB Epistles | 18\% | 12\% | 70\% |
| CB Acts | 0\% | 63\% | 37\% |

- The converted existential and possessive predicates experience significant variation between $\mathrm{O} \gamma$ and $\gamma$ in the early and classical manuscripts. P.Bodm. 18 and BL Deut. are consistent with the use of the digraph. ${ }^{71}$ On the other hand, although there is only one example, in P.Bodm. 23 the upsilon alone is used: тетеүйтac (Isa. 54.1). The scribe of BL Acts alternates between the two allographs, but preferring the reduced form: $\gamma 73 \%$ of occurrences and $\mathrm{o} \gamma 27 \% .^{72}$ The hesitation between the two forms continues in the classical manuscripts, the upsilon alone being the preferred option: CB Epistles $-\curlyvee 76 \%$ and oץ $24 \%$; CB Acts $-\curlyvee 84 \%$ and oץ $16 \%{ }^{73}$ As in the case of
 eү̄ㅡ/2wñ/.
- The sequence $\mathrm{O} \gamma-\mathrm{O} \gamma$ is sometimes the object of coalescence, simplified as $\mathrm{O} \gamma$ in both the early and classical manuscripts. ${ }^{74}$
 (Deut. 24.10), єоҮnTK (Deut. 24.10), -етеOYnTe-/ eTeornta $=$ (Deut. 15.2, [15.3] x2, 24.10, 24.11).

72 Cf. Appendix 2, Tables 61 and 62.
73 Cf. Appendix 1, Tables 31 and 32.









## 2. /u/~/w/ following a consonant

$E S$ : oy (var. $\widehat{\mathrm{OY}}$ ) $\quad C B: \mathrm{O} \mathrm{\gamma}$

Following a consonant the vowel $/ \mathrm{u} /$ and the glide $/ \mathrm{w} /$ are always realised or in the early and classical manuscripts: for example, MOY/'mu/, cioү /'sju/, moүTe /'mu.to/,
 digraph carrying a circumflex in this environment in BL Deut. occurs at the end of the text, all of them after 29.18. ${ }^{75}$ Are these true variants or accents for reading or singing purposes, as Budge suggests?
3. /w/ following a vowel (Cf. Appendices: Cases D5, D6)
a) Following $\mathbf{0}, \boldsymbol{\omega}$, $\mathbf{1}$ and or $\quad E S: \mathrm{OY}$ (var. $\widehat{\mathrm{OY}}$ ) $\quad C B$ : or

Following the vowels $\mathbf{O}, \boldsymbol{\omega}, \mathbf{I}$ and $\mathrm{O} \gamma$ the digraph is stable in early and classical Sahidic: for example, mooy /'mow/, zooy /'how/, т由оүн /'town/, кооүе /'ko.wə/, x:ıүе /'ci.wa/, MOүOү'T /'muwt/.
 11.5). On two occasions the scribe of BL Deut. employs the circumflex: 200. (Deut. 34.8) татамÓ $=\hat{O \mathcal{Y}}$ (Deut. 32.20). Once again, these occur at the end of Deuteronomy where the use of the circumflex is quite frequent, as has been mentioned, and in these two cases the circumflexes were written by the second hand.
b) Following $\boldsymbol{\lambda}$, $\boldsymbol{\epsilon}$ and $\mathbf{o o} \quad E S: \gamma($ var. $\mathrm{O} \gamma \sim \widehat{O \gamma}) \quad C B: \gamma$ (var. $\mathrm{O} \gamma)$

When these vowels precede, the glide is represented by the upsilon only: for example,
 double vowel oo is distinguished from the single omicron in the following lexemes: $x: O O=\gamma$ /'co:w/ "say them" vs. $\mathrm{x}: \mathrm{O}=\mathrm{OY} / \mathrm{cow} /$ "send them"; 200\%/'ho:w/ "day" vs. 200ץ† /'how/ "to be bad". ${ }^{76}$

75 MÔَ (Deut. 30.19, 31.14, 31.27, 31.29, $32.50 \times 2,33.1,33.6,34.5,34.7$ ); смо个َ (Deut. 30.19, 33.13, 33.23);
 2mố (Deut. 29.23); nốn (Deut. 33.13); cf. Budge (1912), p. xiv.
76 The interpretation of the double vowel representing a lengthening of the vowel is a highly contested issue. Cf. Peust (1999), pp. 205-210, for a summary of the debate. Peust takes the position that gemination

There are only a few examples of variation in the early manuscripts: naOץ "to/for them" (BL Deut. 1.39, 5.9); м̄мдоү (BL Deut. 1.46, 5.5, 5.15); нсдоү (BL Deut. 2.8) vs.

 which displays a number of spellings: ${ }^{79}$ two forms appear in P.Bodm. 18, x: x:eor (Deut.
 but we also see $x: \leq x \in O \gamma \in{ }^{80}$

There is only one instance of the variant allograph written in the later Chester Beatty manuscripts: $\mathbf{T \lambda O} \gamma \mathbf{O}=\mathbf{O}=\left(\right.$ Acts 15.33). ${ }^{81}$

$$
\text { c) Following } \mathbf{H} \quad E S: \gamma \sim \mathrm{O} \mathrm{\gamma}(\text { var. } \hat{\gamma} \sim \mathrm{O} \gamma \sim \widehat{\mathrm{O}}) \quad C B: \gamma \text { (var. } \mathrm{O})
$$

It is in this environment, when the glide follows the eta /e/, that variation proves to be


In P.Bodm. 23 we find variation with the suffix pronouns ( $2 \mathrm{TH}=\mathrm{O} \gamma$ (Isa. 48.2) vs. $2 \mathbf{T H}=\hat{\gamma}$ (Isa. 57.13)), the statives (nноץ 28 times vs. ннץ (Isa. 55.11), [nн] $\hat{\gamma}$ (Isa. 47.9)), at the end of a lexeme (THOY (Isa. 57.13) vs. T $\widehat{\mathrm{FY}}$ (Isa.64.5)), and at the beginning of a syllable within a lexeme (2вноүе 6 times $v s .2$ внүе $\sim$ двн $\hat{\boldsymbol{\gamma}} \boldsymbol{\epsilon} 4$ times). But overall there is a preference for the digraph, especially towards the end of the manuscript: ноץ occurs $71 \%$
expresses long vowels. The alternative hypothesis is that the doubling of a vowel indicates a vowel plus a glottal stop. I have followed the reconstructions of Peust for this project, therefore, for the sake of consistency, I am treating the doubling of a vowel as a long vowel, as in the case of mee $\boldsymbol{\gamma}^{\boldsymbol{\epsilon}} / \mathrm{m} \mathrm{m}: . \mathrm{wa} /$. In Sahidic this situation does not include the doubled vowel-glides, as in the cases of moro ${ }^{\prime} \mathrm{T} / \mathrm{muwt} / \mathrm{and}$ $2(\epsilon)_{\perp}(\epsilon)_{\text {IB }} / \mathrm{hji} \mathrm{\beta} /$. Cf Peust (1999), p. 214 n. 242: "OYOY in MOYOY"T is to be interpreted as /uw/, as is evident both from the etymology (mut) and from the status pronominalis of the verb (mOOYT - /'mowt/; n. 241 "(e)ı( $(\mathbf{C})$ in dialects other than Akhmimic do not denote a long vowel eg. 21E1T "pit" < Demotic hyt is probably /'hjit/." Nevertheless, caution is advised regarding such reconstructions based on etymology since we know little about apophonic transformations of Egyptian words throughout millennia.
77 Crum (1939), p. 635a: pl. 2ג€(Є) $\gamma, 2 \lambda \in O \gamma S$.

79 Crum (1939), p. 799b: xıxeey, xixeeye, xıxeoy (old MSS), xinxeey, xinxeeye, xinxeye $S$.
80 x.x.eof (BL Deut. 1.42, 6.19, 7.15, 12.10, 20.1, 20.3, 20.4, 23.9, 25.19, 28.25, 28.31, 28.48, 28.68, 30.7,

81 Cf. Ghica (2006), p. 234; Funk (1995b), p. 39; Quecke (1984a), p. 43: TגOүO= 13 times and once TaүO= (John 14.49).
and $\mathbf{H} \hat{\boldsymbol{\gamma}}(\mathbf{H} \boldsymbol{\gamma}) 29 \% .^{82}$ The significant exception occurs with the lexeme TH $\hat{\boldsymbol{Y}} \mathbf{T} \overline{\mathbf{N}}$ (THYTī) which occurs 15 times, and $\mathbf{T H} \mathbf{O Y} \mathbf{Y} \overline{\mathbf{N}}$ (Isa. 55.12) only once. ${ }^{83}$ The line break here suggests a syntagmatic resyllabification, /'te.u.tn/. In most cases where the single upsilon is used it carries a circumflex, $\mathbf{H} \hat{\boldsymbol{\gamma}}$, occasionally $\widehat{\mathcal{H}}$. The circumflex is also used at times in BL Deut. ( $\boldsymbol{T} \overline{\mathrm{B}} \mathrm{BHY}$ (Deut. 23.10), TAX.PHY (Deut. 33.28)), but once again, at the end of the manuscript, added by a later hand, where its function is questionable. Like P.Bodm. 23, variation is characteristic of BL Deut. and Jon., with the digraph taking priority. ${ }^{84}$

On the other hand, BL Acts and P.Bodm. 18 almost exclusively employ the upsilon alone. The only use of the digraph in P.Bodm. 18 is $\omega$ )ноүе (Deut. 7.5), and in Acts it occurs only with оүноҮ (Acts 1.12, 22.21), never OүнҮ.

The early manuscripts clearly testify the struggle for priority of one allograph over another in this environment. In the manuscripts where the digraph predominates, variation is prevalent. In the manuscripts where the upsilon is favoured, variation is infrequent. In the classical manuscripts, the upsilon alone becomes the standard, yet the digraph persists as a variant form in the Epistles, but only in the case of the two plurals, 2внүе~2вноүе and пнүе $\boldsymbol{\sim}$ пноүе, where the glide begins a syllable. ${ }^{85}$ The scribe of Acts, as usual, regularly uses the now standard upsilon.

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### 4.4 CONCLUSION

The detailed comparative typologies of the vowel-glide graphemes as rendered in the early and classical Sahidic manuscripts investigated in this study highlight the mechanism of free variation in the process of standardising the orthography of these graphemes. The $4^{\text {th }}-5^{\text {th }}$ century manuscripts are witnesses of the nascent Sahidic orthography, an orthography which was in a state of flux, no doubt influenced by several competing dialects prevalent at that time. Free variation is a characteristic feature of these early manuscripts, yet clear patterns of graphemic distribution of the vowel-glides begin to emerge in the different phonological environments, and gradually evolve to the point when, within only a century or two, they become highly standardised. These patterns of distribution can be seen in the following summary comparative tables (Tables 6 and 7) which indicate the preferred choice of allograph by each scribe in the respective environments.

Table 6: Comparative typology of the vowel-glide $/ \mathrm{i} / \sim / \mathrm{j} /$

| Context | Early Sahidic |  |  |  | Classical Sahidic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { P.Bodm. } \\ 18 \end{gathered}$ | P.Bodm. $23$ | $B L$ <br> Deut./Jon. | BL Acts | CB Epistles | CB Acts | Examples |
| \# + V-G | ¢I | ¢I | ¢I | €ı | EI | eı | EIPE EICT |
| $\mathbf{C}+\mathbf{V}-\mathbf{G}$ | 1 | 1 | 1 | 1 | 1 | 1 | MICE NIM 21H |
| $\mathrm{G}+\mathrm{V}$ | ¢I | EI | ¢I | ¢1 | EI | ¢I | ofeine 2ieib |
| $\mathbf{H}+\mathbf{G} \#$ | €ı | EI | EI | ï | ï | ï | нї |
| O + G\# | €ı | ¢1 | ¢ı | Ï | ï | ï | xoï |
| $\omega+\mathbf{G} \#$ | Ø | ¢1 | ¢ | ï | ï | ï | $21 \times 0=1$ |
| OY + G\# | ï | ¢1 | EI | ï | ï | ï | коүї |
| A $+\mathbf{G} \#$ | ï | i~6ı | i | ï | ï | ï | тגї |
| E + G\# | ¢1 | EI | ï | ï | ï | ï | пеї- |
| $\mathrm{V}+\mathbf{G C}$ | EI | EI | EI | EI | EI | EI | $x$ Oeic |
| . + GV | EI | EI | १~ Cl | ¢1 | EI | ï | $\times$ xï̈ |

As can be seen in Table 5, the principal graphemes that represent the vowel /i/ are eı and $\mathbf{t}$, and the glide $/ \mathrm{j} /$ is realised $\epsilon ı$ and $\ddot{i}$, except when preceded by a consonant. The choice of allograph to render the vowel-glide $/ \mathrm{i} / \sim / \mathrm{j} /$ beginning a lexeme, or following a consonant or
glide, is fixed very early in the development of Sahidic orthography. However, it is when the glide $/ \mathrm{j} /$ follows a vowel, at a syllable boundary, that the optionality between the graphemes becomes more prevalent, and the differences between early and classical Sahidic become more apparent. The digraph is the dominant allograph for the glide in the early manuscripts, although the iota with a trema tends to be preferred after the vowel $\boldsymbol{\lambda}$. In contrast, $\ddot{i}$ is favoured, following all the vowels, by the later scribes. The exception to this rule concerns the use of the digraph for the glide in the 'covered' position which, in the $4^{\text {th }}-5^{\text {th }}$ century manuscripts, is unusually stable, and indeed, remains the standard in the later texts, the variant only used at the end of a line.

Table 7: Comparative typology of the vowel-glide $/ \mathrm{u} / \sim / \mathrm{w} /$

| Context | Early Sahidic |  |  |  | Classical Sahidic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { P.Bodm. } \\ 18 \end{gathered}$ | P.Bodm. $23$ | $B L$ <br> Deut./Jon. | BL Acts | $C B$ Epistles | CB Acts | Examples |
| \# + V-G | OY | OY | O $\gamma$ | OY | Or | OY | OYNAM |
| $\mathbf{C}+\mathbf{V}-\mathbf{G}$ | OY | Or | Or | OY | Or | Or | MOY |
| $\mathrm{O}+\mathrm{G}$ | OY | OY | OY | OY | OY | OY | MOOY |
| $\omega+\mathbf{G}$ | OY | OY | OY | OY | OY | OY | TaOYN |
| $1+\mathbf{G}$ | OY | OY | Or | Or | Or | Or | x.loye |
| $\mathrm{O} \gamma+\mathbf{G}$ | $\varnothing$ | $\emptyset$ | OY | OY | OY | OY | namor $=0 \gamma$ |
| $\mathbf{H}+\mathbf{G}$ | $\gamma$ | OY | OY | $\gamma$ | $\gamma$ | $\gamma$ | THY"TN |
| ${ }^{\text {d }}+\mathbf{G}$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | NAY |
| e $+\mathbf{G}$ | $\gamma$ | $\gamma$ | $\gamma$ | $Y$ | Y | $Y$ | пе $\gamma^{-}$ |
| OO $+\mathbf{G}$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $\gamma$ | $x: 00=\gamma$ |

The distribution of the allographs realising the vowel-glide $/ \mathbf{u} / \sim / \mathrm{w} /$ is less complex (cf. Table 7). The vowel is rendered by the digraph $O \gamma$. The glide is also written with the digraph except after the vowels $\lambda, \epsilon$, and oo where the single upsilon $\gamma$ is employed. The choice between the two graphemes occurs when the glide follows the vowel $\mathbf{H}$, in which case the early scribes fluctuate between the two allographs, the digraph finally yielding to the upsilon in the classical period. The circumflex which occurs quite frequently in early Sahidic, although it continues to exist to some extent in the classical manuscripts with the $/ \mathrm{i} / \sim / \mathrm{j} /$ digraph ( $\widehat{\mathrm{C}} \mathrm{)}$ ), disappears from the allographs expressing $/ \mathrm{u} / \sim / \mathrm{w} /(\widehat{\mathrm{O}}$ and $\hat{\gamma})$.

Of the early manuscripts, the book of Acts, the last biblical book in the British Library codex, most reflects the classical standard in terms of the graphemic distribution of the vowelglides. The progression from the glide $/ \mathrm{j} /$ being rendered by the digraph to being superseded by the iota with the trema is striking when comparing the texts of Deuteronomy and Jonah with that of Acts, especially since these texts are part of one codex, although written some time apart. The dating of this codex was originally attributed to the mid- $4^{\text {th }}$ century by Kenyon ${ }^{86}$ and Hebbelynck, ${ }^{87}$ but more recently, Orsini ${ }^{88}$ has brought forward the terminus ante quem to the mid- $5^{\text {th }}$ century. The orthography of the vowel-glides in Acts may provide further evidence to confirm Orsini's conclusion of a later date.

These graphemic elements typical of the early manuscripts, particularly the frequent use of the digraph for the glide $/ \mathrm{j} /$, persisted in the Chester Beatty collection, being most evident in the Epistles. The codex which contains the Epistles is dated by Orsini to 500-550 CE, and that of Acts to $525-574 \mathrm{CE},{ }^{89}$ both, it is argued, having been produced in the same scriptorium in the monastery of Apa Jeremiah at Saqqara. ${ }^{90}$ As such, the comparison of the vowel-glides in these two codices sheds light on the dynamics of standardisation. The optionality of the various graphic forms observed in the Epistles, on the one hand, reflects the situation displayed in the earlier manuscripts, but on the other hand, points to a resolution indicated in the standardised 'rules' of distribution as represented in Acts, where the variant forms have been to a large extent eliminated.

[^37]
## 5. CONCLUDING REMARKS

The predominant theme which has emerged from this investigation of scribal orthographic practice, specifically in relation to graphemic realisations of the vowel-glides, is the relative degree of regularity and variation exhibited in the early and classical Sahidic manuscripts. The synchronic approach complemented by a diachronic one applied to this study has highlighted the dynamics of orthographic change in the Sahidic literary manuscripts from the $4^{\text {th }}$ to the late $6^{\text {th }}$ century in Egypt, and reveals the active influence of the transmitters of the texts, the scribal hands. Free variation can be seen to be the vehicle by which the written language became standardised, in that certain variant forms prevailed into the $6^{\text {th }}$ century, while others were abandoned. What was free variation in the $4^{\text {th }}$ and $5^{\text {th }}$ centuries, as these manuscripts reveal, became regular variation in the classical period, as strict orthographic rules are imposed in the strengthening monastic scriptoria. Yet language never stands still, and the mechanism of free variation persists, even in a highly standardised orthography such as that displayed in the Chester Beatty codices.

This thesis has sought to furnish a secure methodology for future studies on Coptic orthography and to provide a detailed collection of data on two orthographic elements, the graphemic realisations of the two vowel-glides in Sahidic. It is my hope that these data will serve as reliable comparanda for further linguistic analyses of early Sahidic manuscripts, most particularly, the Sahidic manuscripts of the Nag Hammadi codices.

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## APPENDICES

## VOWEL-GLIDE TYPOLOGIES

## Appendix 1: CHESTER BEATTY MSS. 813 AND 814

A. Graphemic forms of the vowel $/ \mathbf{i} /(\mathbf{1} \sim \mathbf{e} \mathfrak{\sim} \sim \mathbf{e} \sim \mathbf{i})$

Table 8: Typology of the vowel /i/

| Case | Syllabic Context ${ }^{1}$ | $\begin{gathered} C B \text { Ms. } 814 \\ \text { Acts } \end{gathered}$ | CB Ms. 813 Epistles | Examples |
| :---: | :---: | :---: | :---: | :---: |
| A1 | \#'V | EI (var. ¢ì | EI (var. ¢i~~~ï) | ei~el/'i/ elpe /'i.rə/ EINE /'i.nə/ |
| A2 | \#(')VC | ¢1 | el (var. eì) | eic- /is/ |
| A3 | (')(C)CV | $\mathbf{I}$ (var. ¢ıI~Ei) | $\mathbf{l}$ (var. ¢ıI~Ei) | X.ı/ci/ $\mathbf{q 1} /$ 'fi/ ceı/'si/ mice /'mi.sə/ caıme /'shi.mə/ $\mathrm{HI}-/ \mathrm{pi} /(+-) / \mathrm{ti} / \mathrm{NI}-/ n i /$ |
| A4 | (')(C)CVC(C) | $\mathbf{I}$ (var. eı) | $\mathbf{I}$ (var. eı) | NIM /'nim/ CIN-/kiin/ |
| A5 | '(C)GV | ¢1 | ¢ı (var. ¢ì) | oүeì/'wi/ oүeıne /'wi.nə/ 2OYeITe /'hwi.tə/ |
| A6 | (C)GVC | el (var. ï) | Eı (var. ï) | aүein /a.'win/ aoreir /'Jwit/ <br>  |

Key
$\mathrm{V}=$ vowel
$\mathrm{G}=$ glide
$\mathrm{C}=$ consonant
$(C)=$ possibility of one or more consonants
\# = segment boundary
= accented syllable
. = syllable divider
Ø = no occurrences

[^38]
## 

At the beginning of lexemes, in an open syllable, the vowel /i/ is represented by the digraph eı (var.eì):
ei~eì, eipe~eipe, eime~cime, eine, eibe, eidee.
In Copto-Greek the initial vowel $/ \mathrm{i} /$ is also rendered with the digraph:
GIKH, GIMH, EIPHNNIKON, EITA, GIMHTI, EIMHTEI

eIphinh is regularly written †phni with the definite article.
Note: 2IKळN (Rom. 1.23) (2 Cor. 3.18), eikळn (Rom. 8.29) (1 Cor. 11.7, 15.49 x2) (2 Cor.
4.4) $($ Col. 3.10 $)($ Heb. 10.1 $)=$ eik $\kappa \omega$ v. Cf. Case 3: /i/ following a consonant.

Use of the circumflex: The scribe of Acts always writes the verb $\mathrm{et}_{1}$ "to come" with a line over the iota which, although similar to a superlinear stroke, most likely represents an abbreviated circumflex. ${ }^{2}$ The scribe of the Epistles also makes use this quasi circumflex, however, less consistently and in more varied situations. Since the most frequent form in both Acts and the Epistles is the oblique line, this is the form of the circumflex which will be used for these two Chester Beatty codices ( $\mathbf{\epsilon} \mathbf{i}$ ).

Table 9: \#eı vs. eì

| Standard: ¢ı | Variant: ei |
| :---: | :---: |
| ```\epsilonI (Acts 16.13, 17.13, 18.5, 20.21, 24.1, 25.17, 25.23, 27.5) (Epistles: }94\mathrm{ occurrences) Acts: 5% Epistles: 83%``` | eì (Acts: 147 occurrences) <br> (Rom. 15.24) ( 1 Cor. $7.5,10.1,14.23,16.10 .16 .12 \times 2$ ) (2 Cor. 5.8, 7.6, 7.7, 8.17, 8.19) (Heb. 3.16) (Gal. 3.19, 3.23, 4.4) (Phil. 3.11) (1 Thess. 2.18) (1 Tim. 3.13) Acts: $95 \% \quad$ Epistles: $17 \%$ |
| eıpe (Acts: passim) <br> (Epistles: 76 occurrences) <br> Acts: 100\% Epistles: 94\% | Єìpe (Acts: Ø) <br> (Rom. 1.9) (1 Cor. 9.23, 9.27) (2 Cor. 8.24) (Phil. 1.4) Acts: 0\% Epistles: 6\% |
| eIme (Acts: passim) <br> (Epistles: 45 occurrences) <br> Acts: 100\% Epistles: 98\% | eìme (Acts: Ø) <br> (2 Cor. 3.2) <br> Acts: 0\% Epistles: 2\% |
| EITE (Eítع) (Acts: Ø) <br> (Epistles: 60 occurrences) <br> Acts: $\varnothing$ Epistles: 97\% | eite (Acts: Ø) <br> (2 Cor. 12.2 x 2 ) <br> Acts: $\varnothing$ Epistles: 3\% |

[^39]| Standard：eı | Variant：eì |
| :---: | :---: |
| eI．入．D入ON（ $\varepsilon$ í $\delta \omega \lambda$ lov）（Acts：passim） <br> （Rom．2．22）（1 Cor．5．10，6．9，8．1，8．4，8．10，10．7， 10．14，10．19，12．2）（2 Cor．6．16）（Gal．5．20）（Eph．5．5） （Col．3．5）（1 Thess．1．9） <br> Acts：100\％Epistles：80\％ | eì．入．DAON（Acts：Ø）（1 Cor．10．19） eì．入．Daon（1 Cor．5．11，8．4，8．10） <br> Acts：0\％Epistles：20\％ |

With a preformative clitic：This rule is observed even when preceded by a preformative segment，with the following exceptions in the Epistles where the epsilon is omitted when preceded by the definite article．

Table 10：Definite article $+\# \mathbf{\epsilon}$ ıs． $\boldsymbol{ı}$

| Standard：eı | Variant： 1 |
| :---: | :---: |
| пеıре（Epistles：Ø） <br> Acts：$\varnothing$ Epistles：0\％ | mipe（2 Cor．8．10）＂the doing＂ Acts：$\varnothing$ Epistles： $100 \%$ |
| пеine（Rom．5．14）（Heb．1．3）（Phil．3．21） <br> Acts：$\varnothing$ Epistles： $60 \%$ | rime（Heb．7．15）＂the likeness＂ <br> חIne｜（Rom．6．5） <br> Acts：$\varnothing$ Epistles：40\％ |
| пеІ．入．$\omega$ 人ON（Acts 7．41） <br> Acts：100\％Epistles：0\％ <br>  <br> （Rom．2．22）（1 Cor．8．1，8．4，8．10，12．2）（2 Cor．6．16） <br> （1 Thess．1．9） | mil．＿．D入ON（1 Cor．8．7） Acts：0\％Epistles：100\％ |

Biblical names／proper nouns：The exception to this rule occurs with biblical names where $\ddot{i}$ is regular：

їсддк，їсдк，їсРдндıтнс，ïсcдî（Acts 13．22）for ïєccaı．
The trema is always omitted when the singular definite article is cliticised：
пІсРднд，пІНл．

Case A2 \＃（＇）VC

$$
\mathbf{V}=\mathbf{e} \mathbf{I}(\text { var. } \mathrm{e} \mathbf{i})
$$

There is only one example of the vowel in this domain，and on one occasion the digraph carries a circumflex：
eıc-, eìc- (Heb. 2.13).

## Case A3: '(C)CV and CV V=ı (var. ei~eì)

When the vowel /i/ follows a consonant, in an open syllable, it is generally realised by the grapheme ı. For example:


Variation: The exception to this rule occurs with the lexeme ceı which is consistently written with the digraph:
ceı (Rom. 15.24) (Col. 2.23); ceì (Acts 27.38) (Phil. 4.12) [Crum (1939), p. 316b: ceı, cı].

Note Crum's entry for the following:

- emicд (Acts 7.43) [Crum (1939), p. 313a: сд , $S$ епеıсд, Ac $743 S$ епıсд];
- $\quad \mathrm{I}$ (Acts 20.37) (Rom. 16.16) (1 Cor. 16.20) (2 Cor. 13.12) (1 Thess. 5.26) [Crum (1939), p. 260a: пеו (S), пו (SAF) "kiss"];
- mipa (Acts 26.13) [Crum (1939), p. 267a: пеıpe, пıpe (S); 267b: nтачпирд (1.-pe) Mor 40, 37 (S)].

The variants ei~cì occur almost exclusively in the Epistles, and often appear at the end of a line.

Table 11: C+ivs. Ei~cì

| Standard: 1 | Variant: el~eì |
| :---: | :---: |
| x.I (Acts: 62 occurrences) <br> (Epistles: 129 occurrences) <br> Acts: $100 \%$ Epistles: $93 \%$ | ```x.\in! (Rom. 1.27)(Gal. 3.2) (2 Cor. 1.15) x.E\|l(Rom. 9.33)(1 Cor. 3.14, 6.7, 7.2) (Heb. 13.11) x.eil (1 Cor. 11.8) Acts: 0% Epistles: 7%``` |
| q1 (Acts: 13 occurrences) <br> (Epistles: 40 occurrences) <br> Acts: 100\% Epistles: 93\% | $\begin{aligned} & \mathbf{q} \mathrm{I}(1 \text { Cor. } 5.2) \\ & \mathbf{q} \mathrm{Il}(2 \text { Tim. } 2.16) \\ & \mathbf{q} \mathrm{il} \text { (Eph. } 4.14) \\ & \text { Acts: } 0 \% \quad \text { Epistles: } 7 \% \\ & \hline \end{aligned}$ |
| ${ }_{21}$ "thresh, beat" (1 Cor. 9.9, 9.10) Acts: $\varnothing$ Epistles: $67 \%$ | 2е1 (1 Tim. 5.18) <br> Acts: $\varnothing$ Epistles: $33 \%$ |
| $21 T \bar{N} / 21 T \bar{M}$ <br> (Acts: 66 occurrences) <br> (Epistles: 244 occurrences) <br> Acts: 100\% Epistles: 98.8\% | ```\(2 \mathrm{EIT} \overline{\mathrm{N}}\) (Gal. 3.19) - rubbing on the e 2еIITM (1 Cor. 1.10) 2еı\|TM (2 Cor. 1.4) Acts: 0\% Epistles: 1.2\%``` |
| 212OYN (Acts 16.24) <br> (Rom. 7.22) (1 Cor. 5.12) (2 Cor. 4.16, 7.6) <br> Acts: $100 \%$ Epistles: $80 \%$ | 2еıl2OҮN (Eph. 3.17) <br> Acts: 0\% Epistles: 20\% |
| $\begin{aligned} & \text { пе®iroy } \omega=(\text { Rom. 13.9, 13.10, 15.2) (1 Cor. 6.1) } \\ & (\text { Eph. } 4.25) \\ & \text { Acts: } \emptyset \quad \text { Epistles: } 83 \% \end{aligned}$ | пеөєІ\|тоүок (Gal. 5.14) <br> Acts: $\varnothing$ Epistles: $17 \%$ |


| Standard： 1 | Variant：el～¢i |
| :---: | :---: |
| $\overline{\mathrm{N}} \mathrm{O}$ <br> （Acts： 168 occurrences） <br> （Epistles： 117 occurrences） <br> Acts：100\％Epistles：99．2\％ | noeil（2 Tim．3．17） <br> Acts：0\％Epistles：． $8 \%$ |
| $1^{\text {st }}$ person singular of the Temporal conjugation n̄Tepl－（Acts 11．15，22．11，22．17，23．27，24．20， 25．15） <br> （1 Cor．2．1，13．11）（2 Cor．2．12，2．13，11．9）（Gal． 2．14）（Phil．4．15） <br> Acts： $86 \%$ Epistles： $100 \%$ | n｜TEPEI－（Acts 22．6） <br> Acts：14\％Epistles：0\％ |

## Words of Greek origin：

a）Greek $\mathfrak{l}$ is generally rendered with Sahidic $\mathbf{I}$ ．Variation occurs in the Epistles in the following：


| Standard： l ＞1 |  |
| :---: | :---: |
| $\begin{aligned} & \text { と̌́ıı } \\ & \text { ETı (Acts 2.26, 9.1, 10.44) } \\ & \text { (Heb. 11.4) } \\ & \text { Acts: } 100 \% \quad \text { Epistles: } 7 \% \end{aligned}$ | ```eтeı (Rom. 5.6, 5.8) (1 Cor. 3.3, 12.31) (2 Cor. 1.10) (Heb. 7.10, 7.15, 9.8, 11.36, 12.26, 12.27) eteì (l Cor. 15.17) (Heb. 10.37) Acts: 0% Epistles: 93%``` |
| $\mu \eta \tau \iota$ <br> MHTI（Acts 10．47） <br> （2 Cor．12．18） <br> عỉ $\mu$ ŋ́ $\iota$ <br> EIMHTI（Acts 8．31，11．19，15．1，17．21，24．21，27．22） <br> Acts：100\％Epistles：5\％ | мнтеı（2 Cor．1．17，3．1） <br> eimhtei（Rom．7．7，13．1，14．14）（1 Cor．2．11，7．5， 12．3，15．36）（2 Cor．2．2，12．5，12．13，13．5）（Heb． 3．18）（Gal．1．7，2．16，6．14）（Phil．4．15）（1Tim．5．19） （2 Tim．2．5） <br> Acts：0\％Epistles：95\％ |
| őtı <br> 2 OTI （Acts 4．16） <br> （2 Cor．11．21） <br> Acts： $100 \%$ Epistles：33\％ | oүx отеı（2 Cor．1．24）（Phil．4．17） <br> Acts： $0 \%$ Epistles：67\％ |
| $\dot{\varepsilon} \pi \iota \theta \cup \mu \varepsilon ́ \omega$ <br> епıеүмі（Acts 20．33） <br> （Rom．7．7，13．9）（1 Cor．10．6）（1 Tim．3．1） <br> епı्रMeı（1 Cor．10．6）（Gal．5．17） <br> Acts：100\％Epistles：86\％ | епеıеүми（Heb．6．11） <br> Acts： $0 \%$ Epistles： $14 \%$ |
| 㐅้ठıкоऽ <br> A．入．IKOC（Acts 24．15） <br> （Rom．3．5） <br> Acts：100\％Epistles：50\％ | A．入．еікос（Heb．6．10） <br> Acts：0\％Epistles： $50 \%$ |

b）Greek $\varepsilon \iota$ is also generally rendered with Sahidic ı．Variation occurs in the following：
Table 13：Greek $\varepsilon \mathrm{c}: \mathrm{C}+\mathbf{\imath} v s$. eı～€ì（excluding verb endings）

| Standard：$\varepsilon \iota>1$ | Variant：$\varepsilon \iota>$ eı |
| :---: | :---: |
| $\dot{\varepsilon} \pi \varepsilon \iota \delta \dot{\eta}$ <br> emi．入．h（1 Cor．1．22） <br> Acts： $0 \%$ Epistles： $20 \%$ | епеІ．А．н（Acts 13．46，14．12，15．24） （1 Cor．1．21，15．21）（Heb．2．14）（Phil．2．26） Acts： $100 \%$ Epistles： $80 \%$ |
| бuveíסךбıs <br> çini．n．hcic（Rom．2．15，9．1，13．5）（1 Cor．8．7，8．10， 8．12， $10.2510 .27,10.28,10.29 \mathrm{x} 2$ ）（2 Cor．1．12，4．2） （Heb．9．9，9．14，10．2，10．22，13．18）（1 Tim．1．5，3．9， 4．2）（2 Tim．1．3）（Titus 1．15） <br> Acts： $0 \%$ Epistles： $100 \%$ | cү～Nei．入．hcic（Acts 23．1，24．16） cinh．入．hcic（1 Tim．1．19） <br> Acts：100\％Epistles：0\％ |
| $\dot{\alpha} \nu \tau \iota \kappa \varepsilon \iota \mu \varepsilon$ о丂 <br> antikimenoc（1 Cor．16．9） <br> Acts：$\varnothing$ Epistles： $50 \%$ | antikeimenoc（2 Thess．2．4） Acts：$\varnothing$ Epistles： $50 \%$ |

c）In the case of contract verb endings $-\varepsilon \in \omega /-\varepsilon ́ O \mu \alpha \iota$（imperative $-\varepsilon \iota$ ；infinitive $-\varepsilon \tau \nu,-\varepsilon \tau \sigma \theta \alpha \iota$ ）， there is strong optionality between the two allographs $\mathbf{I}$ and $\operatorname{\epsilon \vdash } \sim \mathrm{ci}$ ．Following a vowel， $\boldsymbol{i}$ is always used（cf．Case B5）．

Greek $\varepsilon \iota>$ Sahidic ı：
дпорРı（Acts 2．12，5．24，10．17，25．20）；дпорı（2 Cor． 4.8 x2）$\dot{\alpha} \pi$ о○ $\varepsilon ́ \omega ;$
дCKı（Acts 24．16）$\dot{\alpha} \sigma \kappa \varepsilon ́ \omega$ ；

дтактı（2 Thess．3．7）$\dot{\alpha} \tau \alpha \kappa \tau \varepsilon ́ \omega ;$
вонөı（Acts 16．9，21．28）（2 Cor．6．2）（Heb．2．18）$\beta$ оך $\theta \dot{\varepsilon} \omega$ ；

катафponi（Rom．2．4）（1 Cor．11．22）（Heb．12．2）（1 Tim．4．12，5．12，6．2）（Titus 2．15） $\kappa \alpha \tau \alpha \varphi \varrho о \nu \varepsilon ́ \omega$ ；

Кдтнгорı（Acts 22．30，24．2，24．8，24．13，24．19，25．5，25．11，25．16，28．19） к $\alpha \tau \eta \gamma о \varrho \varepsilon ́ \omega$ ；

клнрономı（ 1 Cor．6．9，6．10， $15.50 \times 2$ ）（Heb．1．4，1．14，6．12，12．17）（Gal．4．30，5．21）
к $\lambda$ Øооои $\varepsilon ́ \omega$ ；
космı（1 Tim．2．9，3．2）（Titus 2．10）коб $\mu \varepsilon ́ \omega$ ；

сүNeү．入．OKı（Acts 8．1，22．20）бuvevסокє́ $\omega$ ；
TIMOPI（Acts 22．5）；A．IMCPI（Acts 26．11）$\tau \iota \mu \omega \varrho \varepsilon ́ \omega ;$

хорнгı (Gal. 3.5) ұо@ŋүє́ $\omega$.
Greek $\varepsilon \iota>$ Sahidic e :
дмедеı (Heb. 2.3, 8.9) (1 Tim. 4.14) $\dot{\alpha} \mu \varepsilon \lambda \varepsilon ́ \omega$;
дөєтеı (l Cor. 1.19) (Heb. 10.28) (Gal. 2.21, 3.15) (1 Thess. $4.8 \times 2) \dot{\alpha} \theta \varepsilon \tau \varepsilon ́ \omega$;
кдөнгеı (Acts 18.25) (l Cor. 14.19) (Gal. 6.6);кдөнкєı (Gal. 6.6) к $\alpha Ө \eta \gamma \varepsilon ́ о \mu \alpha ь ;$
кдтдлдлеı (Rom. 1.30) к $\alpha \tau \alpha \lambda \alpha \lambda \varepsilon ́ \omega$;
пардтнреı (Gal. 4.10) та@ $\tau$ тПе́ $\omega$;


Table 14: Greek $\varepsilon \mathbf{\varepsilon}: \mathrm{C}+\boldsymbol{\imath} v s$. eı $\sim \mathbf{c i ̀}$ (verb endings)

| Standard: $\varepsilon \iota>1$ |  |
| :---: | :---: |
| $\pi \alpha \varrho \alpha \kappa \alpha \lambda \varepsilon ́ \omega$ <br> mapakài (Rom. 16.17) (2 Cor. 12.18) (2 Thess. 3.12) (1 Tim. 2.1) | Паракдлеı (Acts 16.39) <br> (Rom. 12.1, 12.8) (1 Cor. 1.10, 4.13, 4.16, 16.12, 16.15) (2 Cor. 2.8, 6.1, $7.6 \times 2,8.6,10.1$ ) (Heb. 3.13, 10.25, 13.19, 13.22) (Eph. 4.1, 6.22) (Phil. 4.2) (Col. 4.8) (1 Thess. 4.1, 4.10, 4.18, 5.11, 5.14) (2 Thess. 2.17) (1 Tim. 5.1, 6.2) (Titus 2.6) (Philem 9, 10) паракалеі̀ (Phil. 4.2) (Titus 2.15) <br>  |
| $\dot{\varepsilon} \pi \iota \iota \kappa \alpha \lambda \varepsilon ́ \omega$ |  |
| $\dot{\varepsilon} \gamma \kappa \alpha \lambda \varepsilon ́ \omega$ | erkatel (Acts 23.28, 23.29, 26.7) <br> егКА入єì (Acts 26.2) |
| $\pi$ пок $\alpha \lambda \varepsilon$ ќ $\omega$ <br> Acts: 0\% Epistles: 9\% | прОкдлеı (Gal. 5.26) <br> Acts: $100 \%$ Epistles: $91 \%$ |
| кotv $\omega v$ ह́ $\omega$ <br> KOINQNI (Rom. 12.13, 15.27) (Heb. 2.14) (Gal. 6.6) (Eph. 5.11) (1 Tim. 5.22) <br> Acts: $\varnothing$ Epistles: $86 \%$ | Koinconeı (Phil. 4.14) <br>  <br> Acts: $\varnothing$ Epistles: $14 \%$ |

3 Girgis (1966), p. 79 § $6 \mathbf{H}$ for $\mathbf{I}$.

| Standard：$\varepsilon \iota>1$ |  |
| :---: | :---: |
| ठı $\alpha$ коv $\varepsilon$ $\omega$ <br> ．A．IAKONI（Acts 6．2，19．22）（Rom．15．25）（2 Cor．3．3， 8．19，8．20，11．8）（Heb． $6.10 \times 2$ ）（1 Tim．3．13） <br> Acts： $100 \%$ Epistles： $89 \%$ | A．ıakonei（1 Tim．3．10） <br> Acts： $0 \%$ Epistles： $11 \%$ |
|  <br> enepit（1 Cor．12．6，12．11）（2 Cor．1．6）（Heb．4．12）（Gal． 5．6）（Eph．2．2）（Phil．2．13）（Col．1．29）（2 Thess．2．7） （Philem 6） <br> Acts：$\varnothing$ Epistles： $50 \%$ | eneprei（Rom．7．5）（1 Cor．16．9）（2 Cor．4．12） （Gal． 2.8 x2，3．5）（Eph．1．11，1．20，3．20）（1 Thess．2．13） <br> Acts：$\varnothing$ Epistles： $50 \%$ |
| $\lambda \cup \pi \varepsilon ́ \omega$ <br> גүாו（2 Cor．7．8， $7.9 \times 3,7.11$ ）（1 Thess．4．13） <br> Acts：$\varnothing \quad$ Epistles： $37 \%$ | 入үחеı（Rom．14．15）（2 Cor． $2.2 \times 2,2.3,2.4$ ， 2．5，2．7，6．10，7．8）（Eph．4．30） <br> Acts：$\emptyset$ Epistles： $63 \%$ |
| $\pi \varrho о \sigma \kappa \alpha \varrho \tau \varepsilon \varrho \varepsilon ́ \omega$ <br> проскגртерı（Acts 1．14，2．42，2．46，8．13，10．7）（Rom． 12.12) (Col. 4.2) <br> Acts：100\％Epistles：67\％ | пРоскартереı（Rom．13．6） <br> Acts：0\％Epistles：33\％ |
| о́ $\mu$ одоү $\bar{\varepsilon} \omega$ <br> 2OMOлOгI（Acts 7．17，23．8，24．14）（Rom．10．9）（1 Tim． <br> 6．12）（Titus 1．6） <br> Acts： $100 \%$ Epistles： $50 \%$ | 2OMO八Oгеı（Rom．10．10）（Heb．11．13，13．15） Acts：0\％Epistles：50\％ |
|  <br> єそОмологі（Acts 19．18） <br> Acts： $100 \%$ Epistles： $0 \%$ | €そомологеı（Rom．14．11）（Phil．2．11） Acts： $0 \%$ Epistles： $100 \%$ |
| $\kappa \alpha \tau \alpha \varrho \gamma \dot{\varepsilon} \omega$ <br> катаргı（Rom．3．3，3．31，6．6） <br> Acts：$\varnothing$ Epistles： $60 \%$ | катаргеı（1 Cor．1．28）（2 Thess．2．8） Acts：$\varnothing$ Epistles：40\％ |
| ```\(\dot{\varepsilon} \pi \iota \theta \nu \mu \varepsilon ́ \omega\) emieүmi (Acts 20.33) (Rom. 7.7, 13.9) (1 Cor. 10.6) (1 Tim. 3.1) епеıеүмі (Heb. 6.11) Acts: \(100 \%\) Epistles: \(71 \%\)``` | епıөүMeı（1 Cor．10．6）（Gal．5．17） <br> Acts：0\％Epistles：29\％ |
| $\beta \alpha \varrho \varepsilon ́ \omega$ <br> Bapı（2 Cor．1．8，5．4） <br> $\dot{\varepsilon} \pi \iota \beta \alpha \varrho \varepsilon ́ \omega$ <br> Acts：$\varnothing$ Epistles： $50 \%$ | bapei（2 Cor．12．16） <br> emibapei（2 Cor．2．5） <br> Acts：$\varnothing$ Epistles： $50 \%$ |
| غ̀кк $\kappa \kappa \varepsilon ́ \omega$ <br> егкдهı（2 Cor．4．1）（2 Thess．3．13） <br> Acts：$\varnothing$ Epistles： $40 \%$ | егКдбеı（2 Cor．4．16）（Gal．6．9）（Eph．3．13） Acts：$\varnothing$ Epistles： $60 \%$ |
| $\varphi \forall$ ov $\varepsilon \omega$ <br> ф日ONı（Titus 2．7） <br> Acts：$\varnothing$ Epistles：33\％ | фeoneı（Gal．3．1，5．26） <br> Acts：$\varnothing$ Epistles： $67 \%$ |
| $\alpha i ̀ \tau \varepsilon ́ \omega$ <br> alTi（Acts 3．14，7．46，9．2，12．20，13．21，13．28，25．3， 25．15）（1 Cor．1．22）（Eph．3．20） <br> Acts： $100 \%$ Epistles： $67 \%$ | altei（Eph．3．13） <br> Acts：0\％Epistles 33\％ |


| Standard：$\varepsilon$ ı $>1$ | Variant：$\varepsilon \iota>$ Ei～cì |
| :---: | :---: |
| $\pi \alpha \varrho \alpha \iota \tau \varepsilon ́ \sigma \mu \alpha\llcorner$ <br> параıтı（Acts 25．11）（Heb．12．25）（1 Tim．4．7，5．11） <br> Acts： $100 \%$ Epistles： $43 \%$ | пардатеı（Heb．12．19，12．25）（2 Tim．2．23） <br> （Titus 3．10） <br> Acts： $0 \%$ Epistles： $57 \%$ |
| $\varphi v \sigma \alpha ́ \omega$（contract－$\alpha \omega$ ） <br> фүсı（Gal．2．15，4．8） <br> Acts：$\emptyset$ Epistles：50\％ | \＄үceı（Rom．2．14）（Eph．2．3） Acts：$\emptyset$ Epistles：50\％ |

d）This type of verb ending is also applied to a number of Greek verbs of another class．For example，$-\omega>-\dot{\varepsilon} \omega$ verbs in Sahidic may have the ending $\mathbf{I}$ or $\epsilon$ ı instead of $\epsilon:^{4}$
ap×ı（Rom．15．12）敞 $\chi \omega$＂to rule＂；
өдлпєı（Eph．5．29）（1 Thess．2．7）$Ө \dot{\alpha} \lambda \pi \varepsilon \omega$.

Table 15：Greek $\varepsilon \iota: C+ı v s$. eı $\sim \mathbf{c i ̀}$（verbs of another class）

| Standard：$\varepsilon \iota>1$ | Variant：$\varepsilon \iota>$ Ei～${ }_{\text {cil }}$ |
| :---: | :---: |
| व̈＠$\chi о \mu \alpha \mathrm{~L}$＂to begin＂ <br> apxı（2 Cor．3．1，8．6，8．10）（Gal．3．3）（Phil．1．6） <br> Acts： $0 \%$ Epistles： $100 \%$ | apxe1（Acts 1．1，2．4，11．4，11．15，24．2，27．35） <br> apxeì（Acts 1．22，8．35，10．37，18．26） <br> Acts： $100 \%$ Epistles： $0 \%$ |
| $\psi \alpha \dot{\alpha} \lambda \lambda \omega$千 ג入入I（Eph．5．19） <br> Acts：$\varnothing$ Epistles： $25 \%$ | 千 àdel（Rom．15．9）（1 Cor．14．15） キa八aeì（l Cor．14．15） <br> Acts：$\varnothing$ Epistles：75\％ |

e）Impersonal verbs appear in the form of the Greek $3^{\text {rd }}$ person singular present indicative：${ }^{5}$
̄．入．OKI（Acts $15.22,15.25,15.28,15.34$ ）סокعі̃．

Table 16：Greek $\varepsilon\llcorner\sim \mathfrak{l}: \mathrm{C}+\boldsymbol{\imath} v s$. eı（impersonal verbs）

| Standard：$\varepsilon$ ¢ $\sim 1>1$ | Variant： $\boldsymbol{\varepsilon} \sim \sim \mathbf{l}>$ ¢ |
| :---: | :---: |
| ぞそと水し <br> еえеcTI（1 Cor．10．23） <br> Acts：$\varnothing$ Epistles：25\％ | еえестеı（1 Cor． $6.12 \times 2,10.23$ ） Acts：$\varnothing$ Epistles： $75 \%$ |
| $\pi \varrho \varepsilon ́ \pi \varepsilon \iota$ <br> препи（Heb．2．10） <br> Acts：$\varnothing$ Epistles： $33 \%$ | препеı（Heb．7．26）（Eph．5．3） <br> Acts：$\varnothing$ Epistles： $67 \%$ |

[^40]Taking into account all these verbs, the scribe of Acts uses the grapheme $164 \%$ of the time,
 of the Epistles uses ו $46 \%$ of cases, and eı $54 \%$.
f) Greek $\varepsilon>$ Sahidic $\operatorname{ei\sim 1}$ : Stressed $\dot{\varepsilon}$ generally maintains its spelling in Coptic. ${ }^{6}$ But note $\pi \alpha \varrho \alpha \gamma \gamma \varepsilon ́ \lambda \omega$ :

параггіле - regular in Acts (Acts 1.4, 4.17, 4.18, 5.28, 5.40, 10.42, 15.5, 16.18, $16.23,17.30,23.22,23.30$ );

параггеıде - regular in the Epistles (1 Cor. 7.10, 11.17) (1 Thess. 4.11) (2 Thess.
3.6, 3.10, 3.12) (1 Tim. 1.3, 4.11, 6.13, 6.17); ехсерt параггіле (1 Tim. 5.7).

Case A4: '(C)CVC(C) and CVC $\quad \mathbf{V}=\mathbf{1}$ (var. $\mathbf{e} \mathbf{\imath}$ )
In a closed syllable there is a strict adherence to this rule:

But note the following biblical name:
beniamein (Bevla $\alpha$ ív) (Acts 13.21) (Rom. 11.1) (Phil. 3.5).

Case A5: '(C) GV $\quad \mathrm{G}=/ \mathrm{w} / \quad \mathrm{V}=\mathrm{e} \boldsymbol{\mathrm { I }}$ (var. $\mathrm{\epsilon}$ )
In contrast to the previous rule, when the vowel /i/ follows a glide in an open syllable the digraph is employed:
oүeine, zoүeite, леүеітнс ( $\Lambda \varepsilon v i ́ t \alpha \varsigma)$.

Variation: The digraph generally carries a circumflex at the end of a lexeme:
oүeì (" one" fem.) (1Cor 7.2 x2) (Gal. 4.24) - always with circumflex;


[^41]Case A6: '(C)GVC $\quad \mathrm{G}=/ \mathrm{w} /$ or $/ \mathrm{j} / \quad \mathbf{V}=\mathbf{\epsilon} \mathbf{\imath}$ (var. ï)
In a closed syllable the digraph realises the vowel when preceded by a glide. In this case the second vowel-glide element, el, is interpreted as vocalic, the first, consonantal. ${ }^{7}$ The variant occurs at the end of a line only:

由оүеıт~ 1 )

Table 17: $\mathrm{G}+\mathrm{el}$ vs. i

| Standard: eı | Variant: $\mathbf{i}$ |
| :---: | :---: |
| (1)OүヒIT (Acts 4.25, 14.15) <br> (Rom. 1.21, 4.14, 8.20) (1 Cor. 1.17, 3.20, 9.15, 15.10, $15.14 \times 2,15.17,15.58)($ Gal. 2.2) (Col. 2.8) (1 Thess. 2.1) (1 Tim. 1.6, 6.20) (2 Tim. 2.16) (Titus 3.9) <br> Acts: 100\% Epistles: 90\% | (1)OYїT\| (Eph. 4.17, 5.6) <br> Acts: $0 \%$ Epistles: $10 \%$ |
|  $13.22 \times 2,13.34,13.36,15.16$ ) (Rom. 1.3, 4.6, 11.9) (Heb. 4.7, 11.32) (2 Tim. 2.8) <br> Acts: 91\% Epistles:100\% | . A.AYї..। (Acts 1.16) <br> Acts: 9\% Epistles: 0\% |

7 In cases like this, where two vowel-glides are adjacent, it is sometimes difficult to decide which is the vowel and which is the glide. Most of the time the etymology is consistent with GV, but it is not out of the question that apophonic transformations may occur over time. In the case of $21 \in 1 B$ the long form of the definite article, which is used with this word ( Te 2 e E I ), indicates that the word begins with a consonant cluster, therefore, the GV sequence is appropriate here. The same also applies to zIOME (ne2ıOME). Cf. Peust (1999), p. 260, 214 n. 242.
B. Graphemic forms of the glide $/ \mathbf{j} /(\mathfrak{i} \sim \sim \sim \mathbf{E} \mathbf{\imath} \sim \mathbf{e} \mathbf{i})$

Table 18: Typology of the glide $/ \mathrm{j} /$

| Case | Syllabic Context |  | $\begin{gathered} C B M s .814 \\ \text { Acts } \end{gathered}$ | $\text { CB Ms. } 813$ <br> Epistles | Examples |
| :---: | :---: | :---: | :---: | :---: | :---: |
| B1 | \#'GV |  | Eı (var. ו~i) | Eı (var. ï) | eıLD /'jo/ eıote /'jo.tə/ |
| B2 | \#' $\mathbf{G V C}(\mathrm{C}$ ) |  | EI (var. ï) | Eı (var. 1) | EIDT /'jot/ |
| B3 | (C)CGV |  | 1 | 1 | 21н /'hje/ Tcio /'tsjo/ гIOME /'hjo.mə/ |
| B4 | '(C)CGVC |  | 1 | 1 | теıоч /'tsjof/ 2еєıв /'hjiß/ ebihn/a.'ßjen/ |
| B5 | '(C)VG\# | $\mathrm{V}=\mathrm{H}$ | ï | ï (var. el~eì) | нї /'ej/ |
|  |  | $\mathrm{V}=\mathrm{O}$ | ï (var. eı) | ï (var. ¢ı~Eì) | м̄мої/ṃ.'məj/ оүої /'wøj/ |
|  |  | $\mathrm{V}=\omega$ | ï | ï |  |
|  |  | $\mathrm{V}=\mathrm{O} \gamma$ | ï | 1 | KOүï /'kuj/ |
|  |  | $\mathrm{V}=\boldsymbol{\lambda}$ | ï | ï (var. ¢ì) | д(1) $\boldsymbol{\lambda} \boldsymbol{i ̈ l} / \mathrm{a} . \mathrm{Saj} /$ |
|  | (C)VG\# | $V=\boldsymbol{\lambda}$ | i | ï (var. ¢ì) | dï- /aj/ |
|  |  | $V=\boldsymbol{\epsilon}$ | ï | ï (var. el~eì) | пеї- /pəj/ |
| B6 | (C)VG.CV(C) |  | $\begin{gathered} \mathrm{V}=\mathrm{o} \\ \mathrm{i} \quad(\text { var. } \mathrm{e} \mathrm{l}) \end{gathered}$ | $\begin{aligned} & \mathrm{V}=\mathbf{O}, \mathbf{H} \\ & \ddot{\mathrm{I}}(\text { var. } \mathrm{e} \mathbf{I}) \end{aligned}$ | 2Oïne /'hoj.nə/ дмнї̈Т |
|  |  |  | $V=\lambda, \mathbf{H}$ | $V=\boldsymbol{\lambda}$ | 2дївєс /'haj.ßəs/ |
| B7 | '(C)VGC\# |  | Eı (var. ï) | Eı (var. ï) | Maeın /'majn/ c2גeI=q /'shajf/ x.OGIT /'cojt/ OeIK /'jjk/ oүocial /'wojj/ xoeic /'cojs/ |
| B8 | CVC. 'GV |  | EI | EI | PM̄̇еı /rm'je/ |
| B9 | '(C)V.GV(C) <br> (C)V.'GV(C) |  | ï (var. ¢ı~¢i) |  |  TaïO~TaEIO~TaEio /ta.'jo/ тоүеıо /tu.'jo/ |

Case B1：\＃＇GV G＝ $\mathbf{6}$（var． $1 \sim \mathbf{\sim}$ ）
At the beginning of lexemes，in open syllables，the glide $/ \mathrm{j} /$ is represented by the digraph $\mathrm{e}_{\mathrm{I}}$ ：
 еІераоб．

With a preformative clitic：On one occasion the epsilon is omitted when preceded by the definite article：
miepol（Acts 16．13）［Crum（1939），p．82a：eıepo，iepo］．

## Coalescence of two adjacent glides：

теїопе（Acts 19．25）＂this trade＂（теї（єı〉ппе）［Crum（1939），p．81а：єıопе，וопе］．

## Biblical names／proper nouns：



†OY시시（regular with the definite article）．
The initial glide regularly loses the trema when followed by the singular definite article：

On one occasion the plural definite article is employed without the superlinear stroke，in which case syntagmatic resyllabification has taken place：

NıOY．A．גї／nju．＇daj／（Rom．3．9）．
This is in contrast to the usual plural definite article $\overline{\mathbf{N}}$ ，where the trema is retained：
n̄ïoү＿入．גï／ṇ．ju．＇daj／（Acts： 61 occurrences）（Epistles： 12 occurrences）．

Case B2：\＃＇GVC（C）

$$
\mathbf{G}=\mathbf{\epsilon} \mathbf{l}(\text { var. } \mathbf{\imath} \sim \mathbf{i})
$$

At the beginning of a lexeme，in a closed syllable，the glide is also realised with the digraph： еІ由т，еІдт＝．

With a preformative clitic：As in the previous Case A1，the digraph is sometimes reduced to a simple iota when preceded by the definite article，or other preformative．In one case the digraph is replaced by $i$ where it follows the preformative segment $2 \lambda$－．Cf．Case B5，the domain where the grapheme ï follows the vowel $\boldsymbol{\lambda}$ within a segment．

## Table 19: Clitic + \#eı vs. $\mathfrak{\imath} \sim \boldsymbol{i}$

| Standard: eı | Variant: 1~i |
| :---: | :---: |
| пеІшт (Acts 1.4, 1.7, 2.33, 28.8) <br> (Eph. 5.20) (Rom. 8.15) (1 Cor. 8.6, 15.24) (2 Cor. $1.3 \times 2$, 11.31) (Heb. 12.9) (Gal. 1.1, 1.3, 4.2, 4.6) (Eph. 1.3, 1.17, 2.18, 3.14, 4.6) (Phil. 2.11) (Col. 1.3, 1.12, 3.17) (Titus 1.4) <br> пו\|пеıळт (Rom. 6.4) This is a case of dittography. Perhaps the scribe intended to write пu| $\boldsymbol{\Pi}$, but resumed the usual spelling in the next line. There are two other examples of dittography in this same verse. <br> Acts: $100 \%$ Epistles: $88 \%$ | пı\| $\boldsymbol{\omega}$ (Rom. 15.6) <br> пוшт (Eph. 6.23) <br> пוळт\| (2 Tim. 1.2) <br> Acts: $0 \%$ Epistles: $12 \%$ |
| Crum (1939), p. 76a: еІв, еıеıв, еієв <br> Acts: $\varnothing$ Epistles: 0\% | пıеıв ( 1 Cor. 15.56), <br> пекıєıв (1 Cor. 15.55) <br> Acts: $\varnothing \quad$ Epistles: $100 \%$ |
|  2ג-еıат= (Rom. 1.13) (2 Cor. 1.9) <br> Acts: 0\% Epistles: 100\% <br> Note: ela (Heb. 11.38); mnt-ela (Eph. 6.6) (Col. 3.22); тоүn-oүeiat= (Heb. 11.7); тсаве-еıat= (Rom. 11.34); тсеве-еıдт $=($ Acts 8.31, 10.22) (1 Cor. 2.16). | 2ג-їАТ (Acts 26.9) <br> Acts: 100\% Epistles: 0\% |

## Case B3: '(C)CGV G=1

The glide following a consonant, in an open syllable, is always rendered with a iota:
2ін, TCIO, гIOME, ©IE, 2IOOүе.

## Case B4: '(C)CGVC $\quad \mathbf{G}=\mathbf{1}$

The glide following a consonant, in a closed syllable, is also always rendered with a iota:
TCioq, xioop (< eioop), ebinn, zieib.

## Case B5: '(C)VG\# and (C)VG\#

a) Accented syllables '(C)VG\#

$$
\begin{aligned}
& \mathrm{V}=\mathbf{H} \quad \text { Acts: } \mathbf{G}=\mathbf{i} \quad \text { Epistles: } \mathbf{G}=\mathbf{i}(\text { var. } \mathbf{e} \mathbf{1 \sim \mathbf { e }}) \\
& \mathrm{V}=\mathbf{0} \quad \text { Acts: } \mathbf{G}=\mathbf{i}(\text { var. } \mathbf{\epsilon} \mathbf{1}) \text { Epistles: } \mathbf{G}=\ddot{\mathbf{i}}(\text { var. } \mathbf{\epsilon} \mathbf{1} \sim \mathbf{\epsilon} \mathbf{i}) \\
& \mathrm{V}=\mathbf{\omega} \quad \text { Acts: } \mathbf{G}=\boldsymbol{i} \quad \text { Epistles: } \mathbf{G}=\ddot{\mathrm{i}} \\
& \mathrm{~V}=\mathrm{o} \boldsymbol{\gamma} \quad \text { Acts: } \mathbf{G}=\mathbf{i} \quad \text { Epistles: } \mathbf{G}=\mathbf{i} \\
& \mathrm{V}=\boldsymbol{\lambda} \quad \text { Acts: } \mathbf{G}=\mathbf{i} \quad \text { Epistles: } \mathbf{G}=\ddot{\mathbf{i}}(\text { var. } \mathbf{e} \mathbf{i})
\end{aligned}
$$

The final glide $/ \mathrm{j} /$ following a vowel, in accented syllables, is represented by the allograph $\ddot{i}$, with a number instances where the variants ei~eì, (eı (53\%) and cì (47\%)) are employed, mostly by the scribe of the Epistles. There is only one example of the scribe of Acts using the variant (OYoeı (Acts 18.2)).

## Lexical forms:

хої, матої, бвої, стої, гдмої, оүої, ної (vоє́ $\omega$ ), метамої ( $\mu \varepsilon \tau \alpha v о \varepsilon ́ \omega$ );
коүї, моүї;
 тגї, naï.

Table 20: VG\# $\quad \mathrm{G}=\mathrm{i}$ vs. $\mathrm{el} \sim \mathrm{Ci}$

| Standard: $\mathbf{i}$ | Variant: el~eì |
| :---: | :---: |
|  | Heı (Rom. 16.10) ( 1 Cor. 16.15, 16.19) (2 Cor. 5.1) (Heb. 3.2, 3.5, $3.6 \times 2$ ) (Gal. 6.10) (Eph. 2.19) (Phil. 4.22) (1 Tim. 3.15, 5.8, 5.13, 5.14) (2 Tim. 1.16) (Titus 1.11) <br> Heì (Rom. 16.5) ( 1 Cor. 1.16, 11.22, 11.34) (Heb. 3.4, 8.8, 8.10, 10.21) (1 Tim. 3.5, 3.12, 5.4) (2 Tim. 3.6, 4.19) <br> Acts: 0\% Epistles: 77\% |
| $\begin{aligned} & \text { oүoï (Acts } 7.31,7.57,8.29,8.30,9.1,10.28,14.5,19.29 \text {, } \\ & 21.33,22.26,22.27,23.14,28.9) \\ & \text { (Heb. } 4.16,7.25,10.1,10.22,11.6,12.22)(1 \text { Tim. } 6.3) \\ & \text { Acts: } 93 \% \quad \text { Epistles: } 87 \% \end{aligned}$ | OүOEI (Acts 18.2) <br> (Heb. 12.18) <br> Acts: 7\% Epistles: 13\% |
| גїдї (Eph. 4.16) (Col. 2.19) <br> Acts: $\varnothing$ Epistles: $50 \%$ | גї̀єì (Phil. 1.20) (2 Cor. 10.15) Acts: $\varnothing$ Epistles: $50 \%$ |

$1^{\text {st }}$ person singular suffix pronouns:
Оүвн=ї, $2 \lambda$ тн $=\boldsymbol{i} ;$



NOY $=17$;
NA=ї, 2NA=ї, NMMA=ї;


Table 21: Variation with the $1^{\text {st }}$ person singular suffix pronouns in accented syllables

| Standard: $\mathbf{i}$ | Variant: eit |
| :---: | :---: |
| 2TH=ï (Rom. 19.5 x 2 ) (2 Cor. 2.3, 7.8) (Phil. 3.4) (Philem 21) <br> Acts: $\varnothing$ Epistles: $86 \%$ | 2TH=Gì (2 Cor. 7.8) <br> Acts: $\varnothing$ Epistles: $14 \%$ |
| $\overline{\mathrm{M}} \mathrm{MO}=\ddot{\mathrm{I}}$ (Acts: 21 occurrences) (Epistles: 33 occurrences) Acts: 100\% Epistles: $97 \%$ | $\overline{\mathrm{M}} \mathrm{MO}=\mathrm{\epsilon} \mathbf{l}$ ( Gal. 5.11) <br> Acts: 0\% Epistles: 3\% |

b) Unaccented preformatives (C)VG\#

$$
\begin{array}{lll}
\mathrm{V}=\mathbf{\lambda} & \text { Acts } \mathbf{G}=\ddot{\mathbf{i}} & \text { Epistles } \mathbf{G}=\ddot{\mathbf{i}}(\text { var. } \mathbf{\epsilon} \mathbf{i}) \\
\mathrm{V}=\mathbf{\epsilon} & \text { Acts } \mathbf{G}=\ddot{\mathbf{i}} & \text { Epistles } \mathbf{G}=\ddot{\mathbf{i}}(\text { var. } \mathbf{\epsilon} \sim \mathbf{i})
\end{array}
$$

The glide $/ \mathrm{j}$ / functioning as the $1^{\text {st }}$ person singular pronominal subject of verbal conjugations preceded by the vowel $\boldsymbol{\lambda}$ is realised $\ddot{i}$ with only one exception, in the Epistles. The construct participles, $\mathbf{q}_{\mathbf{\lambda}} \mathrm{II}^{-}$and maï-, are also regular. Following the vowel e in the verbal conjugations and the demonstrative articles, the scribe of Acts is also consistent with the use of $\ddot{i}$. On the other hand, the Epistles display considerable optionality between the allographs $\ddot{i}$ and the digraph ( c ì $59 \% \sim$ et- 41\%) following the vowel e.

Table 22: $1^{\text {st }}$ person singular pronominal subject of verbal conjugations: a $+\boldsymbol{i} v s$. eì

| Conjugation | Standard: $\boldsymbol{\lambda}$ + $\mathbf{i}$ | Variant: $\boldsymbol{\lambda}+\mathbf{e i}$ |
| :---: | :---: | :---: |
| Perfect I | גї- passim |  |
| Perfect I Relative / Perfect II | N̄Taï- (Acts 13.2, $20.18 \times 2,20.24,22.5,22.10,24.11$, 24.21, 26.12, 28.17) <br> (1 Cor. 2.1, 2.3, 4.6, 5.11, 9.15, 13.1, 15.32) (2 Cor. 2.9, 2.10, 7.12) (Heb. 11.6) (Gal. 1.12, 2.2 x2) (Phil. 2.16, 3.12) (1 Tim. 1.13) (Titus 3.12) <br>  <br> (-)єntaï- (Acts 10.20, 20.25, 25.11) <br> (Rom. 11.3) (1 Cor. 11.1, 11.2, 11.23, 15.1, 15.2, 15.3, 16.1, 16.21) (2 Cor. 2.3 2.10, 7.14, 11.7, 12.17) (Heb. 3.11, 4.3, 8.9 x2) (Gal. 2.10, 2.18, 5.21) (Eph. 3.3, 3.7, 6.22) (Phil. 3.8) (Col. 1.23, 1.25, 4.8, 4.18) (2 Thess. 3.17) (1 Tim. 1.3, 1.20) (2 Tim. 1.12, 3.11, 4.13) (Titus 1.5) (Philem 10) <br> Acts: 100\% Epistles: 98\% | nTAEìl- (Phil. 2.16) <br> Acts: 0\% Epistles: 2\% |



| Conjugation | Standard: $\mathbf{\epsilon}+\mathbf{i}$ | Variant: $\mathbf{\epsilon}+\mathbf{\epsilon} \mathbf{\text { i }} \mathbf{\text { el }}$ |
| :---: | :---: | :---: |
| Present <br> Circumstantial/ <br> Present II | $\begin{aligned} & \text { €ï- (Acts } 11.5,14.10,17.23 \times 2,20.19,20.21,20.25 \text {, } \\ & \text { 20.31, 20.35, 22.3, 22.4 x2, 22.6, 22.11, 22.17, } 22.20 \\ & \text { x2, 23.28, 23.30, } 24.10,24.12 \times 2,24.14 \times 2,24.17 \text {, } \\ & 24.18,24.21,25.10,25.18,25.20,26.6,26.11 \mathrm{x} 2 \text {, } \\ & 26.17,26.22 \times 2,26.26,28.17,28.20) \\ & (\text { Rom. } 1.9,1.10,3.5,6.19,7.1,7.14,15.15,15.16 \text {, } \\ & 15.24 \times 2,15.29)(1 \text { Cor. } 2.1,4.14,5.3 \times 3,5.10,6.5,7.6 \text {, } \\ & 7.29,7.35,9.8,9.17,9.18,9.19,9.20,9.26 \times 2,9.27 \text {, } \\ & 10.15,10.19,13.11,13.12,14.6,15.10,15.34 \times 2)(2 \\ & \text { Cor. } 1.23,2.3,7.3,8.8,10.1,10.2,10.9,11.21,12.16) \\ & (\text { Heb. } 2.13,6.14)(\text { Gal. } 1.13,1.14,2.2,3.17)(\text { Eph. } \\ & 1.16,4.17,5.32,6.21)(\text { Phil. } 1.4,1.6,1.9,1.16,1.25 \text {, } \\ & 3.6,3.10,3.12,3.13 \times 2,3.14,3.18,4.17 \times 2)(\text { Col. } 1.24 \text {, } \\ & 2.4)(1 \text { Tim. } 3.14)(2 \text { Tim. } 1.4,1.5)(\text { Philem } 4,5,9 \times 3 \text {, } \\ & 21 \times 2) \\ & \text { €ı (Gal. } 4.11) \\ & \text { Acts: } 100 \% \end{aligned}$ | eci- (Rom. 15.20, 15.29) (1 Cor. 9.23, 9.26, 16.7) (2 Cor. 1.17, 7.3, 7.8, 10.1, 11.9, 11.21, 11.23, 13.2) (Heb. 6.14, 11.32) (Gal. 1.10, 1.14, 1.15, 2.20, 3.15, 4.18, 5.11) (Eph. 4.17) (Phil. 2.12) (Col. 1.29, 2.5) (1 Tim. 1.13) (2 Tim. 1.4, 1.12) <br> eєt- (1 Cor. 4.14) (2 Cor. 11.8, 13.2) (Eph. 1.16) (Phil. 3.12) (Col. 2.5) (2 Thess. 3.17) |
| Imperfect | $\begin{aligned} & \text { neï- (Acts } 2.25,10.30 \times 2,11.5,11.11,18.14,22.19 \text {, } \\ & 22.20,23.5,25.11,25.22,26.11 \times 2) \\ & \text { (Rom. } 7.7,9.3)(1 \text { Cor. } 4.4,13.11 \times 2)(2 \text { Cor.1.15, } 7.8 \text {, } \\ & \text { 8.8, 9.3, 11.17, 12.14) (Gal. 4.20) (Phil. 4.11) (2 Thess. } \\ & \text { 2.5) (Philem 13) } \\ & \text { Acts: } 100 \% \quad \text { Epistles: } 60 \% \end{aligned}$ | neeì- (Rom. 15.18, 15.22) (1 Cor. 13.11) (Gal. 1.13) (Phil. 3.18) <br> neet- (Rom. 7.9) (1 Cor. 4.14 (2 Cor. 7.3) (Gal. 1.10, 1.13) <br> Acts: $0 \%$ Epistles: $40 \%$ |
| Adhortative <br> (Future III) | $\begin{aligned} & \text { nneï- (Phil. 1.20) } \\ & \text { Acts: Ø } \quad \text { Epistles: } 50 \% \end{aligned}$ | -̄neeì (1 Cor. 8.13) <br> Acts : $\emptyset \quad$ Epistles: $50 \%$ |
| Conditional | €ї̈) AN- (Acts 24.25) <br> (Rom. 11.27, 15.24, 15.28) ( 1 Cor. $9.16 \times 2,13.1,13.3$, 14.6, 14.11, 14.14) (2 Cor. 12.6, 12.10) (Phil. 1.27, 2.23) (Titus 3.12) <br> Acts: $100 \%$ Epistles: $71 \%$ | eeic)an- (2 Cor. 10.8) (1 <br> Tim. 3.15) <br> eetcian- (Rom. 15.32) (1 <br> Cor. 16.2, 16.3, 16.5) <br> Acts: 0\% Epistles: 29\% |
| Aorist Negative <br> Circumstantial | Acts: $\varnothing$ Epistles: 0\% | $\begin{aligned} & \text { emeeì- (2 Cor: } 11.29 \text { ) } \\ & \text { Acts: } \varnothing \quad \text { Epistles: } 100 \% \\ & \hline \end{aligned}$ |
| Future I <br> Circumstantial/ <br> Future II | ```\epsilonÏnd- (Acts 18.6, 20.22, 22.21, 26.2, 26.12, 28.19) (Rom. 15.24, 15.25) (1 Cor. 14.6) (2 Cor. 12.5) (Heb. 11.32) Acts: 100% Epistles: 71%``` | $\begin{aligned} & \text { єeìna- (2 Cor. 11.30) (1 Tim. } \\ & 1.3) \\ & \text { Acts: } 0 \% \quad \text { Epistles: } 29 \% \end{aligned}$ |
| Summary | Acts: 100\% Epistles: $68 \%$ | Acts: 0\% Epistles: 32\% |

Table 24: Variation with demonstrative articles

| Standard: $\mathbf{\epsilon}+\boldsymbol{i}$ | Variant: $\mathbf{E}+\mathbf{\epsilon} \mathbf{i} \sim \mathbf{E l}$ |
| :---: | :---: |
| пеї- (Acts 1.6, 1.19, 1.21, 1.24, 2.12, 2.33, 2.38, 3.16, $4.17,4.22,5.4,5.20,5.28,5.38 \times 2,6.5,6.13 \times 2,6.14$, $7.4,7.7,7.29,7.60,8.21,8.29,9.13,9.14,9.21 \mathrm{x} 2$, 10.17, 10.18, 11.12, 13.26, 15.6, 16.28, 17.6, 17.18, 19.27, 19.37, 19.40, 20.18, 21.11, 21.28 x2, 22.22, $22.26,23.9,23.13,23.17,23.18,23.25,23.27,23.30$, $24.2,24.5,24.10,24.19,25.5,25.17,25.22,25.24 \times 3$, 26.26, $26.31 \times 2,28.4,28.28$ ) <br> (Rom. 4.9, 7.24, 8.18, 9.9, 11.5, 12.2, 15.28) (1 Cor. 1.20, $2.6 \times 2,2.8,3.18,3.19,4.2,5.10,7.31,11.25$, 11.26, 14.21, 15.19) (2 Cor. 1.10, 4.7, 8.19, 9.4, 9.12, 11.10, 12.3, 12.13) (Heb. 6.3, 9.9, 10.10, 10.33) (Gal. 1.4, 5.8) (Eph. 1.21, 5.32) (Phil. 1.29) (Col. 1.27, 4.8) (1 Thess. 3.3) (1 Tim. 4.8, 6.17) (2 Tim. 4.10) (Titus 2.12) <br> Acts: 100\% Epistles: $61 \%$ | пеєì- (Rom. 3.26, 5.2, 6.2) (1 Cor. 5.3, 7.31, 11.5) (2 Cor. 8.20) (Heb. 7.8, 9.11) (Eph. 2.2, 2.8) <br> пеєı- (Rom. 11.25, 13.6, 13.9) (1 Cor. 2.12, 5.2, 13.13) (2 Cor. 1.15, 3.10, 4.4, 8.14, 9.3) (Heb. 7.1, 12.1, 13.14) (Gal. 6.16) (Eph. 6.12, 6.22) пеє $\langle\downarrow$ (2 Cor. 7.11) <br> Acts: 0\% Epistles: 39\% |
| Teï- (Acts 1.16, 1.17, 1.25, 2.6, 2.40, 4.27, 6.3, 8.19, $8.35,10.30,16.12,16.20,17.19,18.10,19.25$ теї(єı〉опе, 22.3, 22.4, 22.28, 24.21, 26.7, 27.23, $28.20 \times 2,28.22$ ) <br> (Rom. 16.22) (1 Cor. 3.12, 4.13, 8.9, 11.5) (2 Cor. 2.6, 8.6, 8.7) (Heb. 7.22) (Gal. 4.25) (Col. 3.13) (1 Thess. 5.27) (1 Tim. 1.18) (2 Tim. 2.19) (Titus 1.13) <br> n̄teïmine (Acts $16.24,18.15,22.22$ ) <br> (Rom. 16.18) (1 Cor. 7.15, 11.16) (2 Cor. 3.4, 3.12, 12.3, 12.5) (Heb. 8.1, 12.3, 13.16) (Gal. 5.23) (Philem 9) <br> nтeïre (Acts 3.18, 7.1, 13.34, 14.1, 15.15, 15.23, 17.11, 20.11, 21.11, 22.24, 23.11, 24.9, 24.14) <br> (Rom. 6.4, 9.20) (1 Cor. 3.15, 5.3, 7.7, 7.11, 11.25, 7.26, 9.24, $9.26 \times 2$ ) (Eph. 4.20) (Gal. 5.21) (1 Tim. 3.8, 3.11, 5.25) <br> Acts: 100\% Epistles: 41\% | Te૯ì- (1 Cor. 4.11, 14.21) (2 Cor. 1.10, 3.12, 4.1) (Heb. 2.3) (Phil. 2.2) <br> тeet- (1 Cor. 9.12, 11.14) (2 Cor. 9.13) (Heb. 4.7) (Gal. 6.11) (Eph. 3.8) (Col. 4.16) <br> ñteeimine (Rom. 2.2) (1 Cor. 5.1, 7.28) (Heb. 7.26) (Gal. 6.1) (Phil. 2.29) (2 Thess. 3.12) (Titus 3.11) 2enteeìmine (2 Cor. 10.11) íteeimine ( 1 Cor. 5.5, 5.11, 16.16, 16.18) (2 Cor. 2.7, 12.2, 11.13) <br> ñeeìre (Rom. 2.3, 5.21, 6.11, 10.6, 15.20) (1 Cor. 7.40) (2 Cor. 9.5) (Heb. 2.14, 5.3, 6.9, 6.15, 10.25, 11.14) (Gal. 6.2) (Eph. 5.28) (Phil.4.1) (2 Thess. 3.17) (Titus 2.3) <br> ñeeıre (1 Cor. 9.15, 14.25) (2 Cor. 8.6) (Heb. 4.4, 9.6, 9.21) (Gal. 1.6) (Eph. 5.27, 6.9) (Phil. 3.17) (1 Thess. 4.17) (1 Tim. 2.9) (Titus 2.6) <br> Acts: 0\% Epistles: 59\% |
| neï- (Acts $1.15,3.24,4.16,5.5,5.8,5.24,5.32,5.35$,5.36, $5.38,10.44,13.42,14.15,16.17,16.20,16.35$,$16.36,16.38,19.37,20.34,21.5,21.15,21.38,25.20$,$26.29)$(Rom. 15.23) (Heb. 1.2, 13.16) (2 Cor. 7.1) (1 Thess. <br> 3.3, 4.18) (2 Tim. 3.5, 3.8) <br> Acts: $100 \% \quad$ Epistles: $73 \%$ , | $\begin{aligned} & \text { neeì (1 Cor. 6.13) } \\ & \text { neti- (l Cor. 7.15) (2 Tim. 1.12) } \end{aligned}$ <br> Acts: 0\% Epistles: 27\% |


| Standard: $\mathbf{\epsilon}+\ddot{\mathbf{i}}$ | Variant: $\mathbf{\epsilon}+\mathbf{\text { ei }} \mathbf{\epsilon} \mathbf{\epsilon}$ |
| :---: | :---: |
| Summary |  |
| Acts: $100 \%$ Epistles: $52 \%$ | Summary |
|  | Acts: $0 \% \quad$ Epistles: $48 \%$ |

Case B6: '(C)VG.CV(C) $\quad \mathbf{G}=\boldsymbol{i}\left(\right.$ var. $\left.\mathbf{\epsilon ı}^{\prime}\right)$

$$
\begin{array}{lll}
\mathrm{V}=\mathbf{o} & \text { Acts: } \mathbf{G}=\ddot{\mathbf{i}}(\text { var. } \mathbf{\epsilon}) & \text { Epistles: } \mathbf{G}=\ddot{\mathbf{i}}(\text { var. } \mathbf{\epsilon} \mathbf{\imath}) \\
\mathrm{V}=\mathbf{H} & \text { Acts: } \mathbf{G}=\mathbf{i} & \text { Epistles: } \mathbf{G}=\ddot{\mathbf{i}}(\text { var. } \mathbf{\epsilon}) \\
\mathrm{V}=\mathbf{\lambda} & \text { Acts: } \mathbf{G}=\mathbf{i} & \text { Epistles: } \mathbf{G}=\ddot{\mathbf{i}}
\end{array}
$$

When the glide closes a syllable within a lexeme, ï takes precedence, but with variation following the vowels $\mathbf{O}$ and $\mathbf{H}$. Following the vowel $\boldsymbol{\lambda}$, the iota with a trema is stable.

2дївес, с2дї=cоү.

Table 25: Variation in the glide at a syllable boundary

| Standard: $\mathbf{i}$ | Variant: eı |
| :---: | :---: |
| גМНїТі̄ (Acts $16.15,16.36$ ) Acts: $100 \%$ Epistles: $0 \%$ | AMHEITM (2 Cor. 6.17) <br> Acts: $0 \%$ Epistles: $100 \%$ |
|  ```\(\boldsymbol{\lambda} \mathbf{O} \\| \boldsymbol{\sigma} \mathbf{E}(\) Acts 10.21\()\) (1 Thess. 2.5) Acts: \(100 \%\) Epistles: \(50 \%\)``` | 入OEIGE (Phil. 1.18) <br> Acts: 0\% Epistles:50 \% |
| 2OÏne (Acts 6.9, 12.1, 14.4, 15.1, 15.5. 15.24, 17.4, 17.6, $17.18 \times 2,17.28,17.32,19.9,19.13,19.31$ zoïlne, 21.16, 23.9, 23.12, 27.44, 28.24) <br> (Rom. 3.3, 3.8, 11.14, 11.17, 11.24, 11.25 2Oïlne) (1 Cor. $4.18,8.5,8.7,9.22,10.7,10.8,10.9,10.10,12.28,15.6$, 15.12, 15.34) (2 Cor. $2.16 \times 2,8.13,10.2,10.12$ ) (Heb. 3.16, 4.6, 10.25, 13.2) (Gal. 1.7, 2.12 2Oїlne) (Eph. 4.11 x2) (Phil. 1.15, 1.16) (2 Thess. 3.11) (1 Tim. 1.3, 1.6, 1.19, 4.1, 5.15, 5.24, 6.10, 6.21) (2 Tim. 2.18 2Oïlne, 2.20 2OÏlne) <br> Acts: $91 \%$ Epistles: 100\% | 2Oleine (Acts 10.23, 11.20) <br> Acts: 9\% Epistles: 0\% |
| ```2ОїТе (Acts 7.58, 9.39, 16.22, 18.6, 20.33, 22.20 2Оїlте, 22.23 2Oї̈'TE) (Heb. 1.11) (1 Tim. 2.9 2Oїl'Te) Acts: 78% Epistles: 100%``` | 2OGITE (Acts 11.15) <br> 2Oleite (Acts 14.14) <br> Acts: $22 \%$ Epistles: 0\% |

## Case B7: '(C)VGC\# $\quad \mathbf{G}=\mathbf{e l}$ (var. ï)

In the 'covered' position, the variant form is mostly used at the end of a line, rarely elsewhere:

XOEIT, MOEIT, COEIT, OEIK, OYOEIC, XOEIC, OYOEIN, $1 O O E I C$, , XOEIX,


Table 26: Variation in the glide in the 'covered' position

| Standard: $\mathbf{E l}_{1}$ | Variant: ï |
| :---: | :---: |
|  <br> (Epistles: 109 occurrences) <br> 〈Oү〉oeid) (1 Cor. 15.58) <br> O $\gamma\langle\mathbf{O}\rangle \mathrm{E} \mathbf{1} \mathbf{\omega}$ (Phil. 1.4) <br> Acts 85\% Epistles: 96\% |  <br> -еүОїф)е\|тм̄мдү (Acts 7.20) <br> OүOїव1 (Rom. 3.26, 5.6) (Heb. 4.7, 9.9) <br> (Philem 4) <br> Acts: $15 \%$ Epistles: 4\% |
| ```TA(1)eocia) (Acts 1.2, 3.24, 4.29, 4.31, 5.20, 8.4, 8.40, 11.20, 13.5, 13.38, 14.15, 15.36, 16.10, 16.17, 17.3, 17.13, 17.23, 21.8) (Rom. 2.21, 10.8, 10.15, 16.25) (1 Cor. 1.21, 2.4, 9.14, 9.27, 11.26, 15.11, 15.12, 15.14) (2 Cor. 1.19, 4.5, 11.4 x2) (Gal. 1.8, 1.9, 1.11, 1.16, 1.23, 2.2, 5.11) (Eph. 4.11) (Phil. 1.17, 1.18) (Col. 1.23, 1.28) (1 Thess 2.9) (1 Tim. 3.16) (2 Tim. 4.2, 4.5, 4.17) (Titus 1.3) Acts: 75% Epistles: 87%``` | ```Ta(1)\inO}̈\omega)\| (Acts 4.2, 7.52, 14.21, 16.21 17.18) TA@@OI@| (Acts 5.42) Ta@)GO}̈\omega)\(Rom. 10.14) (1 Cor. 1.23)(Gal 1.8) (Phil. 1.15, 4.15) Acts: 25% Epistles: 13%``` |
| x.OGIC (Acts: 110 occurrences) <br> пе $X \overline{\mathrm{C}}$ (Acts 9.20) <br> (Epistles: 280 occurrences) <br> Acts: $97 \%$ Epistles: $94 \%$ | x.Oїcl (Acts 4.26, 4.29, 9.17) <br> (Rom. 5.1, 5.11) (2 Cor. 1.2, 1.14) (Heb. 1.10, 8.8) (Eph. 1.21) (Phil. 3.1, 4.23) (Col. 1.3, 3.24) <br> (2 Thess. 3.16) (2 Tim. $1.18 \times 2$, 2.24) (Philem 20, 25) <br> x.oïc (Phil. 4.23) <br> Acts: 3\% Epistles: $6 \%$ |
| poeic (Acts 20.31) <br> (1 Cor. 16.13) (2 Cor. 11.27) (Heb. 13.17) (Eph. 6.18) (Col. 4.2) (1 Thess. 5.6, 5.10) <br> Acts: $100 \%$ Epistles: $87 \%$ | poïcl (2 Cor. 6.5) <br> Acts: 0\% Epistles: 13\% |
| ```OeIK (Acts 2.42, 2.46, 7.11, 20.11, 27.35 OleIK) (1 Cor. 10.16, 1.17 x2, 11.23, 11.26, 11.27, 11.28) (2 Cor. 9.10) (Heb. 9.2) (2 Thess. 3.8, 3.12) Acts: 83% Epistles: 100%``` | Оїк। (Acts 20.7) <br> Acts: 17\% Epistles: 0\% |
| noeik (Rom. $2.22 \times 2,7.3 \times 2$, 13.9) (1 Cor. 6.9) Acts: $\varnothing$ Epistles: $86 \%$ | noїк। (Heb. 13.4) <br> Acts: $\varnothing$ Epistles: $14 \%$ |
| nolein (Acts 16.26) <br> Acts: $50 \%$ Epistles: $\varnothing$ | noïn (Acts 21.30) <br> Acts: 50\% Epistles: $\varnothing$ |
| Possessive predicate <br> eterñaei=q (l Cor. 15.31) eteү'NTaeı=c (2 Cor. 2.4) <br> Acts: 0\% Epistles: 100\% | петеоү'Nтаї=9 (Acts 3.6) <br> Acts: 100\% Epistles: 0\% |

## Case B8: CVC.'GV $\quad \mathbf{G}=\boldsymbol{\epsilon}$

At the beginning of a syllable, following a closed syllable, the digraph renders the glide, possibly an extension to the domain of Case B1:


## Case B9: '(C)V.GV(C) and (C)V.' GV(C)

Acts: $\mathbf{G}=\mathbf{i}($ var. $\mathbf{\epsilon} \mathbf{I} \sim \mathbf{e i}) \quad$ Epistles: $\mathbf{G}=\mathbf{e} \mathbf{1}$ (var. $\mathbf{\epsilon} \mathbf{i} \sim \mathbf{i})$
The distribution of the allographs differs between the two scribes in the case of the intervocalic glide that begins a syllable preceded by an open syllable. The digraph is preferred in the Epistles, and the iota with the trema in Acts.

Acts: тдїо, хגї̈є, тдїоү, єїє, еїє- (Adhortative base), тдїоү;


єїє, єї̈- (eìe-Gal. 1.16).

Table 27: Variation in the intervocalic glide

| i | El~Eì |
| :---: | :---: |
| $\begin{aligned} & \text { TaïO(=) (Acts 2.33, 20.24, } 24.3 \text { тalïo, 28.10) } \\ & \text { (Eph. 4.8) (Phil. 4.8) (1 Tim. 1.15) } \\ & \text { Taïe- (Eph. 6.2) (1 Tim. 5.3, 6.1) } \\ & \text { Taïнु (Acts 5.34) } \\ & \text { (2 Cor. 3.10) (Heb. 13.4) (Eph.5.27) (Phil. 2.29) } \\ & \text { Acts: } 100 \% \quad \text { Epistles: } 24 \% \end{aligned}$ |  |
| TMAїO ( $=$ ) (Acts $13.39 \times 2$ TMAlïO) (Rom. 3.4, 5.16, 5.18) (1 Tim. 3.16) <br> тмגїе- (Rom. 3.30, 4.2) (Gal. 3.8) <br> тмגїнү (1 Cor. 4.4) <br> Acts: $100 \%$ Epistles: $22 \%$ | TMAEIO ( $=$ ) (Rom. 2.13, 3.26, 3.28, 4.5, 4.25, 5.1, $5.9,5.16,5.18,6.7,8.4,8.30 \times 2,8.33$ ) (1 Cor. 6.11) (Gal. $2.16 \times 3,2.17,3.11,3.24,5.4)$ (Titus 3.7) TMAEì̀ (Rom. 3.20, 3.24) Acts: 0\% Epistles: 78\% |
| тбגїє-(Rom. 8.3) <br> Toaïo (Rom. 8.34) <br> © $\mathbf{~} \mathbf{i O ̈ O}$ (Rom. 2.1) <br> Acts: $\varnothing$ Epistles: $25 \%$ | ```т\mp@code{AEıE- (Heb. 11.7)} To\lambdaEIO(=) (Rom. 5.16, 5.18, 8.1) (1 Cor. 11.32) (2 Cor. 3.9, 7.3) To\\epsilon1HY (Rom. 14.23)(Titus 3.11) Acts: Ø Epistles: 75%``` |
| x. AïO (2 Cor. 2.14) <br> Acts: $\varnothing$ Epistles: $50 \%$ | $\begin{aligned} & \text { T:ג. } \lambda \in 10=(\text { Col. } 2.15) \\ & \text { Acts: } \varnothing \quad \text { Epistles: } 50 \% \end{aligned}$ |
| X. 入ї̈ (Acts 1.20, 7.36, 7.44, 12.17) <br> (1 Cor. 10.5) (Heb. 3.17, 11.38) <br> Acts: $100 \%$ Epistles: $75 \%$ | x.גeıe (2 Cor. 11.26) <br> Acts: 0\% Epistles: $25 \%$ |


| i | El~Eì |
| :---: | :---: |
| oүeḯcnin (Acts 6.1, 16.1, 21.37) <br> (Rom. 1.16, 2.9, 2.10, 3.9, 10.12) (1 Cor. 12.13) <br> Acts: 33\% Epistles: 100\% | Oुeeienin (Acts 9.29, 11.20, 16.3, 19.10, 20.24) <br> oुecienin (Acts 21.28) <br> Acts: $67 \%$ Epistles: 0\% |

C. Graphemic forms of the vowel $/ \mathrm{u} /(\mathrm{O} \sim \mathcal{\gamma})$

Table 28: Typology of the vowel /u/

| Case | Syllabic Context | $\begin{gathered} \text { CB Ms. } 814 \\ \text { Acts } \end{gathered}$ | CB Ms. 813 Epistles | Examples |
| :---: | :---: | :---: | :---: | :---: |
| C1 | \#(')V | OY (var. $\gamma$ ) | Oү (var. $\gamma$ ) | OY/'u/ ${ }^{8}$ OүBe /'u.ßә/ OYNAM /'u.nam $/{ }^{9}$ <br>  |
| C2 | (')(C)CV | OY | OY | MOY/'mu/ cior/'sju/ MOYTE /'mu.tə/ тдїоү /'ta.ju/ тоүеєо /tu.'jo/ |
| C3 | (C)CVC(C) | OY | OY | MOYOYT /'muwt/ ${ }^{12}$ кOҮï /'kuj/ nOY $=0 \gamma$ (/nuw/) e2OYn/a.'hun/ |

Case C1: \#(')V V=o (var. $\gamma$ )
At the beginning of a segment the vowel $/ u /$ is realised $O \gamma$ :


With a preformative clitic: This rule stands (with certain exceptions listed below) even when the initial $\mathrm{O} \gamma$ is preceded by a clitic segment. For example: prepositions (eg. є, етве, $\boldsymbol{\omega}$ ) д,
 NTA-), adjectives (eg. KE) or conjunctions (eg. x.e. . For example:

етвеоү (Acts 3.12), ӣсдоүнам (Acts 2.34) 由) доүмдентнс (Acts 21.16).
But: І̄TAYTCOM (Rom. 11.25) "that a hardness has..." (Perfect II). ${ }^{13}$

In the following cases variation occurs under the influence of certain clitics:

- The indefinite article $0 \gamma^{-}$is regularly reduced to $-\gamma^{-}$when it is preceded by the preposition $\mathrm{\epsilon}$ and the Perfect I conjugation nominal base $\boldsymbol{\lambda}$. For example:


[^42]- A few lexemes beginning with $\mathbf{o \gamma}$, two of which denote time, are preceded by the


- Fluctuation between the short and long form of the article occurs with the lexeme
 omitted provoking resyllabification: /pu.'caj/ vs. /pəw.'caj/. ${ }^{15}$

Table 29: Forms of oyxaï with the definite article

| Short form of the definite article: $n+0 \gamma$ | Long form of the definite article: $\Pi \boldsymbol{\Pi}+\boldsymbol{\gamma}$ |
| :---: | :---: |
| $\begin{aligned} & \text { поү:х.лї } \\ & \text { (Acts 4.9, 16.17) } \\ & \text { (Eph. 6.17) (1 Thess. 5.8) (2 Thess. 2.14) (2 Tim.3.15) } \\ & \text { (Heb. 2.10) } \\ & \text { Acts: } 100 \% \quad \text { Epistles: } 50 \% \end{aligned}$ | пеү:хаї <br> (Rom. 11.11) (2 Cor. 6.2) (Heb. 5.9, 6.9, 11.7) <br> Acts: $0 \%$ Epistles: $50 \%$ |

Case C2: (')(C)CV $\quad \mathbf{V}=\mathrm{O} \gamma$
The vowel is always rendered $\mathrm{O} \gamma$ following a consonant in an open syllable:
MOY, MOY'TE, NOY'TE, TENOY;

THP=O $\gamma$.

Case C3: ' (C)CVC(C) $\quad V=o \gamma$
The vowel is also always rendered or following a consonant in a closed syllable:
2OYN, E2OYN, 212OYN, MOYOYT, KOYї, NOYї, NOY=OY, NANOY=OY, AY $\mathrm{XNO}=O \boldsymbol{O}$.

[^43]D. Graphemic forms of the glide $/ \mathrm{w} /(\mathrm{O} \gamma \sim \gamma)$

Table 30: Typology of the glide $/ \mathrm{w} /$

| Case | Syllabic Context |  | $\begin{gathered} \text { CB Ms. } 814 \\ \text { Acts } \end{gathered}$ | CB Ms. 813 Epistles | Examples |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D1 | \#(')GV |  | OY | OY | ora /'wa/ oreì/'wi/ oүeıne /'wi.nə/ orephre /wo.'re.tə/ |
| D2 | \#(')GVC(C) |  | OY (var. $\gamma$ ) | OY (var. $\gamma$ ) | OYOM /'wom/ OYN̄-/wñ/ oүoeic) /'wojj/ |
| D3 | '(C)CGV |  | OY | OY | 2OYerse /'hwi.ta/ |
| D4 | '(C)CGVC |  | OY | OY | W)Oү6IT /'Jwit/ |
| D5 | (')(C)VG(C) | $\mathbf{V}=\mathbf{O}$ | OY | OY | 200\% "to be bad" /'how/ |
|  |  | $\mathbf{V}=\boldsymbol{\omega}$ | OY | OY | TCOOY'/'tow.ņ/ |
|  |  | $\mathbf{V}=\mathbf{O} \boldsymbol{\gamma}$ | Or | OY | NANOY $=0 \boldsymbol{O} /$ / na. nuw/ |
|  |  | $\mathbf{V}=\mathbf{H}$ | $\gamma$ | $\gamma$ | THYTN / 'tew.tņ/ |
|  |  | $\mathbf{V}=\boldsymbol{\lambda}$ | $\gamma$ | $\gamma$ | NaY/'naw/ AY-/aw/ |
|  |  | $V=e$ | $\gamma$ | $\gamma$ | пеү- /pəw/ |
|  |  | $\mathbf{V}=\mathbf{O O}$ | $\gamma$ | $\gamma$ | 200Y "day" /'ho:w/ ${ }^{16}$ |
| D6 | (C)V.' $\mathbf{G V}(\mathrm{C})$ <br> '(C)V.GV(C) | $\mathrm{V}=\mathrm{O}$ | OY | OY | кooye /'ko.wə/ |
|  |  | $\mathrm{V}=\mathbf{1}$ | OY | OY | x.ıoye /'ci.wa/ |
|  |  | $\mathbf{V}=\mathbf{H}$ | $\gamma$ | $\gamma$ (var. OY) | пнүе /'pe.wa/ |
|  |  | $\mathbf{V}=\boldsymbol{\lambda}$ | $\gamma$ (var. OY) | $\gamma$ | AY(1)/a'wo/ AYein /a.'win/ |
|  |  | $V=\epsilon$ | $\gamma$ | $\gamma$ | meeje /'me:.wa/ |

## Case D1: \#(')GV G=o

At the beginning of a segment, in an open syllable, the glide is always realised or:
oүд, oүel, oүeIne, oүephte;

With a preformative clitic: For example:
пдоүш (Eph. 6. 21), кеоүд (Acts. 1.20).

16 Peust (1999), p. 235: The distinction between 200Y "to be bad" /'how/ and 200 $\gamma$ "day"/'ho:w/ can be determined by taking into consideration the forms from other dialects. " $200 \gamma$ "bad" must be /'how/ because the Akhmimic form is $2 \lambda \gamma$, but 200 $\gamma$ "day" must be /'ho:w/ because the Akhmimic form is $200 \gamma \mathrm{E}$.

## Case D2: \#(')GVC(C) $\quad \mathbf{G}=\mathrm{o} \mathrm{\gamma}$ (var. $\gamma$ )

As in case D1, the glide is represented by the digraph beginning a segment in a closed syllable:


With a preformative clitic: For example:


In the following cases variation occurs under the influence of certain clitics:

- Converted existential: $\mathbf{\epsilon} / \mathrm{ne} /-\mathbf{\epsilon T E}+\gamma \overline{\mathbf{N}}-($ var. $\mathrm{O} \gamma \overline{\mathbf{N}}-)$

Table 31: Variation with the converted existential

| Conjugation | Standard: e/ne/-ETE + $\mathbf{\gamma}^{\mathbf{N}}$ - | Variant: E/Ne/-ETE + OY/ $\overline{\mathbf{N}}$ - $^{\text {- }}$ |
| :---: | :---: | :---: |
| Circumstantial | ```E` (Acts 1.15, 16.14, 18.24, 19.40, 24.11, 27.39) (Rom. 15.14) (Heb. 5.2) (Gal. 3.21) (2 Tim. 3.15, 5.24) Acts: 100% Epistles: 83%``` | EOY $\overline{\mathrm{N}}-$ <br> (1 Thess. 2.7) <br> Acts: 0\% Epistles: 17\% |
| Imperfect | $\begin{aligned} & \text { Ne } \gamma \overline{\mathbf{N}}- \\ & \text { (Acts } 3.2,4.33,8.9,9.10,9.36,10.1,11.20, \\ & 12.5,12.18,14.8,14.12,16.1,19.14,20.8, \\ & 20.9,28.7) \\ & \mathbf{N E} \gamma\langle\overline{\mathbf{N}}\rangle(\text { Acts } 11.24) \\ & \text { Acts: } 94 \% \text { Epistles: } 0 \% \end{aligned}$ | $\begin{aligned} & \text { neOY } \overline{\mathbf{N}}- \\ & (\text { Acts } 26.32) \\ & (\text { Heb. } 7.11)(\text { Gal. } 4.15) \\ & \text { Acts: } 6 \% \quad \text { Epistles: } 100 \% \end{aligned}$ |

- Converted predication of possession:


Table 32: Variation with the converted predication of possession

| Conjugation | Standard: e/ne/-ETE + Ү-NTE-/Y/̄TA= |  |
| :---: | :---: | :---: |
| Circumstantia 1 | еүへ̄TE-/E「N̄TA= <br> (Acts 2.47, 4.37, 18.24, 19.14, 21.23, 23.18) <br> (Rom. 1.14, 2.20, 12.6, 15.23) (1 Cor. 7.12, <br> 7.13, 13.2) (2 Cor. 3.12, 4.1, 4.13, 7.1, 9.8, <br> 10.15) (Heb. 4.14, 5.14, 10.1, 10.19, 12.1) <br> (Eph. 4.28) (Phil. 1.23, 1.30, 2.2, 3.4) (Col. <br> 2.23) (1 Tim. 1.19, 3.4, 3.7, 3.9, 4.8, 5.4, <br> 5.12, 6.8) (2 Tim. 2.19, 3.5) (Titus 1.6) <br> (Philem 8) <br> Acts: $86 \%$ Epistles: $88 \%$ | eOY'̄Te-/EOY'̄TA= <br> (1 Cor. 6.1, 12.12) (Col. 3.13) (1 Tim. 5.16) <br> eOүnTe- / eOYnTA= <br> (Acts 24.15) <br> (Gal. 6.10) <br> Acts: $14 \%$ Epistles: $12 \%$ |


| Conjugation | Standard: E/Ne/-ETE + Y/̄TE-/Y/ TTA | Variant: E/NE/-ETE + OY/ $\mathbf{N T E - / O Y \overline { N } T A =}$ |
| :---: | :---: | :---: |
| Imperfect |  | -NEOY-̄TE-/NEOY'̄TA= <br> (Rom. 6.21) (Heb. 9.1) <br> Acts: 0\% Epistles: $67 \%$ |
| Relative | -єтеүйте-/етеүйтa= <br> (Acts 25.19) <br> (Rom. 12.4) (1 Cor. 7.29, 15.31) (2 Cor. 2.4) (Heb. 7.6, 11.10) (Gal. 2.4, 4.27) (Eph. 3.12) (1 Tim. 6.16) (Philem 5) <br> Acts: $20 \%$ Epistles: $55 \%$ | $\begin{aligned} & \text {-еTEOYNTE-/ETEOYNTA= } \\ & \text { (Rom. 12.4) (1 Cor. 8.10) (Heb. 2.14, 3.3, } \\ & \text { 4.15, 10.35) (1 Tim. 6.2) } \\ & \text {-еTEOYNTE-/GTEOYNTA }= \\ & \text { (Acts 3.6, 4.34, } 11.29 \text { 23.19) (2 Cor. 8.11, } \\ & \text { 8.12) } \\ & \text { Acts: } 80 \% \quad \text { Epistles: } 45 \% \end{aligned}$ |

- Long and short form of the article with lexeme-initial or: As with the case of oүxגï (Case C 1 ), fluctuation between the long and short form of the definite article also occurs with the lexeme oyoesc). ${ }^{17}$ In addition, with this particular word, there is variation between the use of $\mathrm{O} \gamma$ and $\gamma$ with the long form of the article.

Table 33: Forms of oyoeic) with the definite article

| Short form of the definite article $\pi+O \gamma$ | Long form of the definite article $\boldsymbol{\pi e / n e}+\mathrm{OY}$ | Long form of the definite article $\pi \mathbf{n e} / \mathrm{Ne}+\gamma$ |
| :---: | :---: | :---: |
| поүoeid) ( 1 Cor. 16.12) <br> (Heb. 11.11) (Phil. 4.10) (1 <br> Thess. 2.17) (2 Tim. $4.2 \times 2$ ) <br> Acts: 0\% Epistles: $18 \%$ | пеоүoeic) (Acts 7.17, 12.1, 17.30) <br> (Heb. 11.32) (Gal. 4.3) (2 Tim. 4.6) <br> neofoeid) (Acts 3.19, 3.21) <br> (Titus 1.2) <br> Acts: 63\% Epistles: 12\% | пеүoeı(1) (Acts 19.23, 24.25) <br> (Rom. 6.20, 13.11) (1 Cor. 4.5, <br> 7.29, 7.39, 13.11) (2 Cor. 6.2) <br> (Heb. 2.15, 5.12, 9.10) (Gal. 4.1, 4.4, 6.10) (Eph. 2.12, 5.16) <br> пеүої曰) (Acts 7.20) <br> (Col. 4.5) <br> neүoeid) (Rom. 16.25) (Heb. <br> 9.26) (Eph. 1.10, 2.7) (1 Thess. 5.1) <br> (1 Tim. 4.1) (2 Tim. 1.9) (Titus 1.2) <br> neүö̈c) (Acts 1.7) <br> Acts: 37\% Epistles: 70\% |

- Coalescence of $\mathrm{O} \mathrm{Y}-\mathrm{O} \boldsymbol{\gamma}$ : The sequence $\mathrm{O} \gamma-\mathrm{O} \mathrm{\gamma}$ (initial $\mathrm{O} \gamma$ lexeme preceded by the indefinite article) sometimes coalesces to or (19\%). Elsewhere oyor is maintained (22 occurrences - 81\%).

Table 34: Objects of coalescence

| Standard: $\mathrm{OY}-\mathrm{OY}$ | Variant: $\mathrm{O} \mathrm{\gamma}\langle\mathrm{OY}\rangle$ |
| :---: | :---: |
| просоүоүOєıは) (Heb. 11.25) <br> Acts: $\varnothing \quad$ Epistles: 33\% | просоүоєıы) (1 Cor. 7.5) (2 Cor. 4.18) "for a time" <br> Acts: $\varnothing$ Epistles: $67 \%$ |
| N̄OYOYOEIW) (Rom. 7.9) Acts: 0\% Epistles: 100\% | $\overline{\text { No YOEI@ }}$ (Acts 19.22) "for a time" Acts: 100\% Epistles: 0\% |
|  |  Acts: $100 \%$ Epistles: $\varnothing$ |
|  | n̄OYOeın (Acts 13.47) "as a light" Acts: $100 \%$ Epistles $\emptyset$ |
|  | oүeḯcnin (Acts 16.1); oүeeıenin (Acts 16.3) "a Greek" <br> Acts: 100\% Epistles: $\varnothing$ |

## Case D3: '(C)CGV $\quad \mathbf{G}=\mathrm{O} \gamma$

There is only one example of the glide $\mathrm{O} \gamma$ following a consonant in an open syllable:
zoyeite.

## Case D4: '(C)CGVC $\quad \mathbf{G}=\mathrm{O} \gamma$

In a closed syllable there is only one instance of the glide o $\gamma$ following a consonant:
ब) OүEIT.

## Case D5: (')(C)VG(C)

$$
\begin{array}{lll}
\mathbf{V}=\mathbf{o}, \mathbf{\omega}, \mathbf{o \gamma} & \text { Acts: } \mathbf{G}=\mathbf{o \gamma} & \text { Epistles: } \mathbf{G}=\mathbf{o \gamma} \\
\mathbf{V}=\mathbf{\lambda}, \mathbf{\epsilon}, \mathbf{H}, \mathbf{o \mathbf { o }} & \text { Acts: } \mathbf{G}=\boldsymbol{\gamma} & \text { Epistles: } \mathbf{G}=\boldsymbol{\gamma}
\end{array}
$$

Following $\mathbf{O}, \boldsymbol{\omega}$, and vocalic $\mathbf{O} \gamma$, the glide is realised $\mathbf{O} \gamma$. Following $\boldsymbol{\lambda}, \boldsymbol{\epsilon}, \mathbf{H}$, and $\mathbf{o o}$, the glide is realised $\gamma$.
a) $\quad \mathbf{V}=\mathrm{O}, \mathrm{\omega}, \mathrm{O} \gamma$
$\mathbf{G}=\mathbf{O}$

## Lexical forms:

 eiepodor.
$3^{r d}$ person pronominal suffixes:
ЄPO=OY, $\bar{M} M O=O \gamma, ~ \epsilon: X: \omega=O \gamma, \bar{N} C \omega=O \gamma, 21 \times(\omega=O \gamma, 2 \omega=O \gamma$, NANOY $=0 \gamma$.

$$
\text { b) } \quad \mathbf{V}=\boldsymbol{\lambda}, \mathbf{\epsilon}, \mathbf{H}, \text { OO } \quad \mathbf{G}=\boldsymbol{\gamma}
$$

Lexical forms:
 200 $\gamma$ "day" $\times \mathbf{0 0}=\gamma$.

Statives:

$3^{r d}$ person plural suffix pronouns:

$3^{\text {rd }}$ person plural pronominal subjects:



Possessive articles:

$$
\pi \epsilon \gamma^{-}, T \epsilon \gamma^{-}, N \epsilon \gamma^{-} .
$$

Case D6: (C)V.'GV(C) and '(C)V.GV(C)

$$
\begin{array}{lll}
\mathbf{V}=\mathbf{O}, \mathbf{I} & \text { Acts: } \mathbf{G}=\mathbf{o \gamma} & \text { Epistles: } \mathbf{G}=\mathbf{O} \gamma \\
\mathbf{V}=\mathbf{H} & \text { Acts: } \mathbf{G}=\gamma & \text { Epistles: } \mathbf{G}=\gamma(\text { var. } \mathbf{O} \gamma)
\end{array}
$$

The intervocalic glide, following O and $\mathbf{t}$, is rendered by $\mathrm{O} \gamma$. The intervocalic glide, following $\mathbf{H}$, is always realised $\gamma$ in Acts, but variation is displayed in the Epistles.
a) $\quad \mathbf{V}=\mathbf{O}, \mathbf{I} \quad \mathbf{G}=\mathrm{O} \gamma$
кооүе, Xioye, zıoүe.
b) $\quad \mathbf{V}=\mathbf{H} \quad$ Acts: $\mathbf{G}=\gamma \quad$ Epistles: $\mathbf{G}=\gamma($ var. $\mathrm{O} \gamma)$
Acts: гвнүе, пнүе.
Epistles: авнүе~2вноүє, пнүе~пноүе.

Table 35: $\mathbf{H}+\gamma v s . \mathrm{O} \gamma$

| Standard: Y | Variant: OY |
| :---: | :---: |
| 2внүе (Acts 7.22, 7.41, 19.18, 21.19, 26.20) <br> (Rom. 2.6, 3.20, 3.27, 3.28, 4.2, 4.6, 8.13,9.12, 11.6, 13.12) (1 Cor. 16.14 (2 Cor. 11.15) (Heb. 1.10, 2.7, 3.9, 4.3, 4.4, 4.10, 6.1, 9.14, 10.1, 10.24, 11.1) (Gal. 1.13, $2.16 \times 3,3.2$, 3.5, 3.10, 5.19) (Eph. 2.10, 4.22, 5.11) (Col. 1.21, 3.9) (1 Tim. 2.10, 4.12, 5.10, 5.25, 6.18) (2 Tim. 1.9, 2.4, 4.14) (Titus 1.16, 2.7, 2.14, 3.8, 3.14) <br> Acts: $100 \%$ Epistles: $94 \%$ | 2вноү' (Rom. 9.32) (1 Tim. 6.5) (Titus 3.5) <br> Acts: 0\% Epistles: 6\% |
| пнүе (Acts 2.34, 7.56) <br> (Rom. 2.22) (Heb. 1.10, 4.14, 7.26, 8.1, 9.23 x2, 12.23, 12.25) (Eph. 1.3, 1.10, 2.6, 3.10, 3.15, 4.10, 6.9, 6.12) (Phil. 2.10, 3.20) (Col. 1.5, 1.16, 1.20) (1 Thess. 1.10) Acts: 100\% Epistles: 92\% | пноүе (2 Cor. 5.1) (Eph. 1.20) <br> Acts: $0 \%$ Epistles: $8 \%$ |

c) $\quad \mathbf{V}=\boldsymbol{\lambda}, \mathbf{\epsilon} \quad$ Acts: $\mathbf{G}=\gamma($ var. $\mathbf{O} \gamma) \quad$ Epistles: $\mathbf{G}=\gamma$

The intervocalic glide, following $\boldsymbol{\lambda}$ and $\boldsymbol{\epsilon}$, is realised $\gamma$, with one exception in Acts:


Table 36: $\boldsymbol{\lambda}+\gamma v s$. $O \gamma$

| Standard: $\gamma$ | Variant: OY |
| :---: | :---: |
|  | TAOY/O $=\mathbf{O \gamma}$ (Acts 15.33) <br> Acts: 7\% Epistles: 0\% |

## APPENDIX 2: BRITISH LIBRARY OR. 7594

A. Graphemic forms of the vowel $/ \mathbf{i} /(\mathbf{I} \sim \mathbf{E l} \sim \widehat{\mathbf{E} \mid \sim \mathbf{i} \sim \mathbf{\epsilon i}})$

Table 37: Typology of the vowel/i/

| Case | Syllabic Context <br> *Examples | BL Deuteronomy | BL Jonah | BL Acts | Examples |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A1 | $\begin{gathered} \#^{\prime} \mathbf{V} \\ \text { eı } \end{gathered}$ | $\boldsymbol{\epsilon l}$ (var. $\widehat{\text { El } \sim}$ | El (var. © ¢ı) | Eı (var. eï~~~i) |  |
| A2 | $\begin{gathered} \text { \#(')VC } \\ \text { EIC- } \end{gathered}$ | EI | Ø | EI | EIC- |
| A3 | $\begin{gathered} (')(\mathrm{C}) \mathrm{CV} \\ x_{1} .1 \end{gathered}$ | $\mathbf{l}$ (var. $\mathbf{e l} \sim \widehat{\mathrm{e} \mathbf{l}}$ ) | 1 (var. ©ı) | $\mathbf{l}$ (var. ¢ıI~ї) |  |
| A4 | $\begin{gathered} (')(\mathrm{C}) \mathrm{CVC}(\mathrm{C}) \\ \text { NIM } \end{gathered}$ | $\mathbf{I}$ (var. ¢if ${ }^{\text {a }}$ ) | 1 (var. ©ı) | 1 (var. ¢ı) | NIM |
| A5 | $\begin{gathered} \text { '(C)GV } \\ \text { oүé } \end{gathered}$ |  | Ø | EI | o̧ê ofeine |
| A6 | '(C)GVC <br> a) OYeIT | ¢ı | EI | EI | ()OYEIT |

*Examples from classical Sahidic (Chester Beatty - Acts)

At the beginning of a lexeme, in an open syllable, the vowel/i/ is rendered by the digraph $\mathbf{\epsilon} \mathbf{1}$, and, in the case of Deuteronomy and Jonah, often carrying a circumflex ( $\widehat{\mathrm{\epsilon}}):{ }^{18}$

Jon.: ê, eipe~êpe, eime, eine.
Acts: ei~eï, eipe, eime, eine.

The initial vowel /i/, in Copto-Greek lexemes, is also rendered with the digraph:
EI. CD (ON, EIPHNH, EIPHNIKE, EIMHTI.


18 In the edition of Budge (1912) the circumflex is placed over the iota ( $\epsilon \mathrm{i}$ ).

With a preformative clitic: When preceded by the definite article, or other preformative clitic, this rule applies, with the following exceptions:
acı "she came" (Acts 5.7);


Use of the circumflex: The circumflex occurs regularly over the digraph of the verb "to come" in Deuteronomy and Jonah, and at times with other words. It does not appear in Acts in the lexeme-initial position, but the trema is found twice surmounting the iota of the digraph ( $\epsilon \mathrm{i}) .{ }^{19}$ The trema could be functioning like a circumflex in this case, or it is possibly a variant writing.

Table 38: \#é vs. Є̂ vs. eï

| EI | © | eï |
| :---: | :---: | :---: |
| €ı (Deut. 28.19) <br> (Jon.: Ø) <br> (Acts: 110, [5] occurrences) <br> Deut.: $2 \%$ Jon.: 0\% Acts: $98 \%$ | €ी (Deut. $1.44,2.14 \times 2,6.4,9.15,10.1,10.5$, $10.7,10.22,11.5,11.10,12.9,12.26,13.2$, $13.13,14.28,16.1,[16.3 \times 2], 16.6,16.8$, $18.6,22.6,23.4,24.20,25.1,26.3,26.5$, $28.22,28.25,[28.45], 28.57,28.60,29.7$, $29.20,29.22,30.1,31.2,32.2,32.17,33.2$, $33.16,33.18)$ (Jon. $1.2,1.7,1.8,2.4,2.6,2.8)$ Deut.: $98 \%$ Jon.: $100 \%$ Acts: $0 \%$ | eï (Acts 1.8, 7.34) <br> Deut.: 0\% <br> Jon.: 0\% <br> Acts: $2 \%$ |
| inneipe (Acts 19.37) dittography <br> Deut.: 63\% Jon.: 100\% Acts: 100\% | êpe (Deut. 6.25, 11.32, 12.4, 12.30, 15.1, $15.5,15.17,16.12,16.13,17.2,17.10,18.9$, $19.20,22.21,24.20,25.15,28.15,28.58$, 28.63, 29.9, 29.24, 30.5, 30.10, 31.5, 32.46, 34.9) <br> Deut. $37 \%$ Jon $\cdot 0 \%$ Acts $\cdot 0 \%$ |  |

[^44]| El | ¢ | eï |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { eine (Deut. 7.19, 14.22, 17.5, 17.14, } \\ & 26.10 \text { ) } \\ & \text { (Jon.: passim) } \\ & \text { (Acts: passim) } \\ & \text { Deut.: } 50 \% \text { Jon.: } 100 \% \text { Acts: } 100 \% \end{aligned}$ | êne (Deut. 14.27, 28.28, 28.35, 28.49, 29.27) <br> Deut.: 50\% Jon.: 0\% Acts: 0\% |  |
| $\begin{aligned} & \text { EIME (Deut. } 7.9,11.2,29.6,29.9) \\ & \text { (Jon.: passim) } \\ & \text { (Acts: passim) } \\ & \text { Deut.: } 80 \% \quad \text { Jon.: } 100 \% \quad \text { Acts: } 100 \% \end{aligned}$ | ême (Deut. 11.2) <br> Deut.: 20\% Jon.: 0\% Acts: 0\% |  |
| eibe (Deut. 28.48) <br> Deut.: $50 \%$ Jon.: $100 \%$ Acts: $100 \%$ | eíbe (Deut. 32.10) <br> Deut.: 50\% Jon.: 0\% Acts: 0\% |  |

Biblical names/proper nouns: The exception to this rule occurs with biblical names where $\ddot{i}$ is regular:

Edomite").
But eıcca[xap] (I'б $\alpha \chi \chi \grave{\alpha} \varrho)$ (Deut. 33.18).
Jon.: Ø
Acts: їсдлк, ісдк ( $7.8 \times 2$ - trema with one point).
The initial glide regularly loses the trema when followed by the singular definite article:
пІсРднл, пінл (пінл/ пाнй).
Note: т2וталікн (Acts 10.1) ' I $\tau \alpha \lambda \iota \kappa \tilde{\eta} \varsigma$.

## Case A2 \#(')VC <br> $$
\mathbf{V}=\mathbf{\epsilon} \mathbf{I}
$$

There is only one example in this domain:
eic- .

When the vowel /i/ follows a consonant, in an open syllable, it is generally rendered by the grapheme ı. For example:



Variation: The exception to this rule concerns the lexeme ci~cel~cêt, which in

Deuteronomy is always written with the digraph, sometimes with a circumflex towards the end of the manuscript. ${ }^{20}$ In Deuteronomy there is also one occurrence each of cêmé "fullness" (Deut. 33.23) ${ }^{21}$ and ceine "pass through" (Deut. 23.14). In Acts it is written cı (Acts 27.38).

Table 39: ceı vs. cê

| EI | © |
| :---: | :---: |
| $\begin{aligned} & \text { ceı (Deut. } 6.11,11.16,14.28,23.25,31.20) \\ & \text { ceine (Deut. 23.14) } \\ & \text { Deut: } 67 \% \end{aligned}$ | $\begin{aligned} & \text { cêl (Deut. } 32.15,33.23) \\ & \text { cêné (Deut. 33.23) } \\ & \text { Deut: } 33 \% \end{aligned}$ |

Other variants (or particular spellings):

- noïl (Acts 19.33, 22.30). Note also: nơı (Acts 2.5, 8.30, 9.36); $\overline{\mathrm{M}} \mathbf{O} \mathbf{I}$ (Acts 22.26) and nơoï (Acts 23.12); $\overline{\mathrm{N}} \mathbf{O} \mathbf{I}$ (passim);
- м̄пі- (Acts 20.27, 20.33) vs. м̄пו- (Acts 10.14, 20.20, [20.31], 24.11);
- xגïoүג (Acts 19.37) vs. x.ıoүג (Acts 18.5) - possible variant spelling, or perhaps a scribal error. [Crum (1939), p. 468b: x.ı, x. $\in$ oүג "speak blasphemy"] The trema on the iota could be triggered by the preceding vowel $\boldsymbol{\lambda}$ (cf. Case B5).

Apart from the exceptions mentioned above, there are two other examples of fluctuation between the two allographs.

Table 40: C + ı vs. eı

| 1 | EI |
| :---: | :---: |
| ```OIME "the wife" (Deut. 22.24, 22.30, 25.7, 25.9, 25.11) 2IME (Deut. 22.29) Deut.: 83%``` | e€ime (Deut. 5.21) <br> Deut.: 17\% |
| mice "boil" (Deut. 14.20) <br> Deut.: 50\% | пеıсе (Deut.. 16.7) <br> Deut.: 50\% |

20 Budge (1912), p. xiv; Thompson (1913), p. 9: The scribe frequently places the circumflex over various vowels towards the end of the manuscript, in the Song of Moses in particular (Deut. 32-34). Most of these, and other diacritical marks, were added later probably for singing purposes.
21 Where Budge (1912) has пe eîne (Deut. 33.23) Thompson (1913), p. 28 has emended it to пceîne, with the comment, "CeIn- is written over an erasure, the $\mathbf{N}$ over $\boldsymbol{\Pi}$ prob".

## Words of Greek origin：

a）Greek $\llcorner$ is generally rendered with Sahidic $\mathbf{ı}$ ．The scribe of Acts almost exclusively uses the simple iota，whereas Jonah and Deuteronomy exhibit more variation．For example：

A．AIKIA，A．AIKOC，ETI，MHTI，EIMHTI， $2 O T I$.


Table 41：Greek l： $\mathrm{C}+\mathbf{I}$ vs． $\mathbf{\epsilon} \mathbf{I}$

| $1>1$ | $1>$ el |
| :---: | :---: |
| $\dot{\varepsilon} \pi \iota \theta \nu \mu \varepsilon ́ \omega$ епıヲүMI（Acts 20．33） <br> Deut．：0\％Jon．：Ø Acts： $100 \%$ | $\begin{aligned} & \text { епеıӨҮмı (Deut. } 5.21,7.25,12.20,14.25) \\ & \text { епеıӨҮMeı (Deut. } 5.21,14.25) \\ & \text { Deut.: } 100 \% \quad \text { Jon.: } \emptyset \quad \text { Acts: } 0 \% \end{aligned}$ |
| غ̇ $\pi \iota \theta \cup \mu i ́ \alpha$ emieymia（Deut．12．20） <br> Deut．：33\％Jon．：Ø Acts：$\varnothing$ | eпеieүMid（Deut．12．21） <br> eпeioүmian（Deut．9．22） <br> Deut．： $67 \%$ Jon．：$\varnothing$ Acts：$\varnothing$ |
|  | ```епеІкдал (Deut. 14.22, 33.19) епеІкдаеı (Deut. 12.5, 26.2) (Jon. 1.6) [епеІ]калı (Acts 17.17) Deut.: 80% Jon.: 100% Acts: 0%``` |

b）Greek $\varepsilon \boldsymbol{\varepsilon}$ is generally rendered $\mathbf{ı}$ in Acts and $\mathbf{\in \_ \sim} \mathfrak{\imath}$ in Deuteronomy and Jonah：


abipon（Deut．11．6）A $\beta \varepsilon$ цо $\omega$ v；
дпıле（Acts 4．21）$\dot{\alpha} \pi \varepsilon \iota \lambda \varepsilon ́ \omega$ ，or $\dot{\alpha} \pi \varepsilon i ́ \lambda \omega$ ，дпілн（Acts 9．1）$\dot{\alpha} \pi \varepsilon \iota \lambda \eta$ ．
It is interesting to note that the following are regular throughout the manuscripts：
nhстід（vךбтвí́ ），порнia（ $\pi$ ） （ $\pi$ о入ı七єí $\alpha$ ）．

Table 42: Greek $\varepsilon \iota: C+\boldsymbol{\imath} v . \operatorname{es}$ (excluding verb endings)

| $\varepsilon \iota>1$ | $\varepsilon \mathbf{l}>\boldsymbol{\epsilon} \mathbf{l}$ |
| :---: | :---: |
| غ̇ $\pi$ cí | епеı (Jon. 1.10) <br> Deut.: $\emptyset$ Jon.: $100 \%$ Acts: $\varnothing$ |
| $\pi \varepsilon$ ю $\alpha \sigma \mu о ́ \varsigma$ <br> пוрдсмос (Deut. 6.16) (Acts 20.19) <br> Deut.: 25\% Jon.: $\emptyset$ Acts: $100 \%$ | пеірдсмос (Deut. 7.19, 9.22, 29.3) <br> Deut.: 75\% Jon.: $\emptyset$ Acts: 0\% |
| $\pi \varepsilon เ \varrho \alpha ́ \zeta \omega$ <br> пוрaze (Acts 5.9, 15.10, [16.7], [24.6]) <br> Deut.: 0\% Jon.: $\varnothing$ Acts: $100 \%$ | пеıрдze (Deut. 6.16, 33.8 x2) <br> Deut.: 100\% Jon.: $\varnothing$ Acts: 0\% |
| хєцца́œ@оऽ <br> XIMAPOC (Deut. 10.7) <br> Deut.: 50\% Jon.: $\varnothing$ Acts: $\varnothing$ | xeimappoc (Deut. 9.21) <br> Deut.: $50 \%$ Jon.: $\varnothing$ Acts: $\varnothing$ |
| $\pi \varepsilon i ́ \theta \omega$ <br> пוee (Acts: passim) <br> Deut.: 0\% Jon.: $\varnothing$ Acts: $100 \%$ | пеєея (Deut. 13.7) <br> Deut.: 100\% Jon.: $\varnothing$ Acts: 0\% |

c) In the case of the $-\varepsilon \in \omega /-\varepsilon \quad \mu \alpha$ t contract verb endings, the scribe of Acts prefers I and the scribe of Deuteronomy and Jonah favours the digraph. Following a vowel, $i$ is always used (cf. Case B5).

Greek $\varepsilon \iota>$ Sahidic ı:
גITI (Acts 3.14, 7.46, 9.2, 12.20, 13.21, 13.28 גTı) $\alpha i \tau \varepsilon ́ \omega ;$
дпОР। (Acts 2.12, 5.24, 10.17) $\dot{\alpha} \pi$ о○ $\varepsilon ́ \omega ;$
גCKI (Acts 24.16) $\dot{\alpha} \sigma \kappa \varepsilon ́ \omega ;$


КАТнгOpı (Acts 24.8, 28.19), nathpı (Acts 22.30), ГАтнгOpı (Acts 24.2);

проскартерı (Acts $1.14,2.42,2.46,8.13,10.7) \pi \varrho о \sigma к \alpha \varrho \tau \varepsilon \varrho \varepsilon ́ \omega ;$

сүneү.入.Oهı (Acts 8.1, 22.20) бuvevסокé $\omega$;
TI[MO]PI (Acts 22.5) $\tau \iota \mu \omega \varrho \varepsilon ́ \omega ;$


грдчнті (Deut. subscriptio) $\gamma \varrho \alpha \psi \varepsilon ́ \omega$;
Note: дпाле (Acts 4.21) $\dot{\alpha} \pi \varepsilon \iota \lambda \varepsilon ́ \omega$ or $\dot{\alpha} \pi \varepsilon \dot{\lambda} \lambda \omega$.

Greek $\varepsilon \iota>$ Sahidic $\mathrm{e}_{\mathrm{l}}$ :
acxhmoneı (Deut. 24.3) $\dot{\alpha} \sigma \chi \eta \mu о v \varepsilon ́ \omega ;$ $\lambda \curlyvee \Pi € \iota($ Deut. 15.10) (Jon. $4.1 \times 2) \lambda v \pi \varepsilon ́ \omega$; өлапеı (Deut. 22.6) $Ө \alpha ́ \lambda \pi \varepsilon \omega$.

Table 43: Greek $\varepsilon \iota: C+ı v s$. eı (verb endings)

| $\varepsilon ı>1$ | $\varepsilon \mathbf{l}>\boldsymbol{\epsilon}$ |
| :---: | :---: |
| $\alpha \dot{\alpha} v o \mu \varepsilon ́ \omega$ <br> anOMI (Deut. 9.12) <br> Deut.: 50\% Jon.: $\varnothing$ Acts: $\varnothing$ | anómeı (Deut. 31.29) <br> Deut.: 50\% Jon.: Ø Acts: $\varnothing$ |
| व̌○хо $\alpha$ м "to begin" <br> ${ }^{\operatorname{Prxi}}$ (Acts 1.1, 1.22, 2.4, 10.37, 11.4, 18.26, 24.2) <br> Deut.: $\varnothing$ Jon.: $\varnothing$ Acts: $87 \%$ | apxel (Acts 11.15) <br> Deut.: $\emptyset$ Jon.: $\emptyset$ Acts: $13 \%$ |
| $\beta \circ \eta \theta \varepsilon ́ \omega$ <br> вонөІ (Deut. 28.29, 28.31) (Acts 16.9) <br> вонті (Acts 21.28) <br> Deut.: $50 \%$ Jon.: $\varnothing$ Acts: $100 \%$ | вонеєı (Deut. 22.27, 32.38) <br> Deut.: $50 \%$ Jon.: $\varnothing$ Acts: 0\% |
| غ̇兀ı $\theta \cup \mu \varepsilon ́ \omega$ <br> епеıөүмі (Deut. 5.21, 7.25, 12.20, 14.25) <br> епוөүMı (Acts 20.33) <br> Deut.: $67 \%$ Jon.: $\varnothing$ Acts: $100 \%$ | епеıяүмеı (Deut. 5.21, 14.25) <br> Deut.: 33\% Jon.: $\varnothing$ Acts: 0\% |
| ```غ̇\piıк\alpha\lambda\varepsiloń\omega епеІкд\lambdaI (Deut. 14.22, 33.19) Eחוkג\lambdaI (Deut. 12.26) (Acts 7.59, 7.60, 9.14, 9.21, 22.16, 28.19) [\epsilonпו]кג\lambdaו (Acts 15.17) eחוк[ג\I](Acts 26.32) \tau\alpha\varrho\alphaк\alpha\lambda\varepsiloń} пардкадІ (Acts 16.39) \varepsiloǹ\gammaк\alpha\lambda\varepsiloń\omega \epsilonNг\\lambdal (Acts 23.28, 23.29) Deut.: 50% Jon.: 0% Acts: 100%``` | епеікдлеı (Deut. 12.5, 26.2) (Jon. 1.6) епекд八еı (Deut. 17.8) <br> Deut.: $50 \%$ Jon.: $100 \%$ Acts: $0 \%$ |
| $\kappa \lambda \eta \varrho о \vee о \mu \varepsilon ́ \omega$ <br> клнропомı (Deut. 1.39, 5.33, 6.1, 6.18, 7.1, 8.1, 9.23, $10.11,11.8 \times 2,11.10,11.11,11.23,11.29,11.31,12.1$, $12.29,15.4,16.20,17.14,23.20,25.19,26.1$, [28.21], $28.63,30.5 \mathrm{x} 2,30.16,30.18,31.3,31.13,31.16,32.47$, 32.49) <br> Deut.: 94\% Jon.: $\varnothing$ Acts: $\varnothing$ | клнponomei (Deut. 2.9, 33.23) <br> Deut.: $6 \%$ Jon.: $\varnothing$ Acts: $\varnothing$ |

d) Impersonal verbs appear in the form of the Greek $3^{\text {rd }}$ person singular present indicative:

e) Greek $\varepsilon>$ Sahidic EI~I: $^{\text {: Stressed }} \dot{\varepsilon}$ generally maintains its spelling in Coptic. But note the following renderings of $\pi \alpha \varrho \alpha \gamma \gamma \varepsilon ́ \lambda \omega$ :

парлггеıле (Acts 1.4, 4.17, 4.18, 5.28, 5.40, 10.42, 16.23, 17.30, [23.22]);
параглеіле (Acts 23.30);
параггедеı (Acts 16.18);
пардггеілід (Acts $5.28,16.24$ ) т $\alpha \varrho \alpha \gamma \gamma \varepsilon \lambda i ́ \alpha$.

Case A4: '(C)CVC(C) and CVC $\quad \mathbf{V}=\mathbf{i}$ (var. $\mathbf{e} \mathbf{\imath} \sim \hat{i})$
In a closed syllable there is strict adherence to this rule in Acts, but variation occurs in Deuteronomy and Jonah:

NIM, KIM, MEPIT, XIIN, ©IN-.

Variation: The circumflex also appears over the grapheme 1 on one occasion towards the end of the book of Deuteronomy, where it appears frequently over various vowels. ${ }^{22}$
mepît (Deut. 33.5) vs. Mepit (Deut. 7.13, 15.16 33.12, 13.8, 23.5, 32.15, 33.12, 33.26)

Note: $\times \overline{\mathbf{N}}$ (Acts 3.2); $\times \mathbf{x} \mathbf{I n}$ (passim). ${ }^{23}$

Words of Greek origin and biblical names/proper nouns:
abapin (Deut. 32.49) A $\beta \alpha \varrho \varepsilon$ év,
入._גMAPIC (Acts 17.34) $\Delta \alpha ́ \mu \alpha \varrho ı s$.
But note the use of the digraph in the following:
өлічеıс (Deut. 26.7, 28.53, 28.57, 31.17) (Jon. 2.3) $\theta \lambda i ̃ \psi \iota \varsigma ; ~$
өגрсеıс (Jon. $1.3 \times 3,4.2$ ) $Ө \alpha \varrho \sigma \iota \varsigma ;$
гapızeın (Deut. 11.29) Гф@ıцıv;
їдкеıм (Deut. 10.6) 'І $\alpha \kappa ц$.


[^45]Table 44: Greek $\mathrm{t}: \mathrm{C}+\mathbf{\imath}+\mathrm{C} v s . \mathrm{C}+\mathbf{e} \mathbf{\imath}+\mathrm{C}$

| 1 | EI |
| :---: | :---: |
| по́ ${ }^{\prime} ı \varsigma$ пОлıc (Deut. 6.10, 12.14, 12.15, 12.17, 12.18, 12.21, 13.12, 13.13, 13.16, 14.20, 14.26, 14.27, 14.28, 15.7, 15.22, 16.5, 16.11, 16.14, 17.2, 17.8, 18.6, 19.5, 19.7, 19.9, [22.17], 22.18, 22.21, 22.23, [22.24], 22.24, 24.14, 25.8, 28.3, 28.16, 28.52 x3, 28.55, [28.58], [31.12]) (Acts: passim) Deut.: $84 \%$ Jon.: $0 \%$ Acts: $100 \%$ | полеіс (Deut. 13.15, 19.1, 19.2, 19.9, 19.11, 19.12, 34.3) <br> (Jon. 1.2, 3.2, 3.3, 3.4, $4.5 \times 3,4.11)$ <br> Deut.: $16 \%$ Jon.: $100 \%$ Acts: $0 \%$ |
| $\pi \varrho \tilde{\alpha} \xi \iota \varsigma$ <br> ПРАミıс (Acts subscriptio) <br> Deut.: $\varnothing$ Jon.: $\emptyset$ Acts: $50 \%$ | ПРАぇеıс (Acts superscriptio) <br> Deut.: Ø Jon.: Ø Acts: 50\% |
| Bevia $\mu$ ív <br> beniamin (Acts 13.21) <br> Deut.: 0\% Jon.: $\emptyset$ Acts: $100 \%$ | beniamein (Deut. 33.12) <br> Deut.: 100\% Jon.: $\emptyset$ Acts: 0\% |

Case A5: ' $(\mathrm{C}) \mathrm{GV} \quad \mathrm{G}=/ \mathrm{w} / \quad \mathrm{V}=\mathrm{e} \mathrm{e}$ (var. $\widehat{\mathrm{e}!}$ )
In contrast to the previous rule, when the vowel/i/follows a glide in an open syllable the digraph is always employed:
oүeine, zoүеіте, леүеітнс.

Variation: In Deuteronomy the digraph carries a circumflex at the end of lexemes:

- oүêt "one" f. (Deut. 12.5, 12.14, 13.12, 15.7, 16.5, 17.2, 18.6).

But: eүel "to one": (Deut. 19.5), eүe! (Deut. 19.11).

- $\lambda \mathrm{e} \mathrm{C}_{\mathrm{e}}^{\mathrm{I}}$ (Deut. 10.8).


Case A6: '(C)GVC

$$
\mathrm{G}=/ \mathrm{w} / \text { or } / \mathrm{j} / \quad \mathbf{V}=\mathbf{\epsilon} \mathbf{I}
$$

In a closed syllable the digraph realises the vowel when preceded by a glide. In this case the second vowel-glide element, $\mathbf{\epsilon}$, is interpreted as vocalic, the first, consonantal:

2єєів (Deut. 14.20) (Acts 8.32), 2Єิєıв (Deut. 32.14).
B. Graphemic forms of the glide $/ \mathbf{j} /($ el $\sim \widehat{\text { E| } \sim \mathbf{l} \sim \mathbf{i}})$

Table 45: Typology of the glide $/ \mathrm{j} /$

| Case | Syllabic Context |  | BL Deuteronomy | BL Jonah | BL Acts | Examples |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B1 | $\begin{gathered} \# ' \mathbf{G V} \\ \text { eI } \omega \end{gathered}$ |  | Eı (var. ï) | eı (var. ï) | Eı (var. I~ī) | EID EIOTE |
| B2 | $\begin{gathered} \text { \#'GVC(C) } \\ \text { еІळT } \end{gathered}$ |  | $\boldsymbol{\epsilon 1}$ (var. ¢¢~i) | Ø | Eı (var. ı) | EIDT |
| B3 | $\begin{gathered} \text { '(C)CGV } \\ 2 \mathbf{1 H} \end{gathered}$ |  | $\mathbf{l}$ (var. ¢ı\|~i') | 1 | 1 | 2IH TCIO 2IOME |
| B4 | $\begin{gathered} \text { '(C)CGVC } \\ \text { 2ıеıв } \end{gathered}$ |  | 1 (var. ¢̂) | 1 | 1 | TCIOq 2ıEıb~2êtis |
| B5 |  | $\mathrm{V}=\mathbf{H}$ | eı (var. ï) | $\emptyset$ | ï (var. ı $\sim$ eı | Hei~hï |
|  |  | $\mathrm{V}=\mathrm{O}$ | eı (var. ï) | eı (var. ï) | ï (var. ı~Eı) | x:OGI~X:Ö̈ |
|  |  | $\mathrm{V}=\boldsymbol{\omega}$ | EI | eı | ï (var. eı) | 21.x.0¢1~21.x:0ї |
|  |  | $\mathrm{V}=\mathrm{O} \gamma$ | eı (var. ï) | EI | Ï (var. eı) | коүеı~кOYї |
|  |  | $V=\lambda$ | ï (var. eı) | ï | ï (var. ı $\sim$ eı | A(1) $\lambda \ddot{\sim} \sim \lambda(1) \lambda E 1$ |
|  | $\begin{aligned} & \text { (C)VG\# } \\ & \text { גї- } \\ & \text { eï- } \end{aligned}$ | $V=\lambda$ | i | i | ̈̈ (var. $1 \sim \mathbf{E \prime}$ ) | $\lambda i ̈-q \lambda i ̈-\sim 9 \lambda E 1-~$ |
|  |  | $V=\epsilon$ | ï (var. ı) | ï | ï (var. ו) | еï- пеï- |
| B6 | '(C)VG.CV(C) <br> 2OÏne 2OeIne |  | $\begin{gathered} \mathrm{V}=\mathrm{O} \\ \mathrm{el} \end{gathered}$ | $\begin{gathered} \mathrm{V}=\mathrm{O}, \mathrm{H} \\ \mathrm{\epsilon l} \end{gathered}$ | $\begin{gathered} V=0, \mathbf{H} \\ \operatorname{\epsilon l}(\operatorname{var} . \mathrm{i} \sim \mathbf{I}) \end{gathered}$ | 2OEINE~2OÏne |
|  | 2גївес |  | $\begin{gathered} V=\boldsymbol{\lambda} \\ \ddot{\mathbf{i}}(\text { var. } \mathbf{\epsilon} \mathbf{\imath}) \end{gathered}$ | $V=\boldsymbol{\lambda}$ | $\begin{gathered} V=\lambda \\ \epsilon \boldsymbol{e} \end{gathered}$ | 2деІвес 2גївес |
| B7 | $\begin{array}{r} \text { '(C } \\ \times: 06 \end{array}$ | SC\# <br> $\times$ ㅇïc | Eı (var. ï) | €ı | ¢ı | X:OEIC X X:Ö̈c |
| B8 | $\begin{gathered} \mathrm{CV} \\ \mathrm{PM} \mathrm{C} \end{gathered}$ |  | Ø | Ø | ¢1 | PMEIOOYE |
| B9 | (C)V.GV(C) <br> (C)V.' GV(C) X.גїе |  | $\begin{gathered} V=\lambda, \epsilon \\ \ddot{i} \\ \begin{array}{c} V=o \gamma \\ \epsilon ı \end{array} \end{gathered}$ | Ø | eı (var. $̈ \sim 1$ ) |  |

## Case B1：\＃＇GV <br> $$
\mathbf{G}=\boldsymbol{\epsilon} \mathbf{\imath}(\text { var. } \mathfrak{\imath \sim i})
$$

At the beginning of a lexeme，in an open syllable，the glide $/ \mathrm{j} /$ is represented by the digraph eı：



With a preformative clitic：This rule applies when it is preceded by the definite article or other preformative morpheme，with only a few exceptions．

Table 46：Clitic＋\＃eı vs．ı vs．ï

| EI | 1 | i |
| :---: | :---: | :---: |
| пеıеро（Deut．11．24） | пıepo（Acts 16．13）${ }^{24}$ |  |
| пеntayeıop2̄（Acts 27．39） |  | ЄïO［PA］2 $\overline{\mathrm{C}}$（Deut．28．68）＂to see it＂ |
| eү＇cıopM（Acts 1．10） |  | EYїOPM（Acts 28．6）${ }^{\text {in slightly raised }}$ |

Coalescence of two adjacent glides：теїопе（Acts 19．25）（теї（єı〉опе）．This also occurs in the same place in the Chester Beatty codex．

## Biblical names／proper nouns：


But note the loss of the trema in the following：
i由2annhc（Acts 1．13）vs．ïш2annhe（x16）；
Ідк由в（Acts 7．8）vs．їдкСв（х5）．
The initial glide regularly loses the trema when preceded by the singular definite article：
mebroүcaioc；
пIOP．A．ANHC；
өiepoүсалнm／телероүсалнм；





24 Cf．also CB：пıеPO（Acts 16．13）；and P．Bodm．23：пıepo（Isa．48．18）．

At the beginning of a lexeme, in a closed syllable, the glide is realised with the digraph:


Note the following:

- ofineiadr "a linen" (Deut. 22.11) - [Crum (1939) 88a: elady: Crum cites Deut. 22.11 neiady for eiadir.];


With a preformative clitic: As in Case B1, this rule applies when the glide is preceded by a preformative segment, with a few exceptions.

Table 47: Clitic + \#eı vs. ı vs. ï

| El | 1 | ï |
| :---: | :---: | :---: |
| пеІ由т (Acts Ø) <br> пеıшт (Deut.: passim) <br> Deut.: 100\% Acts: 0\% | ПІФт (Acts 1.4, 1.7, 28.8) <br> Deut.: 0\% Acts: $100 \%$ | плїшт (Deut. 26.5) "my father" <br> Deut.: 100\% |

On two occasions in Deuteronomy the circumflex is used with the digraph:
cnapeiepboone (Deut. 28.56); peqea)êepbooone (Deut. 18.10).
But: qnapeiepboone (Deut. 28.54).

Case B3: '(C)CGV $\quad \mathbf{G}=\mathbf{I}$ (var. $\mathrm{e} \boldsymbol{\mathrm { I } \sim \mathrm { i }})$
The glide following a consonant, in an open syllable, is rendered with a iota:

```
2IH, TCIO, 2IOME, 21O=, 21OCD=, 2IOO`', ЄBIO,
Ө\overline{B}
```


## Variation:

cïe "goat" (Deut. 32.14).
Variation also occurs in Deuteronomy in the following cases.

Table 48: C + ı vs.eı

| 1 | EI |
| :---: | :---: |
| Өйвіо (Deut. 26.6, 26.7) <br> (Acts: passim) <br> Deut.: 67\% Jon.: Ø Acts: 100\% |  <br> Deut.: 33\% Jon.: Ø Acts: 0\% |
| таmio (Deut. 9.12, 9.16, 10.1, 10.3, 16.21) <br> TAMIO $=(10.5,32.15)$ <br> (Jon.: passim) <br> (Acts: passim) <br> Deut.: 7\% Jon.: 100\% Acts: 100\% | $\text { TAMEIO }=(\text { Deut. 32.6 })$ <br> Deut.: 13\% Jon.: 0\% Acts: 0\% |

## Case B4: '(C)CGVC $\quad \mathbf{G}=\mathbf{1}$ (var. © e )

The glide following a consonant, in a closed syllable, is also rendered with a iota:
TCIOQ, XIOOP.

Variation: One exception appears in Deuteronomy:
2€̂€ıв (Deut. 32.14) vs. 2єєıв (Deut. 14.20) (Acts 8.32)

## Case B5: '(C)VG\# and (C)VG\#

a) Accented syllables '(C)VG\#

| $\mathrm{V}=\mathbf{H}$ | Deut./Jon.: G = el (var. ï) | Acts: $\mathbf{G}=\mathbf{\mathrm { i }}$ (var. $\mathbf{1} \sim \mathbf{e} \mathbf{ı})$ |
| :---: | :---: | :---: |
| $\mathrm{V}=\mathrm{O}$ | Deut./Jon.: G = eı (var. ï) | Acts: $\mathbf{G}=\mathbf{i}($ var. $\mathbf{\imath} \sim \mathbf{e} \mathbf{I})$ |
| $\mathrm{V}=\boldsymbol{\omega}$ | Deut./Jon.: G = eı | Acts: $\mathbf{G}=\boldsymbol{\mathrm { i }}$ (var. $\mathbf{\epsilon \prime}$ ) |
| $V=O \gamma$ | Deut./Jon.: G = eı (var. ï) | Acts: $\mathbf{G}=\boldsymbol{\mathbf { i }}$ (var. $\mathbf{\epsilon} \mathbf{1}$ ) |
| $\mathrm{V}=\boldsymbol{\lambda}$ | Deut./Jon.: G = $\mathbf{i}$ (var. ©ı) | Acts: $\mathbf{G}=\boldsymbol{\mathbf { i }}$ (var. $\mathbf{\imath} \sim \mathbf{e} \mathbf{I})$ |

After the vowels $\mathbf{H}, \mathbf{O}, \boldsymbol{\omega}$, and $\mathbf{O} \boldsymbol{\gamma}$, the final glide $/ \mathrm{j} /$, in an accented syllable, is expressed graphically by et in Deuteronomy and Jonah, with only a few variations. The scribe of Acts prefers $\ddot{i}$, but occasionally omits the trema. Following the vowel $\lambda$, the allograph $\ddot{i}$ is favoured by both scribes.
i）$\quad \mathrm{V}=\mathbf{H} \quad$ Deut．$/ J o n .: \mathbf{G}=\mathbf{e} \mathbf{l}($ var． $\mathbf{i}) \quad$ Acts： $\mathbf{G}=\ddot{\mathbf{i}}($ var． $\mathbf{\imath} \sim \mathbf{e} \mathbf{l})$
Table 49：V＝н G＝eı vs．$\ddot{\sim} \sim \mathbf{ı}$

| Eı | i～1 |
| :---: | :---: |
| 山）HEI（Deut．6．11） |  |
| 2גTHEI（Deut．32．34） |  |
|  | OүBH＝̈（Acts 28．19） <br> Deut．：Ø Jon．：Ø Acts： $100 \%$ |
| $\begin{aligned} & \text { неı (Deut. } 30 \text { occurrences) } \\ & \text { (Acts } 4.34,5.42,10.2,10.22,11.13,16.15,16.31,16.32 \text {, } \\ & 16.34,20.20 \text { не[ı], 21.6) } \end{aligned}$ | $\begin{aligned} & \text { нї (Deut. 5.21) } \\ & \text { (Acts 2.2, 2.46, 2.36, 7.10, 7.42, 7.47, 7.49, 8.3, } \\ & \text { 9.11, 9.17, 10.6, 10.17, 10.30, 10.32, 11.11, } \\ & \text { 11.12, 11.14, 12.7, 12.12, 16.15, 16.34, [17.5], } \\ & 18.7,18.8,19.16,21.8) \\ & \text { HI (Acts } 7.20) \end{aligned}$ |
| Deut．： $97 \%$ Jon．：$\varnothing$ Acts： $32 \%$ | Deut．：3\％Jon．：Ø Acts：68\％ |

ii）$\quad \mathrm{V}=\mathbf{0} \quad$ Deut．／Jon．： $\mathbf{G}=\mathbf{e} \mathbf{l}($ var． $\mathbf{i}) \quad$ Acts： $\mathbf{G}=\ddot{\mathbf{i}}$（var． $\mathbf{1} \sim \mathbf{e} \mathbf{l})$
Table 50：V＝o G＝eı vs．ï～ı

| El | $\ddot{\sim} \sim 1$ |
| :---: | :---: |
| 2̄̄入OGı（Deut．29．10） <br> Deut．：100\％Jon．：$\varnothing$ Acts：$\varnothing$ |  |
| ```OYOGı (Deut. 5.23, 5.27, 12.5, 20.2, 25.9, 25.11, 26.3, 28.49, 33.2 OүOGוO, 28.49) (Jon. 1.6) (Acts 7.31, 8.29, 8.30, 9.1, 10.28 OүOE[^], 21.33, 22.26, 22.27, 28.9) паүOеו (Deut. 22.14) пеүоєı (Acts 14.5, 19.29) пеү〈о\rangleеı (Acts 23.14) тоOTOY mistake for пеүOGו (Acts 7.57) Deut.: 100% Jon.: 100% Acts: 100%``` |  |
| ТА2О $=\mathbf{e} \mathbf{I}$（Deut．31．17） <br> Deut．：100\％Jon．：$\varnothing$ Acts：$\varnothing$ |  |
|  | мגтої（Acts 12．6，12．18， 21.32 x2，21．35， 23．23，［23．31］，27．42，28．16） <br> MaTOI（Acts 10．7，12．4，27．31，27．32） <br> Deut．：$\varnothing$ Jon．：$\varnothing$ Acts： $100 \%$ |
|  | тсаво $=\ddot{\mathrm{i}}$（Acts 10．28） <br> Deut．：Ø Jon．：$\varnothing$ Acts： $100 \%$ |
|  | $\boldsymbol{\top} \overline{\mathrm{B}} \mathrm{BO}=\mathrm{i}($ Deut．32．51） <br> Deut．：100\％Jon．：$\varnothing$ Acts：$\varnothing$ |
|  | х．пО $=$ ï $($ Acts 22．3，22．28） Deut．：$\varnothing \quad$ Jon．：$\varnothing \quad$ Acts： $100 \%$ |


| EI | i~1 |
| :---: | :---: |
|  | Noї (voź $\omega$ ) (Acts 8.30, 9.7, 28.26) <br> MeTanoï ( $\mu \varepsilon \tau \alpha$ vó́ $\omega$ ) (Acts 8.30, 9.7, 28.26) <br> Deut.: $\varnothing$ Jon.: $\varnothing$ Acts: $100 \%$ |
| X.OGı (Jon. 1.3, 1.4, $1.5 \times 2$ ) <br> (Acts 21.6, 27.15) <br> Deut.: $\varnothing$ Jon.: 80\% Acts: $11 \%$ | $\begin{aligned} & \text { x.Oï (Jon. 1.5) } \\ & \text { (Acts [20.13], 20.38, 21.2, [21.3], 27.2, 27.6, } \\ & \text { 27.10, 27.31, [27.38], 27.39, 28.11) } \\ & \text { x.Oı (Acts 27.22) } \\ & \text { Deut.: } \emptyset \quad \text { Jon.: } 20 \% \quad \text { Acts: } 89 \% \end{aligned}$ |
| $\begin{aligned} & \sigma \text { воє (Deut. } 5.15,6.21,7.8,7.19,9.26,9.29,11.2,26.8 \text {, } \\ & 33.20) \\ & \text { Note: } \sigma \text { воєї (Deut. } 33.27 \text { ) } \\ & \text { Deut.: } 100 \% \quad \text { Jon.: } \varnothing \quad \text { Acts: } 0 \% \end{aligned}$ | © BOI (Acts 13.17) <br> Deut.: 0\% Jon.: Ø Acts: $100 \%$ |
| $\begin{aligned} & \text { 2גPO }=\mathbf{\epsilon} \mathbf{I} \text { (Acts } 2.10) \\ & \text { Deut.: } \emptyset \quad \text { Jon.: } \varnothing \quad \text { Acts: } 50 \% \end{aligned}$ | $\begin{aligned} & \text { 2גРO }=\ddot{\mathrm{i}}(\text { Acts } 8.24) \\ & \text { Deut.: } \varnothing \quad \text { Jon.: } \emptyset \quad \text { Acts: } 50 \% \end{aligned}$ |
| $\overline{\mathrm{M}} \mathrm{MO}=\mathbf{\epsilon} \mathbf{I}$ (Deut. 5.9, 5.10, 32.41) <br> Deut.: $100 \%$ Jon.: $\varnothing$ Acts: $0 \%$ | $\begin{aligned} & \overline{\mathrm{M}} \mathrm{MO}=\ddot{\mathrm{I}}(\text { Acts: passim }) \\ & \overline{\mathrm{M}} \mathrm{MO}=1(\text { Acts } 23.6) \\ & \text { Deut.: } 0 \% \quad \text { Jon.: } \emptyset \\ & \text { Acts: } 100 \% \end{aligned}$ |
| ePO=el (Deut. 5.23, 7.17, 9.19, 10.10) <br> (Jon. 2.6, 2.3, 2.4) <br> Deut.: $100 \%$ Jon.: $100 \%$ Acts: $0 \%$ | $\begin{aligned} & \mathrm{ePO}=\mathrm{i}(\text { Acts: passim }) \\ & \text { EPO }=1 \text { (Acts } 8.34) \\ & \text { Deut.: } 0 \% \quad \text { Jon.: } 0 \% \quad \text { Acts: } 100 \% \end{aligned}$ |
| (1) $\mathbf{A P O}=\mathbf{= 1}$ (Deut. 10.1) <br> Deut.: $100 \%$ Jon.: $\emptyset$ Acts: $0 \%$ | () $\mathrm{APO}_{\mathrm{O}}=\mathrm{i}$ (Acts: passim) <br> Deut.: 0\% Jon.: Ø Acts: $100 \%$ |
| кто=еı (Deut. 9.15, 10.5) <br> Deut.: $100 \%$ Jon.: $\varnothing$ Acts: $0 \%$ | кТО $=\ddot{\mathrm{I}}$ (Acts 18.21, 22.17) <br> Deut.: 0\% Jon.: Ø Acts: $100 \%$ |
| TАMO $=\mathbf{e l}$ (Acts 23.30) <br> Deut.: $\varnothing$ Jon.: $\emptyset$ Acts: $50 \%$ | [T]Ạب̣ $=$ ! (Acts 23.22) <br> Deut.: $\varnothing$ Jon.: $\varnothing$ Acts: $50 \%$ |

iii) $\quad \mathrm{V}=\mathbf{\omega} \quad$ Deut. $/ J o n .: \mathbf{G}=\mathbf{\epsilon} \quad$ Acts: $\mathbf{G}=\ddot{\mathbf{i}}($ var. $\mathbf{\epsilon} \mathbf{\imath})$

Table 51: $\mathrm{V}=\boldsymbol{\omega} \quad \mathrm{G}=\mathrm{e} \mathbf{\imath}$ vs. $\ddot{\mathrm{i}}$

iv) $\quad \mathrm{V}=\mathrm{o} \mathrm{\gamma} \quad$ Deut./Jon.: $\mathbf{G}=\mathbf{\epsilon} \mathbf{ı}($ var. $\mathbf{i}) \quad$ Acts: $\mathbf{G}=\mathbf{i}(\mathrm{var} . \mathbf{e} \mathbf{ı})$

Table 52: $\mathrm{V}=\mathrm{o} \mathrm{\gamma} \mathrm{G}=\mathrm{e} \mathrm{v}$ v. i

| EI | i |
| :---: | :---: |
| коүеı (Deut. 25.6, 25.13, 25.14, 26.5, 28.62) <br> (Jon. 3.5) <br> Deut.: 83\% Jon.: 100\% Acts: 0\% | коүї (Deut.28.38) <br> (Acts 5.34, 5.36, 8.10, 27.14) <br> Deut.: $17 \%$ Jon.: 0\% Acts: $100 \%$ |
| NOY $=\mathbf{E}$ (Acts 4.32) "mine" Deut.: $\varnothing \quad$ Jon.: $\varnothing \quad$ Acts: $100 \%$ |  |

v) $\quad \mathrm{V}=\mathbf{\lambda} \quad$ Deut./Jon.: $\mathbf{G}=\boldsymbol{i}($ var. $\mathbf{e} \mathbf{\imath})$ Acts: $\mathbf{G}=\boldsymbol{i}($ var. $\mathbf{\imath} \sim \mathbf{e} \mathbf{\imath})$

## Lexical forms:


But without the trema in: חal (Acts 10.16, 14.3), nal (Acts 15.8, 15.27, 20.36), oY:x.aı (Acts 2.21), (-)2p시 (Acts 15.4, 16.8), c2גI (Acts 15.23).

## Suffix pronouns:



Table 53: $\mathrm{V}=\boldsymbol{\lambda} \quad \mathrm{G}=\boldsymbol{i}$ vs. $\mathbf{\epsilon}$

| i | EI |
| :---: | :---: |
|  | 2TÁEı (Deut. $32.15 \times 2$ ) <br> Deut.: $100 \%$ Jon.: $\varnothing$ Acts: $\varnothing$ |
|  | [ג] 1 ) AE (Deut. 7.22) AC) AEI (Acts 6.1) |

b) Unaccented preformatives (C)VG\#

$$
\begin{aligned}
& \mathrm{V}=\boldsymbol{\lambda} \quad \text { Deut./Jon.: } \mathrm{G}=\mathbf{i} \quad \text { Acts: } \mathrm{G}=\mathbf{i}(\text { var. } \hat{\mathbf{i}} \sim \mathbf{\epsilon} \mathbf{\imath}) \\
& \mathrm{V}=\mathrm{e} \quad \text { Deut./Jon.: } \mathrm{G}=\boldsymbol{i}(\text { var. } \mathbf{I}) \quad \text { Acts: } \mathrm{G}=\boldsymbol{i}(\text { var. } \mathbf{I})
\end{aligned}
$$

i) The glide $/ \mathrm{j} /$ functioning as the first person singular pronominal subject of verbal conjugations preceded by vowels, namely $\boldsymbol{\lambda}$ and $\epsilon$, is consistently, without variation, realised in Deuteronomy, Jonah and Acts by the allograph ï. Occasionally the trema is missing in Acts, and in one case a circumflex replaces the trema. The trema is omitted once in Deuteronomy.

- Present Circumstantial / Present II: ©ї- (passim) (eı- Acts 14.10, 20.35, 24.14)

But: єїє- (Acts 24.12).

- Imperfect: neï- (passim) (neı- Acts 2.25, 22.20).

But: пеєішт $\bar{\Pi}$ (Acts 22.19) for nєїштй "I was imprisoned".

- Future I Circumstantial/ Future II: eïnd- (passim) (eina-Acts 22.21).
- Perfect I: גї- (passim).

But: дeıme for дї̈ıme (Acts 12.11) and дeı for дї̈ı (Acts 23.27); дeï for дїeı (7.34); aî (Acts 1.1).

- Perfect I Relative/ Perfect II: त̄тaï-, (-)entaï- (passim).
- Habitual: © (1) גї- (passim).
ii) Following the vowel $\boldsymbol{\epsilon}$ in the demonstrative article, the glide $/ \mathrm{j} /$ is always written in Deuteronomy and Jonah with the allograph ї: пеї-, теї-, nЄï- (neı- Deut. 30.7).

The scribe of Acts, on the other hand, displays a few variants. A peculiar characteristic of this scribe is the substitution of $\boldsymbol{\lambda}$ for $\epsilon^{.25}$ In the two cases where the variant form ( $\epsilon_{1}$ rather than $\bar{i}$ ) occurs in the demonstrative article, it follows this replacement $\boldsymbol{a}$ vowel.

Table 54: Variation with demonstrative articles

| $\boldsymbol{e}+\boldsymbol{i} \sim$ | $\boldsymbol{\lambda}+\boldsymbol{i}$ | $\mathbf{\lambda}+\mathbf{E l}$ |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { п€ï- (Deut.: passim) (Jon.: passim) } \\ & (\text { Acts } 1.6,1.19,1.21,1.24,2.12,2.33,3.16,4.17,4.22, \\ & 5.4,5.20,5.38 \times 2,6.5,6.13 \times 2,7.4,7.29,7.60,8.21, \\ & 8.29,9.21 \times 2,10.17,10.18,11.12,13.26,16.28,17.6, \\ & 17.18,19.37,19.40,21.11,22.22,23.9,23.13,23.17, \\ & 23.18,23.25,23.27,23.30,24.2,24.5,24.10,[26.31], \\ & 28.4) \\ & \text { пढı- (Acts } 2.38,5.28,22.26) \\ & \text { Deut.: } 100 \% \text { Jon.: } 100 \% \text { Acts: } 90 \% \end{aligned}$ | пдї- <br> паїрсме (Acts 9.13) <br> паїш) גх.е (Acts 15.6) <br> Deut.: 0\% Jon.: 0\% <br> Acts: 4\% | ПגGI- <br> M̄חaeima (Acts 6.14, 7.7, 9.14) <br> Deut.: 0\% <br> Jon.: 0\% <br> Acts: 6\% |
|  | TAї- <br> ñaï2e (Acts 7.1, 17.11) <br> Deut.: 0\% Jon.: 0\% <br> Acts: 6\% | TAEI- <br> N̄TAEIAIAKONIA <br> (Acts 1.17) <br> Deut.: 0\% <br> Jon.: $0 \%$ <br> Acts: 3\% |

25 Thompson (1913), p. 13.

| $\boldsymbol{e}+\boldsymbol{\sim} \sim \mathbf{1}$ | $\boldsymbol{\lambda}+\boldsymbol{i}$ | $\boldsymbol{\lambda}+\mathbf{e l}$ |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { neï- (Deut.: passim) (Jon.: Ø) } \\ & \text { (Acts } 1.15,5.8,5.24,5.36,5.38,14.15,16.17,16.20 \text {, } \\ & 16.35,16.36,16.38,19.37,20.34,21.15) \\ & \text { Neı- (Acts 5.35) } \\ & \text { Deut.: } 100 \% \quad \text { Jon.: } \varnothing \quad \text { Acts: } 79 \% \end{aligned}$ | Naï- <br> naḯ) ax: (Acts 5.5, 5.32, 10.44, 13.42) <br> Deut.: 0\% Jon.: $\varnothing$ <br> Acts: $21 \%$ | Deut.: 0\% <br> Jon.: Ø <br> Acts: 0\% |

iii) This rule is consistently observed in Deuteronomy with the construct participle qגï(Deut. 5.14, [5.21]). On the other hand, the scribe of Acts alternates between the two allographs. Here again, it is the $\lambda$ vowel which prompts the variant form:

Table 55: Variation with construct participles

| $\boldsymbol{\lambda}+\boldsymbol{i}$ | $\boldsymbol{\lambda}+\mathbf{E}$ |
| :---: | :---: |
| 9 $\mathbf{1} \mathbf{I}-$ (Deut. 5.14, [5.21]) <br> (Acts 16.35) <br> Deut.: 100\% Jon.: Ø Acts: 0\% | $\mathbf{q} \lambda \mathrm{E}_{\mathbf{\prime}}-(\text { Acts } 23.23)$ <br> Deut.: 0\% Jon.: Ø Acts: $50 \%$ |
| MAї- (Acts 28.7) <br> Deut.: $\emptyset$ Jon.: $\varnothing$ Acts: $50 \%$ | MAEI- (Acts 28.2) <br> Deut.: $\varnothing$ Jon.: Ø Acts: 50\% |

iv) Note also the spelling of the interrogative particle in Acts, eer- (Acts 21.38, 23.9) in contrast to $\mathrm{e} \mathrm{e} \mathrm{e}-$ in the Chester Beatty codices.

## Case B6: '(C)VG.CV(C)

$$
\begin{aligned}
& \mathrm{V}=\mathbf{0} \quad \text { Deut./Jon: } \mathbf{G}=\mathbf{\epsilon} \mathbf{1} \quad \text { Acts: } \mathbf{G}=\mathbf{\epsilon} \mathbf{ı} \text { (var. ї) } \\
& \mathrm{V}=\mathbf{H} \quad \text { Deut./Jon: } \mathbf{G}=\mathbf{e} \mathbf{1} \quad \text { Acts: } \mathbf{G}=\mathbf{e} \mathbf{I} \text { (var. } \mathbf{I}) \\
& \mathrm{V}=\mathbf{\lambda} \quad \text { Deut./Jon: } \mathbf{G}=\mathbf{i}(\text { var. } \mathbf{e} \mathbf{\imath}) \quad \text { Acts: } \mathbf{G}=\mathbf{e} \mathbf{ı}
\end{aligned}
$$

When the glide closes a syllable within a lexeme, the digraph is preferred following the vowels $\mathbf{O}$ and $\mathbf{н}$ by both scribes, with variation in Acts. When preceded by the vowel $\boldsymbol{\lambda}$, the digraph is employed in Acts, but the scribe of Deuteronomy and Jonah favours ï, with one exception.
a) $\quad \mathbf{V}=\mathbf{o}, \mathbf{H} \quad$ Deut. $/$ Jon: $\mathbf{G}=\mathbf{\epsilon} \mathbf{1}$ Acts: $\mathbf{G}=\mathbf{e} \mathbf{1}$ (var. $\ddot{\boldsymbol{i} \sim \mathbf{1}})$

Jon.: גMHEITN.


Table 56: $\mathrm{V}=\mathbf{O}, \mathbf{H} \quad \mathrm{G}=\mathbf{\epsilon} \mathbf{I} v s . \ddot{\mathrm{i}} \mathbf{\imath}$

| EI | $\because \sim 1$ |
| :---: | :---: |
| AMHEITN̄ (Acts 16.15) (Jon. 1.7) <br> Deut.: Ø Jon.: 100\% Acts: $50 \%$ | [A]MHITN̄ (Acts 16.36) <br> Deut.: Ø Jon.: 0\% Acts: $50 \%$ |
| ```2OGINE (Acts 6.9, 10.23, 12.1, 14.4, 15.1, 15.5, 15.24, 17.4, 17.6, 17.18 x2, 19.13, 19.31, 23.9, 23.12, 27.44 2OG[INE], 28.24) Deut.: Ø Jon.: Ø Acts: 94%``` | 2Oïne (Acts 19.9) <br> Deut.: $\emptyset \quad$ Jon.: $\varnothing$ Acts: $6 \%$ |
| $\begin{aligned} & \text { 2OGITE (Acts } 7.58,9.39,11.15,14.14,16.22,18.6, \\ & 20.33,22.20) \\ & \text { Deut.: } \varnothing \quad \text { Jon.: } \varnothing \quad \text { Acts: } 89 \% \end{aligned}$ | 2Oїте (Acts 23.23) <br> Deut.: Ø Jon.: Ø Acts: $11 \%$ |

b) $\quad \mathrm{V}=\boldsymbol{\lambda} \quad$ Deut./Jon: $\mathbf{G}=\mathbf{i}($ var. $\mathbf{\epsilon} \mathbf{ı}) \quad$ Acts: $\mathbf{G}=\mathbf{\epsilon} \mathbf{1}$

Jon.: 2גївєс (Deut. 33.12) (Jon. 4.5, 4.6).
Acts: 2גeibec (Acts 5.15).
c) Words of Greek origin: The scribe of Acts occasionally places a trema over the iota of the Greek diphthong:

плї.д.еүе (Acts 22.3) $\pi \alpha เ \delta \varepsilon v ́ \omega ;$
גїтı̀ (Acts 28.18), дїТІ (Acts 28.20) dìtí $\alpha$.

стоїкос (Acts 17.18) इтоїко́ऽ ( $С$ : стоїкос).

Case B7: '(C)VGC\# $\quad \mathbf{G}=\mathrm{el}$ (var. ï)
In the 'covered' position the digraph is regular:
Deut: О



Acts: XOGIC, XOGIT, MOEIT, POEIC, COEIT, OGIK, NOEIN, OYOEIN,
 (талеіт), гкдеіт, петеоүнтаеІ=я.
But note: noï for noein (Acts 16.26)

Variation: The one exception is $\times$.Oïcl (Deut. 6.4, 29.27, 32.4), the variant occurring at the end of a line only, as in the Chester Beatty codices.

## Case B8: CVC'GV G=eı

At the beginning of a syllable, following a closed syllable, the digraph renders the glide.

```
pMéiooye (Acts 20.19, 20.31)
```


## Case B9: '(C)V.GV(C) and (C)V.'GV(C)

$$
\begin{array}{lll}
\mathbf{V}=\mathbf{\lambda}, \mathbf{\epsilon} & \text { Deut.: } \mathbf{G}=\ddot{\mathbf{i}} & \text { Acts: } \mathbf{G}=\mathbf{\epsilon} \mathbf{\imath}(\text { var. } \ddot{\sim} \sim \mathbf{1}) \\
\mathbf{V}=\mathbf{o} \boldsymbol{\gamma} & \text { Deut.: } \mathbf{G}=\mathbf{\epsilon} \mathbf{l} & \text { Acts: } \mathbf{G}=\emptyset
\end{array}
$$

In Deuteronomy the intervocalic glide, beginning a syllable preceded by an open syllable, is realised $\ddot{i}$ following the vowels $\boldsymbol{\lambda}$ and $\epsilon$, as it is in Cases B5 and B6. On the other hand, the glide is rendered $\mathrm{\epsilon}_{\mathbf{\prime}}$ (var. ï) in Acts. Following vocalic o̧, the scribe of Deuteronomy employs the digraph, as in Case B5.
a) $\quad \mathbf{V}=\boldsymbol{\lambda}, \mathbf{\epsilon} \quad$ Deut.: $\mathbf{G}=\ddot{\boldsymbol{i}} \quad$ Acts: $\mathbf{G}=\mathbf{e} \mathbf{I}($ var. $\mathbf{i} \sim \mathbf{1})$

Deut: єїє-, єїоүл;

Acts: eєıe-, oүeєıemin~oүeḯcnin;

Note: eєı- (Acts 23.9, 21.38) interrogative particle (CB: Єḯ) (cf. Case B5).

Table 57: Variation in the intervocalic glide

| EI | i~1 |
| :---: | :---: |
| Adhortative (Future III) <br> Ee1e- (Acts 16.30, 23.35) <br> Deut.: 0\% Jon.: Ø Acts: $100 \%$ | eïe- (Deut. 5.31,10.2, 31.28) <br> Deut.: 100\% Jon.: Ø Acts: 0\% |
| oreeienin (Acts 6.1, 9.29, 11.20, 16.1, 16.3) <br> OүGe[ıE]nin (Acts 20.24) <br> oүe[eıe]nin (Acts 19.10) <br> OY[Eeıe]nin (Acts 21.37) <br> Deut.: $\varnothing$ Jon.: $\varnothing$ Acts: $86 \%$ | oүeï[En]ın (Acts 21.28) <br> Deut.: $\emptyset$ Jon.: $\emptyset$ Acts: $14 \%$ |
| $\text { x. גeıe (Acts } 1.20,7.36,7.44)$ <br> Deut.: 0\% Jon.: Ø Acts: $75 \%$ | ```x.A\ddot{̈}(Deut. 9.28, 11.24) (Acts 12.17) x.ai\epsilon (Deut. 7.22) Deut.: 100% Jon.: Ø Acts: 25%``` |


| EI | i~1 |
| :---: | :---: |
| TaEIO (Acts 2.33, 24.3, 28.10) <br>  <br> Deut.: 0\% Jon.: $\varnothing$ Acts: $80 \%$ | таїо (Deut. 10.17) <br> таїє (Deut. 5.16) <br> таїноҮ (Deut. 7.6, 28.58) <br> тגїнү (Acts 5.34) <br> Deut.: $100 \%$ Jon.: $\varnothing$ Acts: $20 \%$ |
| TMAEIO( $=$ ) (Acts 13.39 x 2$)$ <br> Deut.: 0\% Jon.: $\varnothing$ Acts: $100 \%$ | тмגїє(-) (Deut. 25.1) <br> Deut.: $100 \%$ Jon.: $\emptyset$ Acts: $0 \%$ |
|  | $\begin{aligned} & \hline \text { Tä̈OY (Deut. 22.29) } \\ & \text { TaıOY (Acts } 13.20) \\ & \text { Deut.: } 100 \% \quad \text { Jon.: } \emptyset \\ & \text { Acts: } 100 \% \end{aligned}$ |
|  | тодїо $=($ Deut. 25.1) <br> Deut.: 100\% Jon.: Ø Acts: 0\% |
|  | ндїлт= (Deut. 33.29) <br> Deut.: $100 \%$ Jon.: $\emptyset$ Acts: $0 \%$ |
|  | $\begin{aligned} & \text { Єї̈Үर (Deut. } 12.15,12.22,15.22) \\ & \text { Deut.: } 100 \% \\ & \hline \end{aligned}$ |

Note the following biblical names/proper nouns in Acts:

- нсдїдс (Acts 8.28, 8.30), vs. нсдеıас (Acts 28.25) (CB: нсаїдс) 'Нбаї $\alpha$
- [гд]ïoc (Acts 20.4) (CB: кגїос), vs. гдєıос (Acts 19.29) (CB: гдїос) Га́їоऽ
- Taxaïa (Acts 18.12, 18.27, 19.21) (CB: тахаıа) A $\alpha$ 人ї $\alpha$
- bepola (Acts 17.10, 17.13, 20.4) (CB: bepoia) Béool $\alpha$

- ainaiac (Acts 9.33), ananiac (Acts 22.12) ( $C B$ ennaiac) Avavías
- †or시시 (Acts 1.8, 10.37, 10.39, 11.1, 11.29, 12.19, 15.1), [†lor.a.ala (Acts


b) $\quad \mathbf{V}=\mathbf{o \gamma} \quad$ Deut.: $\mathbf{G}=\mathbf{\epsilon} \quad$ Acts: $\mathbf{G}=\varnothing$ moүeıoore (Deut. 5.8), тоүеıн (Deut.12.2, 32.22, 33.15).
C. Graphemic forms of the vowel $/ \mathrm{u} /(\mathrm{O} \sim \sim \widehat{\mathrm{O}} \sim \gamma)$

Table 58: Typology of the vowel /u/

| Case | Syllabic Context | BL Deuteronomy | BL Jonah | BL Acts | Examples |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C1 | $\begin{gathered} \#(') \mathbf{V} \\ \text { OYNAM } \end{gathered}$ | OY (var. $\widehat{O \gamma} \sim \gamma)$ | OY (var. $\gamma$ ) | OY (var. $\gamma$ ) | OY OYNAM оүхגї оүонн |
| C2 | (')(C)CV MOY | OY (var. $\widehat{\mathrm{OY}}$ ) | OY | OY | MOY~MOY MOүTE таїоү тоүеוо |
| C3 | $\begin{gathered} \text { (C)CVC(C) } \\ 2 \mathrm{O} \gamma \mathbf{n} \end{gathered}$ | OY (var. $\widehat{O \gamma}$ ) | OY | OY | G2OYN MOYOY'T коүеı~кOүї |

## Case C1: \#(')V <br> $$
\mathbf{V}=\mathrm{o} \mathrm{\gamma}(\text { var. } \widehat{O \gamma} \sim \gamma)
$$

At the beginning of a segment the vowel $/ \mathrm{u} /$ is realised $\mathrm{O} \gamma$, on one occasion in Deuteronomy with a circumflex:


With a preformative clitic: In the following cases variation occurs under the influence of certain clitics:

- The indefinite article $\mathrm{O} \gamma^{-}$- is regularly reduced to $-\gamma$ - when it is preceded by the preposition $\epsilon$ and the Perfect I conjugation nominal base $\boldsymbol{\lambda}$. For example:
ȩmaein (Deut. 6.8), eүma (Deut. 19.5), eүnoo (Deut. 7.21), eдүкаке (Deut. 5.22).

Note also: ne

- A few of the lexemes denoting time beginning with $O \gamma$ are preceded by the long form of the definite article ( $\mathrm{O} \gamma \mathrm{C}) \mathrm{H}$, o $\boldsymbol{\mathrm { Y }} \mathrm{NO} \gamma$ ), and in these cases $\gamma$ is regularly used (теүон, теүноү, пттеүоү).
- Note: oyxaï is regularly written with the short form of the definite article (поүххіі).

Case C2: (')(C)CV $\quad V=O \mathcal{O}$ (var. $\widehat{O Y}$ )
The vowel is rendered $o \gamma$ following a consonant in an open syllable:

```
MOY, мOүTе, nOүTе, теNOY, cIO\gamma;
поҮ-, М̈поҮ-, \̀тероҮ-, МАРОҮ-, АРОҮ-;
THP=O
```

Variation: One can observe in Deuteronomy, particularly towards the latter part of the manuscript, as previously mentioned, the frequent use of the circumflex over the digraph. The same phenomenon also occurs with vowel and glide combinations $(\hat{\lambda \mathcal{Y}} \sim \lambda \hat{\gamma} ; \hat{H \mathcal{Y}} \sim \mathbf{H} \hat{\gamma})$.

Table 59: $\mathrm{C}+\mathrm{o} \mathrm{\gamma} v$. $\widehat{\mathrm{O}}$

| OY | O\% |
| :---: | :---: |
| ```MOY (Deut. 17.5, 17.6, 17.12, 19.5, 19.6 x3, 19.11, [20.5], 22.8, 22.26, 24.3 24.7, 24.16 x3, 25.5, 25.6, 28.21) but MOYOY (Deut. 5.25) - reduplication of OY Deut.: 66%``` | $\begin{aligned} & \mathrm{MOY}(\text { Deut. } 30.19,31.14,31.27,31.29,32.50 \times 2, \\ & 33.1,33.6,34.5,34.7) \end{aligned}$ <br> Deut.: 34\% |
| CMOY (Deut.: 28 and [2] occurrences) <br> Deut.: 90\% | $\begin{aligned} & \text { CMÔ (Deut. 30.19, 33.13, 33.23) } \\ & \text { Deut.: } 10 \% \end{aligned}$ |
| $\begin{aligned} & \text { ब)O̧a)O (Deut. 10.21) } \\ & \text { Deut.: } 50 \% \end{aligned}$ | 由) $\widehat{O \mathcal{Y}} \mathrm{\omega} \widehat{\mathrm{OY}}$ (Deut. 33.29) <br> Deut.: 50\% |
| noү"Te (Deut.: 302 and [16] occurrences) <br> Deut.: 99.7\% | nốTe (Deut. 32.37) <br> Deut.: 0.3\% |
|  | MOY'G1 (Deut. 33.20, 33.22) Deut.: 100\% |
|  | nồne (Deut. 29.18) <br> Deut.: 100\% |
|  | 2MOิ̧ (Deut. 29.23) <br> Deut.: 100\% |

## Case C3: '(C)CVC(C) $\quad V=o \gamma($ var. $\widehat{O Y})$

The vowel is also rendered $\mathrm{O} \gamma$ following a consonant in a closed syllable: е2Oү'n, моүоү'т, коүеІ~коүї, noүоү, nô̧n (Deut. 33.13).

[^46]D. Graphemic forms of the glide $/ \mathrm{w} /(\mathrm{O} \gamma \sim \hat{\mathrm{Y}} \sim \gamma \sim \hat{\gamma})$

Table 60: Typology of the glide /w/

| Case | Syllabic Context |  | BL Deuteronomy | BL Jonah | BL Acts | Examples |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D1 | $\begin{gathered} \#(') \mathbf{G V} \\ \text { oץd } \end{gathered}$ |  | OY (var. $\gamma$ ) | OY | OY (var. $\gamma$ ) | ora oreine |
| D2 | $\#(') \mathbf{G V C}(\mathrm{C})$ <br> OYCD |  | OY (var. $\gamma$ ) | OY | OY (var. $\gamma$ ) | $\begin{gathered} \text { OYCOM } \\ \text { OYN-~OY } \bar{N}- \end{gathered}$ |
| D3 | '(C)CGV 2OүEITE |  | OY | Ø | OY | 2OYEITE |
| D4 | '(C)CGVC a) |  | OY | OY | OY | ()OYEIT |
| D5 | (')(C)VG(C) | $\mathbf{V}=0$ | OY (var. $\widehat{\mathrm{OY}}$ ) | OY | OY (var. $\gamma$ ) | MOOY |
|  |  | $\mathbf{V}=\omega$ | OY | OY | OY | TCOOYN |
|  | $\begin{gathered} \text { MOOY } \\ \text { TAOYN } \\ \text { NANOY=OY } \\ \text { THYTN } \\ \text { NAY } \\ \text { חGY- } \\ \text { XOO=Y } \end{gathered}$ | $\mathbf{V}=\mathbf{O} \gamma$ | OY | $\varnothing$ | OY | MOYOYT |
|  |  | $\mathbf{V}=\mathbf{H}$ | $\begin{gathered} \mathrm{OY}(\text { var. } \mathcal{Y} \sim \hat{Y}) \\ \mathbf{H \gamma}(\widehat{H Y}) \end{gathered}$ | OY (var. $\gamma$ ) | $\gamma$ (var. OY) | THOY'TÑ~THYTN̄ |
|  |  | $\mathbf{V}=\boldsymbol{\lambda}$ | $\begin{aligned} & \gamma(\text { var. oY }) \\ & \Delta \gamma(\widehat{\lambda Y} \sim \hat{\gamma}) \end{aligned}$ | $\gamma$ | $\gamma$ | NAY~NAX |
|  |  | $\mathbf{V}=\boldsymbol{\epsilon}$ | $\gamma$ (var. OY $\sim^{(1)}$ | $\gamma$ | $\gamma$ | пе\%- x.ixieor |
|  |  | $\mathbf{V}=\mathrm{OO}$ | $\gamma$ | $\gamma$ | $\gamma$ | 200\% "day" |
| D6 | (C)V.' $\mathbf{G V}$ (C) <br> '(C)V.GV(C) <br> кооүе X.IOү' 2внүе A) ${ }^{\circ}$ meeje | $\mathbf{V}=\mathbf{O}$ | OY | OY | OY | коoүe |
|  |  | $\mathrm{V}=\mathbf{1}$ | OY | OY | OY | xioye |
|  |  | $\mathbf{V}=\mathbf{H}$ | OY (var. $\gamma$ ) | OY | $\gamma$ | 2вHOүе~2внүе |
|  |  | $\mathbf{V}=\boldsymbol{\lambda}$ | $\begin{gathered} \gamma \\ \Delta Y(\widehat{\lambda Y}) \end{gathered}$ | $\gamma$ | $\gamma$ (var. OY) | $\begin{gathered} \Delta Y \omega \\ \text { TAYO=~TAOYO= } \end{gathered}$ |
|  |  | $\mathbf{V}=\boldsymbol{\epsilon}$ | $\gamma$ (var. o $\gamma$ ) | Ø | $\gamma$ | $\begin{gathered} \text { MeGYe } \\ \epsilon \gamma \hat{\omega} \sim \epsilon O \gamma \hat{O} \end{gathered}$ |

## Case D1: \#(')GV G = o $\quad$ (var. $\gamma$ )

At the beginning of a segment, in an open syllable, the glide is realised $\mathrm{o} \gamma$ :
oүд, oुeine, oүephte.

With a preformative clitic: Note the following variations with clitics.
Preposition $\epsilon$ :
еүе1 "to one" (Deut. 19.5, 19.11), еүд (Acts 7.24), eoүג (Acts 23.17, 21.8).
Perfect I conjugation base $\lambda$ :
Аү $\boldsymbol{\lambda}$ (Acts 5.25), $\boldsymbol{\lambda}[\mathrm{O} \gamma \mathrm{\lambda}]$ (Acts 11.28).
Adjective кє:
кеүд"another one" (Deut. 28.30) (Acts 1.20, 4.12, 23.6) vs. кєоүд (Acts 8.34)

Case D2: \#(')GVC(C) $\quad \mathbf{G}=\mathrm{o} \mathrm{\gamma}($ var. $\gamma)$
At the beginning of a segment, in a closed syllable, the glide is realised $\mathrm{o} \gamma:$

OYN-~OY $\overline{\mathrm{N}}-$, OYNTE-/OYNTA=~OY'NTE-/OY $\bar{N} T A=$

With a preformative clitic: Note the following variations:

- еүळм "to eat" (Deut. 2.6);
- mayoei (Deut. 22.14);
- -nayomoy (Deut. 28.55);

- naołnpede (Acts 5.23) (CB: nanoүpCde "the guards") - metathesis;


- Error - еүмппкоте for етмппкште (Acts 5.16).

In the following cases variation occurs under the influence of certain clitics:

- Converted existential: $\mathbf{\epsilon} / \mathrm{ne} /-\mathbf{\epsilon T \epsilon}+\gamma \mathbf{N} / \gamma_{\mathbf{N}}-($ var. OYN-)

Table 61: Variation with the converted existential

| Conjugation |  | E/NE/-ETE + OYN- |
| :---: | :---: | :---: |
| Circumstantial | EүN- (Acts 18.24, 24.11, 27.39) <br> Deut.: 0\% Jon.: Ø Acts: $60 \%$ | ```EOYN- (Deut. 24.10) (Acts 19.40) eOरु (Acts 1.15) Deut.: 100\% Jon.: \(\varnothing\) Acts: 40\%``` |
| Imperfect |  | neorn (Acts 16.1) <br> [ N$]$ GOYN (Acts 20.9) <br> Deut.: $\varnothing$ Jon.: $\varnothing$ Acts: $15 \%$ |

- Converted predication of possession:

$$
\epsilon / N \epsilon /-\epsilon T \epsilon+\gamma \bar{N} T \epsilon-/ Y \bar{N} T \lambda=(\text { var. OY } \bar{N} T \epsilon-/ O Y \bar{N} T \lambda=)
$$

Table 62: Variation with the converted predication of possession

| Conjugation |  | E/NE/-ETE + OYNTTE-/OY/̄TA= |
| :---: | :---: | :---: |
| Circumstantial |  <br> (Acts 24.15) <br> еүnTe-/eүnta= <br> (Acts 2.47, 4.37, 18.24, 19.14, 23.18) <br> Deut.: 0\% Jon.: $\varnothing$ Acts: $100 \%$ | GOYNTK (Deut. 24.10) <br> Deut.: 100\% Jon.: $\emptyset$ Acts: 0\% |
| Imperfect | neү'̄TE-/neү'̃TA= <br> (Acts 13.5, 18.18, 21.9) <br> neүnTe-/neүnta= <br> (Acts 21.9) <br> Deut.: $\emptyset$ Jon.: $\emptyset$ Acts: $80 \%$ | neornte-/neornta= <br> (Acts 21.23) <br> Deut.: Ø Jon.: $\varnothing$ Acts: $20 \%$ |
| Relative |  | ```-\epsilonTEOY\overline{NTE-/\epsilonTEOY\overline{NTA=}}=\mathbf{N} (Acts 4.34) -\epsilonTEOYNTE-/еTEOYNTA= (Deut. 15.2, [15.3] x2, 24.10, 24.11) (Acts 3.6, 11.29 23.19) Deut.: 100% Jon.: Ø Acts: 100%``` |

- Long and short form of the article with lexeme-initial or: In Acts fluctuation between the long and short form of the definite article occurs with the lexeme oyoeic). In addition, there is a hesitation between the use of $O \gamma$ and $\gamma$ with the long form of the article. The scribe of Deuteronomy is consistent in writing пеүоєı(1).

Table 63：Forms of oyocic）with the definite article

| Short form of the definite article $\pi / \overline{\mathbf{N}}+\mathbf{O \gamma}$ | Long form of the definite article $\pi \in / n \in+O \gamma$ | Long form of the definite article $\boldsymbol{\pi e} / \mathbf{N e}+\gamma$ |
| :---: | :---: | :---: |
| $\overline{\text { NoYoeı＠}}$（Acts 1．7） | пЄOүOGIळ) (Acts 12.1) | пеүоєı山）（Acts 7．17，7．20，19．23， 20．18） <br> neyoeıc）（Acts 3．19，3．21，17．30） <br> （Deut．：passim） |
| Deut．：0\％Acts： $11 \%$ | Deut．：0\％Acts： $11 \%$ | Deut．：100\％Acts：78\％ |

－Coalescence of $\mathrm{O} \mathrm{\gamma}-\mathrm{O}$ ：The sequence $\mathrm{o} \mathrm{\gamma}-\mathrm{O} \mathrm{\gamma}$（initial or lexeme preceded by a clitic）sometimes coalesces to $\mathrm{O} \gamma$ ：
oүeeienin（Acts 16．1，16．3）＂a Greek＂（CB：oүeïenin，oүeeienin）；

ñoyoein（Acts 13．47）（CB：ñoyoein＂as a light＂）；


пеүоеı（Acts 14．5，19．29）пеү〈о〉єı（Acts 23．14）vs．пеүүоүоеı（Acts 28．9）（CB：
пеүоүої）．

## Case D3：＇（C）CGV <br> $$
\mathbf{G}=\mathrm{O} \gamma
$$

There is only one example of the glide $\mathrm{O} \gamma$ following a consonant in an open syllable：
2OүGITE．

Case D4：＇（C）CGVC

$$
\mathbf{G}=\mathrm{O} \gamma
$$

In a closed syllable there is only one example of the glide $\mathrm{O} \gamma$ following a consonant： woүeit．

## Case D5：（＇）（C）VG（C）

$$
\begin{aligned}
& \mathbf{V}=\mathbf{H} \quad \text { Deut./Jon: } \mathbf{G}=\mathrm{o} \mathrm{\gamma}(\text { var. } \gamma \sim \hat{\gamma}) \quad \text { Acts: } \mathbf{G}=\gamma(\text { var. } \mathrm{O} \gamma) \\
& \mathbf{V}=\boldsymbol{\lambda}, \mathbf{\epsilon}, \mathbf{o o} \quad \text { Deut./Jon.: } \mathbf{G}=\gamma(\text { var. } \mathrm{O} \gamma \sim \widehat{\boldsymbol{\gamma}} \sim \hat{\gamma}) \quad \text { Acts: } \mathbf{G}=\gamma
\end{aligned}
$$

Following the vowels $\mathrm{O}, \omega$ ，and $\mathrm{O} \gamma$ ，the glide is generally realised $\mathrm{o} \gamma$ ．When preceded by the vowels $\lambda, \epsilon$ ，and oo，the allograph $\gamma$ is employed．The strongest optionality occurs when preceded by the vowel $\mathbf{H}$ ，in which case the scribe of Deuteronomy and Jonah prefers the
digraph, whereas the scribe of Acts favours the single upsilon.
a) $\quad \mathbf{V}=\mathbf{O}, \mathbf{\omega}, \mathrm{O} \mathrm{\gamma} \quad$ Deut. $/$ Jon.: $\mathbf{G}=\mathrm{O} \mathrm{\gamma}($ var. $\widehat{\mathrm{O}} \sim \hat{\mathrm{O}} \gamma) \quad$ Acts: $\mathbf{G}=\mathrm{O} \mathrm{\gamma}$ (var. $\gamma$ )

Lexical forms:
GOOY, MOOY (MOOYG Deut. 23.4), TOOY, 200Ү, 200ҮT, 200Ү (Deut. 34.8), TATAMÓ $=\hat{O}$ Ү. (Deut. 32.20), MOÔY (Deut. 33.8);

moүOYT.
But: чтOY (Acts 11.5)
$3^{\text {rd }}$ person pronominal suffixes:

$\epsilon P \omega=O \gamma, \epsilon \times(\omega=O \gamma, \kappa P \omega=O \gamma, \bar{N} C \omega=O \gamma, 21 \times \omega=O \gamma, 2 \omega=O \gamma$.
But: $\boldsymbol{T} \overline{\mathbf{B}} \boldsymbol{\overline { в }}=\gamma($ Acts 11.9 $)$.
b) $\quad \mathbf{V}=\mathbf{H} \quad$ Deut. $/$ Jon: $\mathbf{G}=\mathbf{o \gamma}($ var. $\gamma \sim \hat{\gamma}) \quad$ Acts: $\mathbf{G}=\gamma$ (var. $\mathrm{o} \gamma$ )

## Lexical forms:

 ех.ноү, тноү"ग̄~тнүTin.
Jon.: -Кд2нОҮ, тноү~THY.

Statives:


Acts: таїнү, ннү.
But: оүноү (Acts 1.12, 22.21) - never оүнү.
$3^{\text {rd }}$ person plural suffix pronouns:
Deut.: Ø.
Jon.: Ø.
Acts: $2 \mathrm{TH}=\gamma, 2 \lambda \mathrm{TH}=\gamma$, о $\gamma \mathrm{BH}=[\gamma]$ (Acts 13.8).

Table 64: $\mathbf{H}+\mathbf{O \gamma}$ vs. $\gamma \sim \hat{\gamma}$

| OY | $\gamma^{\sim} \hat{\gamma}$ |
| :---: | :---: |
| (-)THOү"Tī (Deut.: 64 occurrences) <br> Deut.: 93\% Jon.: $\varnothing$ Acts: 0\% | ```(-)THүTī (Deut. 11.27, 11.28, 12.7, 23.16, 28.14) (Acts: passim) Deut.: 7\% Jon.: Ø Acts: 100\%``` |
| $\begin{aligned} & \text { мноץ (Deut. 9.21, 23.4, 23.23, 24.9, 25.17, 28.34, 28.67, } \\ & 32.29 \text { ) } \\ & \text { Deut.: } 89 \% \quad \text { Jon.: } \emptyset \quad \text { Acts: } 0 \% \end{aligned}$ | $\begin{aligned} & \text { NHY (Deut. 13.6) } \\ & \text { (Acts: passim) } \\ & \text { Deut.: } 11 \% \quad \text { Jon.: } \emptyset \quad \text { Acts: } 100 \% \\ & \hline \end{aligned}$ |
| те̄вноү (Deut. 12.15, 15.22) <br> Deut.: 50\% Jon.: Ø Acts: $\varnothing$ | ТЕ̄внү (Deut. 12.22) <br>  <br> Deut.: 50\% Jon.: $\varnothing$ Acts: $\varnothing$ |
| тגх:рноҮ (Deut. 6.8, 7.19, 7.21, 10.17,11.2, 11.18) <br> Deut.: 86\% Jon.: $\varnothing$ Acts: $\varnothing$ | TAX:PH今ิ (Deut. 33.28) <br> Deut.: $14 \%$ Jon.: $\varnothing$ Acts: $\varnothing$ |
| THOY (Jon. 1.4) <br> Deut.: Ø Jon.: 50\% Acts: Ø | THץ (Jon. 4.8) <br> Deut.: $\emptyset$ Jon.: $50 \%$ Acts: $\varnothing$ |

c) $\quad \mathbf{V}=\boldsymbol{\lambda}, \mathbf{\epsilon}$, oо $\quad$ Deut. $/$ Jon.: $\mathbf{G}=\gamma($ var. $\mathrm{O} \sim \sim \hat{\mathrm{O}} \sim \hat{\gamma}) \quad$ Acts: $\mathbf{G}=\gamma$

Lexical forms:
母үxнал;
cabeer, x: $\gamma^{-}$.
$3^{r d}$ person plural suffix pronouns:
NM̄M $\lambda=\gamma, N \lambda=\gamma, ~ п \in X, \lambda=\gamma, x, O O=\gamma$.
$3^{\text {rd }}$ person plural pronominal subjects:

Possessive articles:
$\boldsymbol{\Pi \epsilon} \gamma^{-}, \mathbf{T E} \gamma^{-}, \mathbf{N E} \gamma^{-}$.
 $6.19,7.15,12.10,20.1,{ }^{28} 20.3,20.4,23.9,25.19,28.25,28.31,28.48,28.68,30.7,32.27$ x2,

 xinxeye $S$ ).
28 Note that Thompson (1913), p. 22 emends Budge's reading nekx.x.e[oүe] (Deut. 20.1) to nek.ix: $[\mathrm{E} \gamma]$ or $-[\mathrm{GO} \gamma]$ if there are three letters.
29 Kahle (1954), p. 67 "perhaps due to Subakhmimic or Middle Egyptian".

An unusual feature of Deuteronomy is the writing of 2 еnкеүноүте for 2 еnкепоүте "other gods" (Deut. 13.13, 17.3, 28.14, 28.36, 28.64, 29.26, 30.17). ${ }^{30}$ But note $2 \in \mathrm{ew} \mathrm{кe}$ ноүте (Deut. 5.7, 11.16, 11.28, 13.1, 13.6), [2"̄] ке nоүте (Deut. 7.4) and м̄̄ ке noүTe (Deut. 32.39)

The scribe of Deuteronomy occasionally uses the circumflex over $\lambda \mathcal{\gamma}$ or $\gamma(\lambda \hat{\gamma} \sim \hat{\gamma})$ especially towards the end of the manuscript, as has been mentioned earlier:
 $23.6,23.18,24.5,28.26,28.32,28.51,28.56,28.68,29.18 \times 2,29.23$ );

- каўma (Deut. 32.10);
- nấ "see" (Deut. 26.7, 32.49, 32.52) vs. nay (Deut. 24 and [1] occurrences);
- nâ̧ "to/for them" (Deut. 31.2, 31.4, 31.5, 31.28, 32.21, 32.35, 32.41, 34.4) vs. nay (Deut. 34 and [2] occurrences);
- mīmấ (Deut. 29.25, 31.16) vs. nल̄mar (Deut. 7.2, 29.1, 32.12); nemay (Deut. 1.41, 1.42, 2.5, 2.9, 2.19, $20.3 \times 2,23.9$ );
- cnây (Deut. 31.4) vs. cnay (Deut.: 11 occurrences);


Table 65: $\boldsymbol{\lambda}+\gamma v s$. $\mathrm{O} \gamma$

| Y | OY |
| :---: | :---: |
| ```N\|=\gamma 5.30, 5.31, 7.2, 7.5, 9.12, 9.27, 9.28, 10.9, 10.11, 11.9, 11.16, 13.13, 17.3, 20.3, 23.6, 23.8, 26.6, 28.14, 29.2, 29.17, 29.26 x2, [30.17], 31.7, [31.20], 31.23, 32.21, 32.33, 32.43, 32.46) N\\widehat{Y}}\mathrm{ (Deut. 31.2, 31.4, 31.5, 31.28, 32.21, 32.35, 32.41, 34.4)``` | $\mathbf{N} \mathbf{A}=\mathbf{O} \gamma$ "to/for them" (Deut. 1.39, 5.9) |
| Deut.: 95\% | Deut.: 5\% |

30 Thompson (1913) p. 13.

| Y | OY |
| :---: | :---: |
|  | M̄мдOҮ (Deut. 1.46, 5.5, 5.15) <br> Deut.: 4\% |
| Biblical name <br> нсау (Deut. 2.4, 2.5, 2.12) <br> Deut.: 75\% | hсаоү (Deut. 2.8) <br> Deut.: 25\% |

## Coalescence:

- EO)
- EYHN (Acts 7.56) = EYOYHN; EOYHN (Acts 16.27) = EYOYHN.


## Case D6: '(C)V.GV and (C)V.' $\mathrm{GV}(\mathrm{C})$

$\mathbf{V}=\mathbf{O}, \mathbf{1} \quad$ Deut./Jon.: $\mathbf{G}=\mathbf{O} \gamma \quad$ Acts.: $\mathbf{G}=\mathbf{O} \gamma$
$\mathbf{V}=\mathbf{H} \quad$ Deut. $/$ Jon. $: \mathbf{G}=\mathbf{O} \gamma($ var. $\gamma) \quad$ Acts.: $\mathbf{G}=\gamma$
$\mathbf{V}=\boldsymbol{\lambda}, \mathbf{\epsilon} \quad$ Deut./Jon.: $\mathbf{G}=\gamma($ var. OҮ) Acts: $\mathbf{G}=\gamma$ (var. Oү)
Concerning the intervocalic glide, as in the previous case, the digraph is employed following O and $\mathbf{I}$, and the upsilon alone follows $\boldsymbol{\lambda}$ and $\epsilon$. Again, variation is greatest following the vowel H. In this case also, the digraph is predominant in Deuteronomy and Jonah, and the single upsilon is favoured in Acts.

$$
\begin{aligned}
& \text { a) } \quad \mathbf{V}=\mathbf{O}, \mathbf{1} \quad \text { Deut./Jon.: } \mathbf{G}=\mathbf{O \gamma} \quad \text { Acts.: } \mathbf{G}=\mathrm{O} \mathrm{\gamma}
\end{aligned}
$$

2TOOYE.

Note: ecoore (Deut. 28.31) for ecoor; moore (Deut. 23.4) for moor.
b) $\quad \mathbf{V}=\mathbf{H} \quad$ Deut./Jon.: $\mathbf{G}=\mathbf{o \gamma}($ var. $\gamma) \quad$ Acts.: $\mathbf{G}=\gamma$

Deut.: 2вноүе~2внүе, пноүе, 由ноүє.
Jon.: гвноүе.
Acts: пнүє, Фнүе, 2внүє

Table 66: $\mathbf{H}+\mathbf{O} \gamma v s . \gamma$

| OY | Y |
| :---: | :---: |
| ```2вноүе (Deut. 2.7, 5.13, 11.2 х2, 11.4, 11.5, 11.6, 11.7, 12.7, 14.28, 15.10, 16.8, 23.20, 23.21, 26.6, [28.12], 28.20, [29.2], [30.9], 31.29, 32.4 x2, [33.11]) (Jon. 3.10) Deut.: 95% Jon.: 100% Acts:0%``` | 2внү' (Deut. 29.9) <br> 2внүе (Acts $7.22,7.41,19.18,21.19)$ <br> Deut.: 5\% Jon.: 0\% Acts: $100 \%$ |
| пноүе (Deut. 32.43) <br> Deut.: 100\% Jon.: Ø Acts: 0\% | пнүе (Acts 2.34, 7.56) <br> Deut.: 0\% Jon.: $\emptyset$ Acts: $100 \%$ |
| шноүе (Deut. 7.5, 12.3) <br> Deut.: 100\% Jon.: $\varnothing$ Acts: 0\% | 由) $\boldsymbol{\omega}$ е (Acts 17.23) <br> Deut.: 0\% Jon.: $\varnothing$ Acts: $100 \%$ |

c) $\quad \mathbf{V}=\boldsymbol{\lambda}, \mathrm{e} \quad$ Deut./Jon:: $\mathbf{G}=\gamma$ (var. o $\gamma$ ) $\quad$ Acts: $\mathbf{G}=\gamma$ (var. $\mathrm{o} \gamma$ )

меєүе, еүє-.
Note the following:
АҮ̂̂ (Deut. 32.34, 33.7), $\widehat{\wedge} \widehat{\gamma} \omega$ (Deut. 32.40, 33.3)

Table 67: $\boldsymbol{\lambda}, \mathrm{e}+\boldsymbol{\gamma} v s . \mathrm{O} \gamma$

| Y | OY |
| :---: | :---: |
| E $\gamma \hat{\mathbf{\omega}}$ "pledge" (Deut. 24.6, 24.10, 24.12, 24.17) <br> Deut.: 80\% Jon.: Ø Acts: Ø | GOYÔ (Deut. 24.11) <br> Deut.: 20\% Jon.: Ø Acts: Ø |
| andicl) "oaths" | anáƠ̧O (Deut. 29.12) <br> andoł(1) (Deut. 29.14) <br> Deut.: 100\% Jon.: Ø Acts: $\varnothing$ |
| $\begin{aligned} & \text { TAYO }(=)(\text { Acts } 2.11,8.33,15.12,15.25,[16.36], \\ & 19.18,19.31,21.26) \\ & \text { (Deut.: passim }) \\ & \text { Deut.: } 100 \% \text { Jon.: } \varnothing \text { Acts: } 87 \% \end{aligned}$ | TAOYO=9 (Acts 23.30) <br> (CB: TaOYOOY (Acts 15.33)) <br> Deut.: 100\% Jon.: Ø Acts: 13\% |

## APPENDIX 3: PAPYRUS BODMER XVIII

## A. Graphemic forms of the vowel /i/ ( $\boldsymbol{i} \sim \mathbf{e} \mathbf{I} \sim \hat{\mathrm{E}} \sim \mathbf{i})$

Table 68: Typology of the vowel /i/

| Case | Syllabic Context Examples* | P.Bodm. 18 <br> Deuteronomy 1-10.7 | Examples |
| :---: | :---: | :---: | :---: |
| A1 | $\begin{gathered} \#^{\prime} \mathbf{V} \\ \epsilon_{\mathbf{I}} \end{gathered}$ |  | ei~êt cine cipe |
| A2 | $\begin{gathered} \text { \#(')VC } \\ \text { EIC- } \end{gathered}$ | ¢ı | CIC- |
| A3 | $\begin{gathered} (')(C) C V \\ \times .1 \end{gathered}$ | 1 (var. eı) | X.I (1)I CI~CEI C2IME |
| A4 | $\begin{gathered} (')(\mathrm{C}) \mathrm{CVC}(\mathrm{C}) \\ \text { NIM } \end{gathered}$ | 1 (var. ©ı) | NIM X:IN X:IX:NIT |
| A5 | $\begin{aligned} & \text { '(C)GV } \\ & \text { oүeı } \end{aligned}$ | ¢1 | OYel 20Yeite |
| A6 | '(C) GVC ()OYeit | ¢1 | ()OYEIT |

*Examples from classical Sahidic (Chester Beatty - Acts)

Case A1: \#'V $\quad \mathbf{V}=\mathbf{\epsilon l}$ (var. $\widehat{\text { en }} \boldsymbol{i}$ )
At the beginning of a lexeme in an open syllable, including words of Greek origin, the vowel / $\mathrm{i} /$ is represented by the digraph:
ei~ê, eine, eibe, eipe, eime, eiphnh.


Variation: On one occasion only, with the word "to come", the circumflex is placed over the digraph: ${ }^{31}$

فิ (Deut. 1.20) vs. eı (Deut. 1.19, 1.24, 1.31, 1.44, $2.14 \times 2,2.23,2.32,3.1,4.45,4.46$, $6.4,9.7 \times 2,9.15,[10.1,10.5,10.7])$

Biblical names/proper nouns: The exception to this rule occurs with biblical names where $i \boldsymbol{i}$ is regular: їсддк.

31 Kasser (1962c) places the circumflex over the iota in his edition.

The trema is always omitted when prefixed with the singular definite article: пісрднд.

## Case A2 \#(')VC V = $\mathbf{e}$

There is only one example of the vowel /i/ in this environment:
eIC-
Note the vowel beginning a syllable (not a lexeme) which occurs in the following proper nouns:


## Case A3: '(C)CV and CV V=ı (var. eı)

When the vowel /i/ follows a consonant, in an open syllable, it is rendered by the grapeme $\mathbf{i}$ :


 6.19), x:Ixinit.

Variation: The exception to this rule concerns the lexeme cei $\sim \mathbf{c I}$ :
ceı (Deut. 8.10, 8.12) vs. cı (Deut. 6.11).
In Deut. 8.12 it appears that the scribe initially wrote $\mathbf{c ı}$, and then corrected himself, writing the $\epsilon$ over the original $ו$.

## Words of Greek origin:

a) There is some variation in the realisation of the vowel in words of Greek origin. Greek t is consistently rendered with Sahidic ı, whereas Greek $\varepsilon \iota$ is generally transcribed with either eı or I :

- opinh (Deut. 2.37) ỏอعıvŋ́;
- ammanithc (Deut. 2.20) A $\mu \mu \alpha v \varepsilon i ́ t \eta s ; ~$
- micop (Deut. 3.10) Meıбف́@.

Table 69: Greek $\varepsilon \mathrm{t}: \mathrm{C}+\mathrm{e}$ ıss. I

| $\varepsilon \iota>$ eı | $\varepsilon \iota>1$ |
| :---: | :---: |
|  | xilmappoc (Deut. 3.12) $11 \%$ |
| M $\omega \alpha \beta$ вítŋ <br> m@abeithc (Deut. 2.9) $33 \%$ | MOABITHC (Deut. 2.11, 2.29) $67 \%$ |

b) In the case of the $-\varepsilon \in \omega /-\varepsilon$ o $\mu \alpha$ ı contract verb endings the digraph is maintained:


Case A4: '(C)CVC(C) and CVC $\quad \mathbf{V}=\mathbf{1}$ (var. $\mathbf{e}$ ı)
In a closed syllable this rule is strictly followed:


Words of Greek origin: As in the previous case, the scribe observes the Greek orthography, 1 transcribed as $\mathbf{\imath}$, and $\varepsilon \iota$ rendered as $\mathbf{\epsilon}$. The only exception occurs with the lexeme $\pi o ́ \lambda ı \varsigma$, in which case the scribe fluctuates between полic and полеıc.

Table 70: подıс vs. полеıс

| $1>1$ | $1>6 \mathbf{l}$ |
| :---: | :---: |
| ```\piо́\lambdaıs по\lambdaוс (Deut. 1.22, 1.28, 2.36 x2, 3.4, 3.5, 3.10, 3.19, 4.41, 4.42, 6.10, 9.1) 50%``` | ```полеıс (Deut. 2.34 x2, 2.35, 2.36, 2.37, 3.4 x2, 3.5, 3.6, 3.7, 3.10, 3.12) 50%``` |

Case A5: ' $(\mathrm{C}) \mathrm{GV} \quad \mathrm{G}=/ \mathrm{w} / \quad \mathrm{V}=\mathrm{e} \boldsymbol{\prime}$
When the vowel /i/ follows a glide, in an open syllable, the digraph is always employed: oүei, zoүeite.

Case A6: '(C)GVC $\quad \mathrm{G}=/ \mathrm{w} / \quad \mathrm{V}=\mathrm{e} \boldsymbol{\mathrm { l }}$
In a closed syllable the digraph also realises the vowel following a glide: ()OүEIT.
B. Graphemic forms of the glide $/ \mathrm{j} /(\mathfrak{i} \sim \hat{\mathfrak{i}} \sim \mathbf{i} \sim \mathbf{e})$

Table 71: Typology of the glide /j/

| Case | Syllabic Context |  | P.Bodm. 18 <br> Deuteronomy 1-10.7 | Examples |
| :---: | :---: | :---: | :---: | :---: |
| B1 | $\begin{gathered} \text { \#'GV } \\ \text { EICD } \end{gathered}$ |  | Eı (var. $̈ \sim 1)$ | eid eiote |
| B2 | $\begin{gathered} \text { \#'GVC(C) } \\ \text { еıळт } \end{gathered}$ |  | Eı (var. ı) | EIWT |
| B3 | $\begin{gathered} \text { '(C)CGV } \\ 21 \mathrm{H} \end{gathered}$ |  | 1 (var. ©ı) | 21H 2IOME EBIC <br> TAMIO~TAMEIO |
| B4 | '(C)CGVC <br> 2ıEIB |  | 1 | x.100p |
| B5 |  | $\mathrm{V}=\mathrm{H}$ | E1 | Hei |
|  |  | $\mathrm{V}=\mathrm{O}$ | EI | OYOEI MMO=eı |
|  |  | $\mathrm{V}=\omega$ | Ø | $\emptyset$ |
|  |  | $\mathrm{V}=\mathrm{O} \gamma$ | ï | k[OY]ï |
|  |  | $\mathrm{V}=\boldsymbol{\lambda}$ | ï (var. $\hat{\mathbf{I}} \sim \mathbf{1 \sim 6 ı}$ ) | $\Pi \lambda i ̈ ̀ \lambda(1) \lambda i ̈ \sim \lambda() \lambda i ̂ ~ n \lambda=\ddot{i}$ |
|  | $\begin{aligned} & \text { (C)VG\# } \\ & \lambda \ddot{i}- \\ & \text { eï- } \end{aligned}$ | $V=\lambda$ | ï (var. $\hat{\mathrm{I}} \sim \mathbf{\epsilon} \mathbf{\prime}$ ) | $\lambda \ddot{i}-9 \lambda \ddot{i}-\sim 9 \lambda E!-$ |
|  |  | $V=e$ | Eı (var. $\mathfrak{i} \sim \hat{\mathbf{i}}$ ) |  |
| B6 | '(C)VG.CV(C) 2Oïne |  | $\begin{gathered} \mathrm{V}=\mathrm{O} \\ \mathrm{el} \end{gathered}$ | 2OEITE |
|  |  |  | $V=\lambda$ | $\mathrm{C} 2 \mathrm{~A} \ddot{\mathrm{i}}=\mathrm{COY}$ |
| B7 | '(C)VGC\# <br> OGIK |  | €I | MAEIN XOEIT XOEIC |
| B8 | $\begin{gathered} \text { CVC.'GV } \\ \text { PM̄लıH } \end{gathered}$ |  | Ø | $\emptyset$ |
| B9 | '(C)V.GV(C) <br> (C)V.' $\mathbf{G V}$ (C) X. $\boldsymbol{i} \boldsymbol{e}$ |  | ¢1 | Tagie Taeiny xaeie тоүеוн moүeiooye eeıe- |

Case B1: \#'GV

$$
\mathbf{G}=\mathbf{\epsilon}(\text { var. } \ddot{i} \sim \mathbf{\imath})
$$

At the beginning of a lexeme, in an open syllable, the glide is realised $\mathrm{\epsilon}_{\mathrm{I}}$ :


Biblical names/proper nouns: The iota with a trema is regular beginning biblical names: їдкшв, їдвок, їнсоүс.

The initial glide loses the trema when preceded by the definite article:
mop.入.anhc, meboycaioc "the Jebusite".
When preceded by the demonstrative article the iota with the trema remains:
пеєї̈ор.А._лnhc (Deut. 3.27, 4.21, 4.22)
But note the following:


- $2 \overline{\mathrm{n}}$ eiaca (Deut. 2.32) "in Jasa" 'I $\alpha \sigma \sigma \alpha ́$;


Case B2: \#'GVC(C) $\quad \mathbf{G}=\mathbf{e l}$ (var. ו)
At the beginning of a lexeme, in a closed syllable, the glide is expressed with the digraph: еוшт.

With a preformative clitic: Note the following exception: वाлт= (Deut. 3.27, 4.19) for $\mathbf{9 I}$ elat=. Here we find the coalescence of the vowel + glide, resulting in syntagmatic resyllabification: /fi.' 'jat/ > /'fjat/.

Case B3:'(C)CGV $\quad \mathbf{G}=\mathbf{1}$ (var. $\mathbf{\epsilon}$ )
The glide following a consonant, in an open syllable, is rendered by the iota:


Variation: The one exception occurs with the following lexeme:


## Case B4: '(C)CGVC $\quad \mathbf{G}=\mathbf{1}$

The glide following a consonant, in a closed syllable, is also rendered by the iota: x:IOOP.

## Case B5 '(C)VG\# and (C)VG\#

a) Accented syllables '(C)VG\#

$$
\begin{array}{ll}
\mathrm{V}=\mathbf{H}, \mathbf{o} & \mathbf{G}=\mathbf{\epsilon} \mathbf{ı} \\
\mathrm{V}=\mathrm{o} \boldsymbol{\gamma} & \mathbf{G}=\ddot{\mathbf{i}} \\
\mathrm{V}=\boldsymbol{\boldsymbol { \lambda }} & \mathbf{G}=\ddot{\mathbf{i}}(\text { var. } \hat{\mathbf{i} \sim \mathbf{\imath} \sim \mathbf{\epsilon})} \\
\mathrm{V}=\boldsymbol{\omega} & \mathbf{G}=\emptyset
\end{array}
$$

Following the vowels $\boldsymbol{H}$ and $\boldsymbol{o}$ the final glide $/ \mathrm{j} /$, in an accented syllable, is consistently rendered $\epsilon$. There is only one example of the glide following vocalic $\mathrm{O} \gamma$, and here the scribe employs ï. Variation occurs when the vowel a precedes the glide, in which case the scribe favours ï. Occasionally the scribe uses a sort of a circumflex (slightly curved line) where a trema would be expected. This could be a graphic malformation of the trema caused by the scribe writing quickly without lifting the calamus from the papyrus. It is rare at the beginning of the manuscript, but becomes more frequent towards the end. ${ }^{32}$
i) $\quad \mathrm{V}=\mathrm{H}, \mathrm{O} \quad \mathbf{G}=\boldsymbol{\epsilon}$

## Lexical forms:


$1{ }^{\text {st }}$ person singular suffix pronouns:

ii) $\quad \mathrm{V}=\mathrm{o} \gamma \quad \mathbf{G}=\boldsymbol{i}$

к[oү]ï (Deut. 1.17)
$32 \operatorname{Kasser}(1962 \mathrm{c})$, p. 13.
iii) $\quad \mathrm{V}=\boldsymbol{\lambda} \quad \mathbf{G}=\boldsymbol{i}(\operatorname{var} . \hat{\mathbf{I} \sim \mathbf{i} \sim \mathbf{e}})$

Lexical forms:
e2pגї (passim); е2pגî (Deut. 9.7).
c2Aї (Deut.10.4, [10.2]; с2גї $=\operatorname{co\gamma }$ (Deut.5.22, 6.8, 6.9); $\langle\mathrm{c}\rangle 2 \lambda \hat{\mathbf{1}}=\operatorname{co\gamma }$ (Deut.4.13).
2גї (passim).
да) дї (Deut.4.1, 6.3, 7.22, 8.1, $8.13 \times 2$ ); да) גî (Deut.1.11, 8.13).
паї (passim); паі̂ (Deut.7.16, 8.10, 9.3); паı (Deut.4.42, 9.29).
таї (passim); таî (Deut.4.6, 9.5).
naï (passim); naı (Deut.5.1).
But one exception: ©ıaeı (Deut.3.11).
Suffix pronouns:

b) Unaccented preformatives (C)VG\#

$$
\begin{array}{ll}
\mathrm{V}=\mathbf{\lambda} & \mathbf{G}=\boldsymbol{i}(\operatorname{var} . \hat{\mathbf{i}} \sim \mathbf{\epsilon} \mathbf{I}) \\
\mathrm{V}=\mathbf{\epsilon} & \mathbf{G}=\mathbf{\epsilon} \mathbf{I}(\operatorname{var} . \boldsymbol{i} \sim \hat{\mathbf{i}})
\end{array}
$$

When the glide functions as the $1^{\text {st }}$ person singular in the conjugation bases, following the vowels $\boldsymbol{\lambda}$ and $\epsilon$, there is considerable variation. Variation also occurs with the glide in the
 allograph $\ddot{\mathfrak{\sim} \sim i}$ following the vowel $\boldsymbol{\lambda}$, with only a few exceptions. Following the vowel $\mathbf{e}$, however, the optionality is stronger with a preference for the digraph.

Table 72: $1^{\text {st }}$ person singular pronominal subject of verbal conjugations: $\mathbf{\lambda}+\boldsymbol{i} \sim \hat{\sim}$ vs. eı

| Conjugation | $\boldsymbol{\lambda}+\boldsymbol{i} \sim \boldsymbol{i}$ | $\boldsymbol{\lambda}+\mathbf{e l}$ |
| :---: | :---: | :---: |
| Perfect I | $\begin{aligned} & \text { גї- (Deut. } 1.8,[1.9], 1.15,[1.15],[1.16], \\ & {[1.18], 1.23,1.29,1.43,2.9,2.24,2.26,2.31,} \\ & 3.12,3.13,3.15,3.16,3.18,3.21,3.23,5.6, \\ & 5.28,9.9,9.13 \times 2,9.15,9.17 \times 3,9.18,9.21 \\ & \mathrm{x} 5,9.25 \times 2,9.26,10.3,[10.3 \times 2],[10.4]) \\ & \lambda \hat{\mathbf{\imath}}-(\text { Deut. } 4.5) \\ & 94 \% \end{aligned}$ | $\text { גє1- (Deut. } 1.20,3.2)$ $6 \%$ |
| Perfect I Relative / Perfect II | $\begin{aligned} & \text { еNTAї- (Deut. 3.19, 3.20) } \\ & \text { NTAї- (Deut. [1.8], 2.5, 2.19) } \\ & 80 \% \end{aligned}$ | EnTAEI- (Deut. 1.35) entaelopkl extending beyond the right hand margin. $20 \%$ |
| Habitual | $\begin{aligned} & \text { €@) } \mathbf{I I ̈}_{-} \text {(Deut. 5.9, 5.10) } \\ & 100 \% \end{aligned}$ | 0\% |

Table 73: $1^{\text {st }}$ person singular pronominal subject of verbal conjugations: $\mathbf{e}+\ddot{\boldsymbol{i} \sim i ̂} v s$. eı

| Conjugation | $\boldsymbol{\epsilon}+\boldsymbol{i} \sim \boldsymbol{i}$ | $\boldsymbol{\epsilon}+\boldsymbol{\epsilon}$ |
| :---: | :---: | :---: |
| Present Circumstantial / Present II | $\begin{aligned} & \text { €ї- (Deut. 3.21, 3.23, 9.13, 9.25, 9.26) } \\ & \text { €î- (Deut. 9.18) } \\ & 67 \% \end{aligned}$ | eєı- (Deut. [1.9], 1.16, 2.26, 3.18) $33 \%$ |
| Imperfect | $\begin{aligned} & \text { neï- } \\ & 0 \% \end{aligned}$ | $\begin{aligned} & \text { neel- (Deut. 5.5) } \\ & 100 \% \end{aligned}$ |
| Future I Circumstantial/ <br> Future II | $\begin{aligned} & \text { eïnd- (Deut. [1.12], 7.17) } \\ & 20 \% \end{aligned}$ | $\begin{aligned} & \text { E€ina- (Deut. } 2.27 \times 2,2.28 \times 2) \\ & 80 \% \end{aligned}$ |
| Future Imperfect | $\begin{aligned} & \text { (द) Neïnd- (Deut. 9.9) } \\ & 100 \% \end{aligned}$ | 0\% |

Table 74: Variation with demonstrative articles

| $\boldsymbol{\epsilon}+\boldsymbol{\sim} \sim \boldsymbol{i}$ | $\boldsymbol{\epsilon}+\boldsymbol{e l}$ |
| :---: | :---: |
| $\boldsymbol{\Pi \epsilon і ̈ - ~ ( D e u t . ~ [ 1 . 5 ] , ~ 3 . 2 5 , ~ 3 . 2 6 , ~ [ 9 . 2 7 ] , ~ [ 9 . 2 8 ] ) ~}$ $7 \%$ | $\begin{aligned} & \boldsymbol{\Pi \epsilon \in ⿺ - ( \text { Deut. [1.6], } 1 . 3 1 \mathrm { x } 2 , 1 . 3 2 , 1 . 3 5 , 2 . 3 , 2 . 1 4} \\ & \boldsymbol{\Pi}[\mathbf{\epsilon}] \mathbf{\epsilon}-, 3.18,3.21,3.25,3.27,3.28,4.6,4.8,4.21, \\ & 4.22 \times 2,4.32,5.3,5.28,5.31,6.23,7.17,9.4,9.6,9.7, \\ & 9.12,9.13) \\ & 93 \% \end{aligned}$ |
| $\begin{aligned} & \text { теї- } \\ & 0 \% \end{aligned}$ | $\begin{aligned} & \text { Teєı- (Deut. 2.7, 4.32, 5.3, 5.25, 8.17) } \\ & 100 \% \end{aligned}$ |
| $\begin{aligned} & \mathbf{N \epsilon} \uparrow \text { ï- (Deut. } 4.6,4.42,6.6,6.20 \times 2,6.24,6.25,7.11 \\ & \mathrm{x} 2,7.19 \times 2,7.22,9.5) \\ & \mathbf{N} \in \hat{1}-(\text { Deut. } 7.11) \\ & 60 \% \end{aligned}$ | $\text { NGEI- (Deut. 1.35, 4.30, 6.20, 7.12, } 9.4 \times 2)$ $30 \%$ |

Table 75: Variation with the construct participle

| A+ï- | $\boldsymbol{\lambda}+\boldsymbol{\epsilon} \mathbf{l}^{-}$ |
| :---: | :---: |
|  67\% | ```q\e!- (Deut. 5.21 q\\em\\2\overline{B} 33%``` |

## Case B6: '(C)VG.CV(C)

$$
\begin{array}{ll}
\mathbf{V}=\mathbf{O} & \mathbf{G}=\mathbf{\epsilon} \mathbf{I} \\
\mathbf{V}=\boldsymbol{\lambda} & \mathbf{G}=\ddot{\mathbf{i}}
\end{array}
$$

When the glide closes a syllable within a lexeme, the previous rule (Case 5B) is observed, the digraph following O , and $\boldsymbol{i}$ used after the vowel $\boldsymbol{\lambda}$.

```
\sigmaO[GI\lambdaE] (Deut.1.16), roeite (Deut.8.4)
c2Aï=co\gamma (passim)
```


## Case B7: '(C)VGC\# $\quad \mathbf{G}=\boldsymbol{\epsilon}$

In the 'covered' position the digraph is consistently used, even following the vowel $\boldsymbol{\lambda}$, where it is otherwise rendered i (cf. Case 5B).
X.OGIT, OGIK, NOGIK, OYOGIG), (1)OGIG), MAGIN, X:OGIC.

## Case B8: CVC'GV

Ø

## Case B9: '(C)V.GV(C) and (C)V.' $\mathbf{G V}(\mathrm{C}) \quad \mathbf{G}=\boldsymbol{\epsilon}$

The use of the digraph here contrasts to Case B5, where the glide is generally realised ï following the vowels $\lambda$ and $\mathrm{O} \gamma$. In this environment, however, the use of eı could be an extension of Case B1, in this case, beginning a syllable, not a segment.


C．Graphemic forms of the vowel $/ \mathrm{u} /(\mathrm{O} \gamma \sim \gamma)$

Table 76：Typology of the vowel／u／

| Case | Syllabic Context | P．Bodm． 18 <br> Deuteronomy 1－10．7 | Examples |
| :---: | :---: | :---: | :---: |
| C1 | $\begin{gathered} \#(') \mathbf{V} \\ \text { OYNAM } \end{gathered}$ | OY（var．$\gamma$ ） | OY OYNAM OY－OYCDH |
| C2 | （＇）（C）CV MOY | OY | MOүTE $\overline{\text { MпO }}$－тнРО |
| C3 | $\begin{gathered} \text { '(C)CVC(C) } \\ 20 \gamma \mathrm{~N} \end{gathered}$ | OY | G2OYN MOYOY＇T к［OY］ï |

## Case C1：\＃（＇）V <br> $\mathbf{V}=\mathbf{o \gamma}$（var．$\gamma$ ）

At the beginning of a segment the vowel $/ \mathrm{u} /$ is realised $\mathrm{O} \gamma$ ．
OY, OY-, OҮBG, OҮ'NAM, OҮ(C).

In the following cases variation occurs under the influence of certain clitics：
－The indefinite article $\mathrm{O} \gamma^{-}$－is regularly reduced to $-\gamma$－when it is preceded by the preposition e，and the Perfect I conjugation nominal base $\boldsymbol{\lambda}$ ．For example：eүmaein （Deut．6．8），еүноб（Deut．1．28，7．21，9．14），єдүкдкє（Deut．5．22）．
－A few of the lexemes beginning with $O \gamma$ are preceded by the long form of the definite article（оү⿴⿱卄一由八，оүNOY），and in these cases $\gamma$ is regularly used（теүо）н， ñeүnor）．

## Case C2：（＇）（C）CV $\quad \mathbf{V}=\mathrm{O} \gamma$

The vowel is rendered or following a consonant in an open syllable：
моүте，noү＂те，теnoү，cioү；

THP $=0 \gamma$ ．

Case C3：＇（C）CVC（C）$\quad V=O \gamma$
The vowel $/ \mathrm{u} /$ is also rendered $\mathrm{o} \gamma$ following a consonant in a closed syllable．
e2Oү＇N，MOүOү＇т，к［Oү］ï．
D. Graphemic forms of the glide $/ \mathrm{w} /(\mathrm{O} \mathcal{\sim} \sim \gamma)$

Table 77: Typology of the glide /w/

| Case | Syllabic Context |  | P.Bodm. 18 <br> Deuteronomy 1-10.7 | Examples |
| :---: | :---: | :---: | :---: | :---: |
| D1 | $\begin{gathered} \#(') \mathbf{G V} \\ \text { oү } \end{gathered}$ |  | OY | OYג OYEI OYEPHTE |
| D2 | \#(')GVC(C) oүOM |  | OY | OYOM OYOEIC OYN-~OY $\overline{\mathbf{N}}-$ |
| D3 | (C)CGV 2OүEITE |  | Or | 2OYEITE |
| D4 | '(C)CGVC w) C еit |  | OY | a)OYEIT |
| D5 | $\begin{gathered} \text { (')(C)VG(C) } \\ \text { MOOY } \\ \text { TOOY'N } \\ \text { MANOY=OY } \\ \text { THYTN } \\ \text { NAY } \\ \text { חEY- } \\ \text { XOO }=\gamma \end{gathered}$ | $\mathbf{V}=\mathbf{O}$ | OY | MOOY |
|  |  | $\mathbf{V}=\omega$ | OY | TODOYN CAOY' |
|  |  | $\mathbf{V}=\mathrm{O} \gamma$ | $\emptyset$ | $\varnothing$ |
|  |  | $\mathbf{V}=\mathbf{H}$ | $\gamma$ | THYTN̄ CNHY NHY |
|  |  | $\mathbf{V}=\boldsymbol{\lambda}$ | $\gamma$ | NAY |
|  |  | $\mathbf{V}=\boldsymbol{e}$ | $\gamma$ (var. o $\gamma$ ) |  |
|  |  | $\mathbf{V}=\mathbf{O O}$ | $\gamma$ | $x \cdot 00=\gamma$ |
| D6 | (C)V.' $\mathbf{G V}(\mathrm{C})$ <br> '(C)V.GV(C) <br> koore X.IOүе 2внүе A) ${ }^{(1)}$ меєүе | $\mathbf{V}=\mathrm{O}$ | OY | MOYEIOOYE PCOOYE <br> tÉnooye 2100 Үe |
|  |  | $\mathbf{V}=\mathbf{1}$ | OY | x.loye |
|  |  | $\mathbf{V}=\mathbf{H}$ | $\gamma$ (var. o $\gamma$ ) | 2внүе МНОО'е |
|  |  | $V=\lambda$ | $\gamma$ | A) ${ }^{\text {co }}$ |
|  |  | $\mathbf{V}=\mathrm{E}$ | $\gamma$ | meeje |

## Case D1: \#(')GV G=o

At the beginning of a segment, in an open syllable, the glide $/ \mathrm{w} /$ is realised $\mathrm{O} \gamma$.
 оү( $\omega \overline{\mathrm{c}}, ~ о \gamma \omega \omega \overline{\mathrm{~T}}, ~ о Ү \omega \omega \bar{q}$.

Note the following haplography: пек $\langle\mathbf{O}\rangle\rangle \mathbf{O e \prime}$ (Deut. 5.27)

Case D2: \#(')GVC(C) $\quad \mathbf{G}=\mathbf{O} \gamma$
At the beginning of a segment, in a closed syllable, the glide is realised $o \gamma:$
oүadb, oүarcazne (Deut. 6.17, 6.25), oүe2carne (Deut. 5.10, 7.9), oүn-,



OYN-~OY'̄̄-, OYNTE-/OYNTA=~OY'NTE-/OY'̄TA=.

With a preformative clitic: The digraph is maintained in the following cases:

- Converted existential: neorn (Deut. 1.35)
- Converted predication of possession: етеоүнтч (Deut. 4.7), етеоүйтд9 (Deut. 4.8), етеоүӣтакм̄ (Deut. 4.38).
- The lexeme o $\gamma \mathbf{O G I}(1)$ is always preceded by the long form of the definite article: пеоүоеıы (passim).

Coalescence: The sequence $\mathrm{O} \gamma-\mathrm{O} \mathrm{\gamma}$ coalesces to $\mathrm{O} \gamma$ in the following. ${ }^{33}$
Mapo $\langle\langle\boldsymbol{O}\rangle\rangle_{\mathrm{D} 2}$ (Deut. 3.19); єо $\langle\langle\mathrm{O} \gamma\rangle \omega \mathbf{\omega}$ (Deut. 2.6).
Note also: $\lambda \lambda \lambda \lambda \gamma$ (Deut. 4.2) for $\boldsymbol{\lambda \lambda \lambda \lambda}$ o $\gamma^{-}$"but a ..."

## Case D3: '(C)CGV $\quad \mathbf{G}=\mathrm{O} \gamma$

There is only one example of the glide $/ \mathrm{w} /$ following a consonant in an open syllable: 2OYeite.

## Case D4: '(C)CGVC $\quad \mathbf{G}=\mathrm{O} \gamma$

In a closed syllable there is only one example of the glide /w/ following a consonant: woүeIT.

## Case D5: (')(C)VG(C)

$\mathbf{V}=\mathbf{O}, \omega$
$\mathbf{G}=\mathbf{O} \gamma$
$\mathbf{V}=\mathbf{H}$
$\mathbf{G}=\gamma$
$\mathbf{V}=\boldsymbol{\lambda}, \mathrm{e}, \mathrm{OO}$
$\mathbf{G}=\gamma($ var. $\mathrm{O} \gamma)$

[^47]a) $\quad \mathbf{V}=\mathbf{O}, \boldsymbol{\omega} \quad \mathbf{G}=\mathbf{O} \boldsymbol{\gamma}$

Lexical forms:
 coo̧, coo̧n, TOOY, qTOOY, 2OOY, 2OOYT, 2POOY, XOOY,

$3^{r d}$ person pronominal suffixes:

 $2 \mathrm{O}=\mathrm{O} \gamma$.
b) $\quad \mathbf{V}=\mathbf{H} \quad \mathbf{G}=\boldsymbol{\gamma}$

Lexical forms:
THY゙TN̄, 2АТНҮ, СNHY.
Statives:

c) $\quad \mathbf{V}=\boldsymbol{\lambda}$, e, oo $\quad \mathbf{G}=\gamma($ var. $O \gamma)$

Lexical forms:

$3^{\text {rd }}$ person plural suffix pronouns:
HA $=\gamma$, NM̄MA $=\gamma, X, O O=\gamma$.
$3^{\text {rd }}$ person plural pronominal subjects:


Possessive articles:
пеү-, теү-, neү-
Biblical names:
нсду (Deut. 2.4, 2.5, 2.12)

Variation: The only exception occurs with the following lexeme:


## Case D6：＇（C）V．GV and（C）V．＇GV（C）

$$
\begin{array}{ll}
\mathbf{V}=\mathbf{O}, \mathbf{I} & \mathbf{G}=\mathbf{O} \gamma \\
\mathbf{V}=\mathbf{H} & \mathbf{G}=\gamma(\text { var. } \mathbf{O \gamma}) \\
\mathbf{V}=\boldsymbol{\lambda}, \mathbf{\epsilon} & \mathbf{G}=\boldsymbol{\gamma}
\end{array}
$$

a）$\quad \mathbf{V}=\mathbf{O}, \mathbf{I} \quad \mathbf{G}=\mathrm{O} \gamma$
MOү
b）$\quad \mathbf{V}=\mathbf{H} \quad \mathbf{G}=\gamma($ var． $\mathrm{O} \gamma)$
2внүе（Deut．1．30，2．7，5．13，9．7）．
шноүе（Deut．7．5）．
c）$\quad \mathbf{V}=\boldsymbol{\lambda}, \mathrm{e} \quad \mathbf{G}=\gamma$
aү⿴囗⿱一一
меєүе，еүе－．

## APPENDIX 4: PAPYRUS BODMER XXIII

A. Graphemic forms of the vowel $\mathrm{i} /(\boldsymbol{1} \sim \mathbf{E} \boldsymbol{\sim} \sim \widehat{\mathbf{E}})$

Table 78: Typology of the vowel /i/

| Case | Syllabic Context Examples* | P.Bodm. 23 <br> Isaiah 47.1-66.24 | Examples |
| :---: | :---: | :---: | :---: |
| A1 | $\begin{gathered} \text { \#'V } \\ \text { el } \end{gathered}$ | $\boldsymbol{\epsilon 1}$ (var. $\widehat{\text { ¢l }}$ ) | CI~ El eine cipe |
| A2 | $\begin{gathered} \text { \#(')VC } \\ \text { eIC- } \end{gathered}$ | ¢ı | EIC- |
| A3 | $\begin{gathered} (')(C) C V \\ \times: 1 \end{gathered}$ |  | 91 X.I Mice cêl пеıре NI- MпI- |
| A4 | $\begin{gathered} (')(\mathrm{C}) \mathrm{CVC}(\mathrm{C}) \\ \text { NIM } \end{gathered}$ | 1 (var. eı) | NIM |
| A5 | $\begin{aligned} & \text { '(C)GV } \\ & \text { oүeı } \end{aligned}$ |  | orê oreine |
| A6 | '(C)GVC ()OYeit | €I | (1) <br>  |

*Examples from classical Sahidic (Chester Beatty - Acts)

Case A1: \#'V $\quad \mathbf{V}=\mathbf{\epsilon l}$ (var. $\widehat{\text { ê~ }}$ )
At the beginning of a lexeme, in an open syllable, the vowel /i/ is represented by the digraph el.
ei~ê, cipe, eime, eine, eibe, ei.入.Dion, eiphnh.

Variation: In the case of the verb "to come" this scribe generally places a circumflex over the digraph ( $\widehat{\mathrm{Cl}}$ ). ${ }^{34}$

Table 79: \#eı vs. Єิ

| EI | © |
| :---: | :---: |
| $\begin{aligned} & \mathrm{\epsilon}(\text { Isa. } 50.2,60.7,63.4,63.14,[66.7],[66.23]) \\ & 27 \% \end{aligned}$ | $\begin{aligned} & \text { فı (Isa. 48.1, 48.3, 48.5, 49.18, 56.1, 59.14, 60.1, 60.4, } \\ & 62.1,63.4,66.5) \\ & 73 \% \end{aligned}$ |

34 In the edition of Kasser (1965) the circumflex is placed over the iota only.

With a preformative clitic: On one occasion the epsilon is dropped when preceded by the definite article:

пıве "the thirst" (Isa. 50.2).

Biblical names/proper noun: "Israel" always occurs with the definite article:
пІсрднд, пінл.

Case A2 \#(')VC $\quad \mathbf{V}=\boldsymbol{\epsilon} \mathbf{I}$
There is only one example of the vowel /i/ in this environment:
eı--

Case A3: '(C)CV and CV $\quad \mathbf{V}=\mathbf{I}$ (var. $\mathrm{e} \boldsymbol{\mathrm { I }} \sim \mathrm{e} \mathbf{i}$ )
When the vowel /i/ follows a consonant, in an open syllable, it is generally realised $\mathbf{i}$ :
api, kibe, mine, mice, mide, pekpike, pime, cmine, crime, aine, ©ine, qi,


Variation: The exception to this rule concerns the lexeme cel, which is always written with the digraph carrying a circumflex:
cề (Isa. 55.2, 56.11, 58.11, [66.11]); cêı (Isa. 65.15).
Another exception is пеıिе "light/shining" and its alternative unusual spelling:
$\overline{\Pi р} \in \iota \in\left(\right.$ Isa. 60.19) vs. пеıре (Isa. 60.3). ${ }^{35}$

Words of Greek origin: The Greek orthography is generally respected.
a) Greek ı > Sahidic ı. For example:
a $\quad$ PION, AIXMAADTIZE, ANOMIA, ГILAC, AAIMONION, AIAOHKH, AIKAIOC,
 өaibe, eүcia, eүciacthpion, кגнponomia, кpiкос, кpine, кpici[c], крітнс, גIbanoc, mactirえ, mepic, mүpCinh, oүpion, mapa.aid.oү,
 MA.入.I2дM, CגMApIA.

35 Crum (1939), p. 267a: пеıре, пı. $S$, also прре $S$, пррıе $A$, прреıе, прıє $A^{2}$.
b) Greek $\varepsilon \iota>$ Sahidic $\epsilon ı$ :

АПЕІАН, ПАРААеІСОС, САППЕІРОС, СТЕІРА.
But note the exception: cicin (passim) $\sum \varepsilon \varepsilon^{\prime} \omega v$.
In the following domain the iota renders Greek $\varepsilon \varepsilon$ :
 (Isa. 57.9) торvєí $;$ Note: вонөiд (Isa. 50.9) for вонөєı.
c) In the case of the $\varepsilon \in \omega / \varepsilon \varepsilon^{\circ} \mu \alpha$ । contract verb endings the digraph is maintained except in two instances:
 zбгрдфєı, косм[єı], лүпеı, паракдлєı.

Table 80: Greek $\varepsilon$ ı: $\mathrm{C}+\mathrm{\epsilon} \mathbf{\imath} v s . \mathbf{I}$ (verb endings)

| $\varepsilon ı>$ eı | $\varepsilon ı>1$ |
| :---: | :---: |
| $\kappa \lambda \eta \varrho о v о \mu \varepsilon ́ \omega$ <br> Кднропомеı (Isa. 49.8, 53.12, 54.3, 58.11, 60.21, 61.7, $65.9 \times 2$ ) <br>  90\% | Клнропомі (Isa. 57.13) $10 \%$ |
| $\kappa \alpha \tau \alpha \pi \alpha \tau \varepsilon ์ \omega$ | КАТАПАТı (Isa. 63.6) 100\% |

d) Greek $\varepsilon>$ Sahidic el:

2үпомеınе (Isa. 59.9, 60.9, 64.3 e placed over the ı) $\dot{\pi} \pi о \mu \varepsilon ́ v \varepsilon \omega$.

Case A4: '(C)CVC(C) and CVC $\quad \mathbf{V}=\mathbf{i}$ (var. $\mathbf{e} \mathbf{\prime}$ )
In a closed syllable the vowel is rendered $ו$.
 X:IN, X:INX:H, GIX.

Words of Greek origin: As in Case A3, the Greek orthography is generally observed, with the following exception:

өגI 母

## Case A5: '(C)GV $\quad \mathrm{G}=/ \mathrm{w} / \quad \mathbf{V}=\mathbf{\epsilon} \mathbf{l}$ (var. $\widehat{\mathrm{e}} \mathbf{\mathrm { l }}$ )

When the vowel /i/ follows a glide the digraph is employed, carrying a circumflex on two occasions:
oүeine, 入eүеith[c] (Isa. 66.21) ^cvítas;


Case A6: '(C)GVC

$$
\mathrm{G}=/ \mathrm{w} / \text { or } / \mathrm{j} / \quad \mathbf{V}=\mathbf{\epsilon} \mathbf{l}
$$

In a closed syllable, as in the previous case, the digraph realises the vowel.

B. Graphemic forms of the glide $/ \mathrm{j} /(\mathbf{e} \mathbf{I} \sim \ddot{\sim} \sim \mathbf{q} \sim \widehat{\mathbf{e}})$

Table 81: Typology of the glide $/ \mathrm{j} /$

| Case | Syllabic Context |  | P.Bodm. 23 <br> Isaiah 47.1-66.24 | Examples |
| :---: | :---: | :---: | :---: | :---: |
| B1 | $\begin{gathered} \text { \#'GV } \\ \text { EIGD } \end{gathered}$ |  | eı (var. ı~i) | eid eiote |
| B2 | $\begin{gathered} \text { \#' } \mathbf{G V C}(\mathrm{C}) \\ \text { еІФт } \end{gathered}$ |  | Eı (var. ï) | EIDT |
| B3 | $\begin{gathered} \text { '(C)CGV } \\ 2 \mathbf{2 1 H} \end{gathered}$ |  | 1 | 21H TCIETAMIO |
| B4 | '(C)CGVC <br> 21EIB |  | 1 | X.IOOP 21EIB 2leit cioyp |
| B5 |  | $\mathrm{V}=\mathbf{H}$ | El (var. © $\mathrm{el}_{\text {) }}$ | неı~не̂ ¢) |
|  |  | $\mathrm{V}=\mathrm{O}$ | eı (var. $\ddot{\sim} \sim \mathbf{1}$ ) |  |
|  |  | $\mathrm{V}=\omega$ | ¢1 |  |
|  |  | $\mathrm{V}=\mathrm{O} \gamma$ | Eı (var. ï) | коүеı nor=ï |
|  |  | $\mathrm{V}=\boldsymbol{\lambda}$ |  |  |
|  | $\begin{gathered} \text { (C)VG\# } \\ \text { גї- } \\ \text { eï- } \end{gathered}$ | $V=\lambda$ | Eı (var. $1 \sim 1$ ) | $\lambda E I-\sim \lambda \ddot{i}-9 \lambda \ddot{i}-$ |
|  |  | $V=\boldsymbol{\epsilon}$ | ¢ı (var. ف̂~i') | еЄı- п¢Єı-~пеї- |
| B6 | '(C)VG.CV(C) 2OÏne |  | El (var. ï) | 2OEITE 2גEIBEC~OגÏвеС |
| B7 | '(C)VGC\# OGIK |  | €ı | MAEIN MOEIT X XOEIC |
| B8 | CVC. 'GV PM̄еін |  | Ø | Ø |
| B9 | '(C)V.GV(C) <br> (C)V.'GV(C) x.גїє |  | Eı (var. ï) | naeiô Taeihoy xacie тоүеıн moүeiooye eeı (e)наїдT= |

## Case B1: \#'GV G=eı (var. $1 \sim \mathbf{\sim}$ )

At the beginning of a lexeme, in an open syllable, the glide $/ \mathrm{j} /$ is realised $\mathrm{\epsilon}_{\mathrm{I}}$.
еід, еіоте, еідт=e, eiepo.

With a preformative clitic: The iota replaces the digraph in the following lexeme when preceded by the definite article (cf. also $C B$ and $B L$ Acts 16.13 ).

пееро "the river"(Isa. 48.18) vs. neıераоү "the rivers" (Isa. 50.2)

Biblical names/proper nouns: The iota with a trema is regular beginning biblical names:
їдк $\omega$ в (Isa. 48.1, 48.20, 49.5, 49.6, 49.26, 58.1, 59.20, 65.9) [І]дк $\omega[$ в] (Isa. 48.12),
But: ıдкав (Isa. 58.14);
їоү.入. ( (Isa. 48.1, 65.9).
The trema is normally omitted in biblical names with the definite article. But note the one exception:


Case B2: \#' $\mathbf{G V C}(\mathrm{C}) \quad \mathbf{G}=\mathrm{el}$ (var. ï)
At the beginning of a lexeme, in a closed syllable, the glide is represented by the digraph:
eict.

Variation: Note the following Copto-Greek lexeme:
їдспис (Isa. 54.12).

## Case B3: '(C)CGV <br> $$
\mathbf{G}=\mathbf{1}
$$

The glide following a consonant, in an open syllable, is always rendered with a iota:



## Case B4: '(C)CGVC $\quad \mathbf{G}=\mathbf{I}$

The glide following a consonant, in a closed syllable, is also always rendered with a iota:
X.IOOP (< EIOOP), 216IB, 216IT, CIOYP.

## Case B5:'(C)VG\# and (C)VG\#

a) Accented syllables '(C)VG

$$
\begin{aligned}
& \mathrm{V}=\mathbf{H} \quad \mathbf{G}=\mathbf{\epsilon} \mathbf{\imath}(\text { var. } \widehat{\mathrm{e}} \mathrm{I}) \\
& \mathrm{V}=\mathrm{O} \quad \mathbf{G}=\mathrm{el}(\text { var. } \mathrm{i} \sim \mathbf{l}) \\
& \mathrm{V}=\mathrm{\omega} \quad \mathbf{G}=\mathrm{e} \boldsymbol{I} \\
& \mathrm{~V}=\mathrm{o} \gamma \quad \mathrm{G}=\mathrm{\epsilon} \boldsymbol{\mathrm { I }} \text { (var. ï) } \\
& \mathrm{V}=\boldsymbol{\lambda} \quad \mathbf{G}=\boldsymbol{\mathbf { i }}(\text { var. } \mathbf{\imath} \sim \mathbf{\epsilon} \mathbf{I})
\end{aligned}
$$

The final glide following the vowels $\mathbf{H}, \mathrm{O}, \mathrm{\omega}$ and $\mathrm{O} \gamma$, in accented syllables, is generally represented by the allograph $\mathbf{\epsilon} \mathbf{I}$, the variant $\boldsymbol{i}$ occasionally being used after the vowel o , and the circumflex covering the digraph sometimes appearing after $\mathbf{H}$. On the other hand, following the vowel $\boldsymbol{\lambda}$, the glide is realised $\ddot{\boldsymbol{i}}$ (var. $\boldsymbol{\epsilon} \boldsymbol{\iota}^{\mathbf{I}}$ ).
i) $\quad \mathrm{V}=\mathbf{H} \quad \mathbf{G}=\mathbf{e l}($ var. $\mathrm{e} \mathbf{l})$


| EI | © |
| :---: | :---: |
| $\begin{aligned} & \text { ()Heı (Isa.51.1) } \\ & 100 \% \end{aligned}$ |  |
| $\begin{aligned} & 2 \mathrm{TH}=\mathbf{\epsilon 1}(\text { Isa. 63.5) } \\ & 100 \% \end{aligned}$ |  |
| $\begin{aligned} & \text { H€ı (Isa. 48.1, 56.5, } 56.7 \mathrm{x} 2,58.1,60.7 \mathrm{x} 3,63.7, \\ & 64.10,66.1,66.20) \\ & 71 \% \end{aligned}$ | $\begin{aligned} & \text { H仑̂ }(\text { Isa. } 56.7,58.7 \times 3,65.21) \\ & 29 \% \end{aligned}$ |

ii) $\quad \mathrm{V}=\mathrm{O} \quad \mathbf{G}=\mathrm{el}($ var. $\ddot{\mathrm{i} \sim \mathbf{l}})$

Table 83: V=O G=eı vs. $\ddot{\mathrm{i} \sim \mathbf{1}}$

| EI | $\ddot{\sim} \sim 1$ |
| :---: | :---: |
| $\begin{aligned} & \text { TMAEIO=Cı (Isa. 50.8) } \\ & 100 \% \end{aligned}$ |  |
| $\begin{aligned} & \mathrm{\Theta} \overline{\mathrm{M} K \mathrm{O}=\mathrm{\epsilon I}}(\text { Isa. } 50.9) \\ & 100 \% \end{aligned}$ |  |
| $\begin{aligned} & \text { noeı (Isa. 47.7) (voعĩv) } \\ & 100 \% \end{aligned}$ |  |


| EI | i~1 |
| :---: | :---: |
| © $\mathbf{B O G I}$ (Isa. $51.5 \times 2,51.9,53.1,59.16,63.12$ ) $67 \%$ | $\begin{aligned} & \text { बвої (Isa. } 52.10,63.5) \\ & \text { बвот (Isa. 62.8) } \\ & 33 \% \end{aligned}$ |
| $\begin{aligned} & \overline{\mathrm{M}} \mathrm{MO}=\mathrm{C} \mathbf{I}(\text { Isa. } 50.2,57.8,58.2,65.1,65.5) \\ & 71 \% \end{aligned}$ | $\begin{aligned} & \overline{\mathrm{M}} \mathrm{MO}=\mathrm{Z}(\text { Is } a .65 .11) \\ & \overline{\mathrm{M}} \mathrm{MO}=\mathrm{I}(\text { Isa. } 49.5,[61.10]) \\ & 29 \% \end{aligned}$ |
| $\begin{aligned} & \mathrm{ePO}=\mathrm{C} \quad \text { (Isa. } 48.16,49.1 \mathrm{x} 2,49.20,50.2,50.4,50.8 \\ & \mathrm{x} 3,50.9,51.1,51.4,51.5,51.7,55.2,55.3,57.11, \\ & 57.13,65.1,65.5,66.4) \\ & 91 \% \end{aligned}$ | $\begin{aligned} & \text { €PO=ï (Isa. 48.12) } \\ & \text { €PO=i (Isa. 49.26) } \\ & 9 \% \end{aligned}$ |

iii) $\quad \mathrm{V}=\mathrm{\omega} \quad \mathbf{G}=\mathbf{\epsilon} \quad$
$1^{\text {st }}$ person singular suffix pronouns:
$N C O=\epsilon 1, P D=\epsilon 1, \epsilon X,(D=\epsilon 1$.
iv) $\quad \mathrm{V}=\mathrm{O} \gamma \quad \mathbf{G}=\mathbf{e} \mathbf{\prime}($ var. ï)

Lexical forms:
MOYEI, KOYEI, MNTKOYEI.
$1^{\text {st }}$ person singular suffix pronouns:

$$
\text { nOY }=\ddot{i} \text { "mine" (Isa. 66.2) }
$$

v) $\quad \mathrm{V}=\boldsymbol{\mathbf { \lambda }} \quad \mathbf{G}=\boldsymbol{i}($ var. $\mathbf{I} \sim \mathbf{E} \mathbf{l})$

Lexical forms:


Table 84: OYX. $\boldsymbol{\lambda} \ddot{\sim} \sim O Y X, \lambda ı$ vs. OYX.גEı

| i~1 | EI |
| :---: | :---: |
| ```оүхх.лї (Isa. 49.6, 49.8, 49.24, 49.25, 51.5, 51.8, 51.14, 52.7, 52.10, 56.1, 59.11, 60.6, 60.18, 61.10, 63.8) OY:X.גו (Isa. 51.6, 59.17, [62.1], 63.1) 95%``` | oyx. $5 \%$ |

Table 85: Variation with demonstrative pronouns

| i~1 | EI |
| :---: | :---: |
| $\begin{aligned} & \text { плї (Isa. 48.20, 49.4, 49.6, 49.15, 50.7, 51.7, 52.6, } \\ & 53.12,54.9,57.10,[59.9], 61.1,64.5,65.5,65.8, \\ & 65.13,65.16) \\ & 100 \% \end{aligned}$ |  |
| $\begin{aligned} & \text { тגї (Isa. 47.15, 48.17, 49.5, 49.7, 49.8, 49.22, 49.25, } \\ & 50.1,51.1,51.16,52.14,54.10,55.11,61.11,62.5, \\ & 63.12,63.14 \text { т } \lambda \ddot{1}, 65.8,66.1,66.13) \\ & \text { Tגı (Isa. } 55.9) \\ & \text { Tג! (Isa. } 62.5,66.22) \\ & 82 \% \end{aligned}$ | Taeı (Isa. 58.5, 58.6, 59.21, 61.7, 64.5) $18 \%$ |
| ```Naï (Isa. 47.7, 47.8, [47.10], 48.11, 48.16, 49.12, 49.21 x3, 50.11, 51.6, 51.12, 52.5 x2, 56.1, 56.2, 56.4 x2, 57.6, 57.10, 57.12, 57.13,[57.15], 60.8, [61.9], 62.6, 64.11, 65.7, 65.13, 66.2 x2, 66.3, 66.5, [66.12], 66.19) 94%``` | naei (Isa. 58.14) <br> natı (Isa. 48.1 - $\mathbf{\epsilon} \mathbf{I}$ inserted over the $\boldsymbol{\lambda}$ ) $6 \%$ |

$1^{\text {st }}$ person singular suffix pronouns:

Table 86: $\mathbf{N} \boldsymbol{A}=\boldsymbol{\mathrm { F }} \sim \mathbf{N} \mathbf{A}=\mathbf{I}$ vs. $\mathbf{N} \mathbf{A}=\boldsymbol{\epsilon}$ !

| $\ddot{\sim} \sim 1$ | EI |
| :---: | :---: |
| $\begin{aligned} & \mathbf{N} \mathbf{A}=\mathrm{i} \text { "to/for me" (Isa. } 48.5 \mathrm{x} 2,49.3,49.5,49.6 \times 2, \\ & 49.20,49.21 \mathrm{x} 3,50.4 \times 2,50.7,54.17,58.4,65.8,65.13 \\ & \mathrm{x} 3,65.14,65.15,66.1,[66.3], 66.20,66.21) \\ & \text { NaI (Isa. 66.3) } \\ & 96 \% \end{aligned}$ | $\mathbf{N} \mathbf{A}=\mathbf{E} \mathbf{I}(\text { Isa. } 65.3)$ $4 \%$ |

b) Unaccented preformatives (C)VG

$$
\begin{array}{ll}
\mathrm{V}=\boldsymbol{\lambda} & \mathbf{G}=\text { Glide } \mathrm{\epsilon}_{\mathbf{I}}(\text { var. } \ddot{\mathrm{i} \sim \mathbf{l})} \\
\mathrm{V}=\mathbf{\epsilon} & \mathbf{G}=\text { Glide } \mathrm{\epsilon}_{\mathbf{I}}\left(\text { var. } \widehat{\mathrm{e}_{\mathbf{l}} \sim \mathbf{i}}\right)
\end{array}
$$

In contrast to the representation of the glide following the vowel $\boldsymbol{\lambda}$ in accented syllables where the scribe prefers the allograph $\ddot{\mathrm{i}}$, in unaccented syllables, namely, the demonstrative articles and the $1^{\text {st }}$ person singular conjugation prefixes, there is a distinct preference for the el allograph following $\boldsymbol{\lambda}$ and also $\epsilon$, with variation occurring more frequently following $\boldsymbol{\lambda}$. On the other hand, the glide in the construct participle $9 \boldsymbol{\lambda} \ddot{\mathbf{i}}$ - is consistently rendered by the allograph ï (Isa. 57.9, $63.9 \times 2$ ).

Table 87: $1^{\text {st }}$ person singular pronominal subject of verbal conjugations: $\mathbf{\lambda}+\boldsymbol{i} \sim \mathbf{I} v s$. eı

| Conjugation | $\boldsymbol{\lambda}+\boldsymbol{i} \sim \mathbf{1}$ | $\boldsymbol{\lambda}+\mathbf{E}$ |
| :---: | :---: | :---: |
| Perfect I | $\begin{aligned} & \lambda \ddot{i}-(\text { Isa. } 48.14-\ddot{\mathrm{I}} \text { above the } \lambda, 48.14, \\ & 48.15,49.8,50.1 \mathrm{x} 2,50.2,50.7,55.4, \\ & 60.15,63.3 \times 2,65.1,65.2,65.12) \\ & \text { גı- (Isa. 47.6, [47.6], 49.4, 51.16, } \\ & [57.18]) \\ & \lambda(\imath\rangle-(\text { Isa. } 48.8,63.6) \\ & 27 \% \end{aligned}$ | $\begin{aligned} & \text { גEI- (Isa. } 48.3 \times 2,48.5,48.6, \\ & 48.10 \times 2,48.15 \times 2,48.17,49.4 \times 2, \\ & 49.6,49.7,49.8 \times 2,49.16,50.2, \\ & 50.6,50.7,51.2 \times 4,51.3 \times 2,54.7, \\ & 54.8 \times 2,54.16,57.17 \times 3,57.18 \times 3, \\ & 60.10 \times 2,60.15,62.6,63.3,63.5 \times 2, \\ & 63.6 \times \epsilon!, 63.7,65.1,65.12,66.4 \times 2, \\ & 66.9) \\ & 73 \% \end{aligned}$ |
| Perfect I Relative / Perfect II | $\begin{aligned} & \text { (-)еnTaï- (Isa. 50.1, 51.16, 57.16) } \\ & \text { пеn[TAI]- (Isa. 66.9) } \\ & 30 \% \end{aligned}$ | $\begin{aligned} & \text { NTAEI- (Isa. } 48.16,58.6) \\ & \text { NTAEI- (Isa. } 50.1) \\ & \text { ENTAEI- (Isa. } 54.9,55.11,58.5, \\ & 59.21) \\ & 70 \% \end{aligned}$ |

Table 88: $1^{\text {st }}$ person singular pronominal subject of verbal conjugations: $\mathrm{e}+\boldsymbol{i} v s$. eı $\sim \widehat{\epsilon}$

| Conjugation | $\mathbf{e}+\mathbf{i}$ | $\mathbf{\epsilon}+\mathbf{\epsilon 1 \sim} \mathbf{\epsilon}$ |
| :---: | :---: | :---: |
| Present Circumstantial / Present II | ¢ï- | $\begin{aligned} & \text { €€ı- (Isa. 47.7, } 47.8 \text { €€ı-, } 48.14, \\ & 49.1,52.7,57.10,63.1) \\ & 100 \% \end{aligned}$ |
| Imperfect | neï- | $\begin{aligned} & \text { neeı- (Isa. 48.16, 49.21) } \\ & 100 \% \end{aligned}$ |
| Adhortative (Future III) Negative $\overline{\mathrm{N}} \mathbf{N} \boldsymbol{\lambda}$ | nneï- | $\begin{aligned} & \text { N̄neeı- (Isa.65.8) } \\ & 100 \% \end{aligned}$ |
| Conditional | Eïc)an- | $\begin{aligned} & \text { eЄId)AN- (Isa. 57.11) } \\ & 100 \% \end{aligned}$ |
| Future I Circumstantial/ Future II | eïnd- | $\begin{aligned} & \text { eєind- (Isa. 66.2) } \\ & \text { cêma- (Isa. } 57.16 \times 2) \\ & 100 \% \end{aligned}$ |

Table 89: Variation with demonstrative articles

| $\boldsymbol{e}+\boldsymbol{i}$ | $\mathbf{e}+\mathbf{e l}$ |
| :---: | :---: |
| $\begin{aligned} & \Pi \epsilon і ̈-(\text { Isa. 65.3) } \\ & 14 \% \end{aligned}$ | $\begin{aligned} & \boldsymbol{\Pi \epsilon \epsilon ⿺ - ( I s a . 4 7 . 9 , ~ 5 2 . 5 , ~ 5 2 . 6 , ~ 5 7 . 3 , ~ 6 6 . 9 ) ~} \\ & \Pi \epsilon І-\text { corrected to п€€ı- by inserting € above (Isa. 62.4) } \\ & 86 \% \end{aligned}$ |
| Tеї- $0 \%$ | $\begin{aligned} & \text { Tеєı- (Isa. 48.14, 52.15, 53.7, } 57.20 \text { Tе[е]ı-, 58.5, 63.1, } \\ & 65.8,65.22) \\ & {[\text { Isa. } 66.8 \times 2]} \\ & 100 \% \end{aligned}$ |
| $\begin{aligned} & \text { neï- } \\ & 0 \% \end{aligned}$ | $\begin{aligned} & \text { neel- (Isa. 49.12) } \\ & 100 \% \end{aligned}$ |

## Case B6: '(C)VG .CV(C)

$\mathbf{G}=\mathbf{\epsilon}$ (var. ï)
The only case where the glide is rendered by $i \boldsymbol{i}$, it follows the vowel $\boldsymbol{\lambda}$.

2деівес~Oдївєс.
Table 90: 2деıвес vs. өдївес

| EI | ï |
| :---: | :---: |
| 2גеівес (Isa. 51.16, 57.5) <br> 67\% | ```Өдївєс "the shade"(Isa.49.2) \Theta[\lambdaI] BGC (Isa. 51.16)(or O[\lambdaEI]b\inC) 33%``` |

Case B7: '(C)VGC\# $\quad \mathbf{G}=\boldsymbol{\epsilon}$
In the 'covered' position the digraph is regular.
MOEIT, COGIT, OGIK, NOGIK, NỌGIT, OYOGIN, OYOEIC), (1)OEIC), TAC)GOGIC),
TOGIC, 2OGIM, XOGIC, MAEIN, 2KAGIT.

## Case B8: CVC'GV

Ø

Case B9: '(C)V.GV(C) and (C)V.' $\mathbf{G V}(\mathrm{C}) \quad \mathbf{G}=\mathrm{e} \quad$ (var. ii)
The intervocalic glide is rendered with the digraph, with one exception:
tagihoy, tmacio=, tmaeie-, xacie, naeiô, toyeio;
eeı〈 $\mathrm{\epsilon}\rangle$ (Isa. 49.20) Adhortative base.
But: плїдт= (Isa.56.2).
C. Graphemic forms of the vowel $/ \mathrm{u} /(\mathrm{O} \gamma \sim \gamma)$

Table 91: Typology of the vowel /u/

| Case | Syllabic Context | P.Bodm. 23 <br> Isaiah 47.1-66.24 | Examples |
| :---: | :---: | :---: | :---: |
| C1 | \#(')V <br> OYNAM | OY (var. Y') | OY OYNAM OY- |

## Case C1 \#(')V <br> $\mathbf{V}=\mathbf{o} \gamma($ var. $\gamma)$

At the beginning of a segment the vowel $/ u /$ is realised $o \gamma$ :

```
OY, OY-, OYBH=, OYNOY, OYNOq, OYNAM, OY'\M (OY}\overline{2M})\mathrm{ , OY'OOP (OY2OOP
pl.), OY2\overline{M}, OYXA\ddot{~OYXXAEI.}
```

In the following cases variation occurs under the influence of certain clitics:

- The indefinite article $O \gamma^{-}$- is reduced to $-\gamma^{-}$when it is preceded by the preposition $\epsilon$, and the Perfect I conjugation nominal base $\boldsymbol{\lambda}$. For example:

(Isa.63.14), дүс2ıме-† (Isa.66.8);
But note the one possible exception: [E]OүMNT][op]фanoc (Isa. 47.8).
- A few of the lexemes beginning with $O Y$ are preceded by the long form of the definite article, one of which occurs in this manuscript ( O NO $\gamma$ ), and in this case $\gamma$ is regularly used (ñeүnoy).
- Note that the short form of the definite article is used with oү:xגi:̈: thus, поү:x:aï (Isa. 52.7).
- The sequence $\mathrm{O} \gamma-\mathrm{O} \gamma$ (initial or lexeme preceded by the indefinite article) sometimes coalesces to $\mathrm{O} \gamma:{ }^{36}$



[^48]（Isa．59．7），〈оү〉ОүのTN（Isa．65．11），$\overline{\mathbf{N}}\langle\mathbf{O} \gamma\rangle \mathbf{O} \gamma \mathbf{N O q}$（Isa．66．20）and possibly $\boldsymbol{2} \boldsymbol{\Pi}\langle\mathrm{O}\rangle\rangle \mathbf{O} \gamma \mathbf{O} \mathbf{I n}$（Isa．60．1）＂the light＂or＂your light＂（as in the Greek），and пе̣oүoeın（Isa．60．3）．${ }^{37}$

## Case C2（＇）（C）CV $\quad V=0 \gamma$

The vowel is always rendered $o \gamma$ following a consonant in an open syllable．



```
THP=O
```


## Case C3＇（C）CVC（C）$\quad \mathbf{V}=\mathbf{o}$

The vowel is always rendered or following a consonant in a closed syllable：
E2OYN，MOYT，MOYEI，KOYEI，CIOYP，MOYEI，$\overline{\text { MNTKOYEI，NOY＝̈̈．}}$

[^49]D．Graphemic forms of the glide $/ \mathrm{w} /(\mathrm{O} \gamma \sim \gamma)$

Table 92：Typology of the glide／w／

| Case | Syllabic Context |  | P．Bodm． 23 <br> Isaiah 47．1－66．24 | Examples |
| :---: | :---: | :---: | :---: | :---: |
| D1 | $\begin{gathered} \#(') \mathbf{G V} \\ \text { oץ } \end{gathered}$ |  | OY（var．$\gamma$ ） | o̧d oүêl o̧ephte |
| D2 | $\begin{gathered} \#(') \mathbf{G V C}(\mathrm{C}) \\ \text { oү⿴囗口⿰亻 } \end{gathered}$ |  | OY（var．$\gamma$ ） | OYOM OYOEIC） OY＇$\overline{\mathbf{N}}-$ |
| D3 | （C）CGV 2OүEITE |  | OY | ［2］OYO |
| D4 | ＇（C）CGVC woүeIT |  | OY | （）OYEIT |
| D5 | $\begin{gathered} \text { (')(C)VG(C) } \\ \text { MOOY } \\ \text { TOOY'N } \\ \text { MANOY=OY } \\ \text { THYTN } \\ \text { NAY } \\ \text { חGY- } \\ \text { XOO=Y } \end{gathered}$ | $\mathbf{V}=\mathrm{O}$ | OY | MOOY 200\％200Y＇T |
|  |  | $\mathbf{V}=\omega$ | OY | TQOOY＇EIEPCDOY PPPDOY |
|  |  | $\mathbf{V}=\mathrm{O} \gamma$ | $\emptyset$ | $\varnothing$ |
|  |  | $\mathbf{V}=\mathbf{H}$ | OY（var．$\hat{\gamma} \sim \gamma$ ） |  |
|  |  | $\mathbf{V}=\boldsymbol{\lambda}$ | $\gamma$（var． $\mathrm{O} \gamma$ ） | nay eneof |
|  |  | $\mathbf{V}=\mathrm{e}$ | $\gamma$ | пе $\gamma^{-}$ |
|  |  | $\mathbf{V}=\mathrm{OO}$ | $\gamma$ | $x \cdot 00=\gamma$ |
| D6 | （C）V．＇ $\mathbf{G V}(\mathrm{C})$ <br> （C）V．GV（C） <br> кооүе <br> x．ioye <br> 2внүе <br> А）${ }^{\circ}$ <br> meeje | $\mathbf{V}=\mathrm{O}$ | OY |  |
|  |  | $\mathrm{V}=\mathbf{1}$ | OY | X．IOYA |
|  |  | $\mathbf{V}=\mathbf{H}$ | $\gamma$（var．$\hat{\gamma} \sim 0 \gamma$ ） | 2В ${ }^{\text {¢ }}$ |
|  |  | $\mathbf{V}=\boldsymbol{\lambda}$ | $\gamma$ | А）${ }^{(1)}$ |
|  |  | $\mathbf{V}=\mathrm{e}$ | $\gamma$ | meģe～meye eyol |

## Case D1: \#(')GV G=o (var. $\gamma$ )

At the beginning of a segment, in an open syllable, the glide is realised $\mathrm{o} \gamma$ :

 оүOM $=$, оүОбп $=$.

Variation with a preformative clitic:

$\overline{\mathrm{N}}+(\mathrm{O} \gamma\rangle \mathbf{\lambda \omega}) \mathrm{O} \gamma$ (Isa. 66.4) - haplography.

Case D2: \# (')GVC(C)

$$
\mathbf{G}=\mathrm{o} \mathrm{\gamma}(\text { var. } \gamma)
$$

As in case D1, the glide is graphically expressed with the digraph beginning a segment in a closed syllable:


 oyox.

With a preformative clitic: Variation occurs under the influence of certain clitics:

- Converted predication of possession:

тетеүйTac $=$ тете + oү̄̄Tac (Isa. 54.1)

- Long and short form of the definite article with lexeme-initial $\mathrm{O} \gamma:$

пеоүоєıы (Isa. 50.4, 54.9) vs. поүоєıа) (Isa.64.8) (сf. поүххаї (Isa. 52.7)).

Case D3: '(C)CGV

$$
\mathbf{G}=\mathrm{O} \gamma
$$

There is only one example of the glide in this environment:
[2]OYO.

Case D4: '(C)CGVC

$$
\mathbf{G}=\mathrm{O} \gamma
$$

In a closed syllable, following a consonant, there is only one example: a)OYEIT.

## Case D5: (')(C)VG(C)

$\mathbf{V}=\mathbf{O}, \omega$
$\mathbf{G}=\mathrm{O} \gamma$
$\mathbf{V}=\mathbf{H}$
$\mathbf{G}=\boldsymbol{O} \boldsymbol{\gamma}($ var. $\hat{\gamma} \sim \gamma)$
$\mathbf{V}=\boldsymbol{\lambda}, \mathrm{e}, \mathrm{OO}$
$\mathbf{G}=\gamma$ (var. $\mathrm{O} \gamma$ )
a) $\quad \mathbf{V}=\mathrm{O}, \boldsymbol{\omega} \quad \mathbf{G}=\mathrm{O} \gamma$

Lexical forms:




3rd person pronominal suffixes:

TA2O $=0 \gamma$, TAX. $\mathrm{PO}=0 \gamma$;

b) $\quad \mathbf{V}=\mathbf{H} \quad \mathbf{G}=\boldsymbol{o \gamma}($ var. $\hat{\gamma} \sim \gamma)$

The variant forms are found mostly after Isa. 60.16. ${ }^{38}$ In total, ноץ occurs $71 \%$ of the time, and $\mathbf{H} \hat{\boldsymbol{\gamma}} \sim \mathbf{H} \boldsymbol{\gamma} 29 \%$.

Lexical forms:

Statives:

$3^{r d}$ person plural suffix pronouns:
оүвн $=0 \gamma$.

[^50]Table 93： $\mathbf{H}+\mathbf{o \gamma} v s . \hat{\gamma} \sim \gamma$

| OY | $\hat{\gamma} \sim$ |
| :---: | :---: |
| TH｜OY＇Tī（Isa．55．12） |  |
| $\begin{aligned} & \text { THOY (Isa. 57.13) } \\ & 50 \% \end{aligned}$ | $\begin{aligned} & \text { TAY (Isa. 64.5) } \\ & 50 \% \end{aligned}$ |
| ```nноү (Isa. 47.9, 47.11 x3, 47.13, 49.12, 49.17, 51.4, 51.15, 51.11, 52.12, 54.15, 55.10, 55.12, 57.16, 59.19 x2, 59.20, 60.5, 60.6, 60.13, 60.14, 61.5, 62.11, 63.1, 66.15, 66.18 x2) 93%``` | $\begin{aligned} & \mathrm{NHY}(\text { Isa. } 55.11[66.24]) \\ & {[\mathrm{NH}] \hat{\gamma}(\text { Isa. } 47.9)} \\ & 7 \% \end{aligned}$ |
| ```\overline{\mathrm{ ввıноү (Isa. 54.11, 58.4, 61.1)}}\mathbf{\prime}) \mathrm{ Аввוноү (Isa. 58.10)} 80%``` | Ө $\overline{\text { вिвін }} \hat{\text { 人 }}$（Isa．49．13） <br> Ө匂вוн［Ү］（Isa．58．3）［ӨввінҮ］（Isa．66．2） 20\％ |
| 2TH＝OY（Isa．48．2） | $2 \mathrm{TH}=\hat{\gamma}$（Isa．57．13） |

c）$\quad \mathbf{V}=\boldsymbol{\lambda}, \mathbf{e}, \mathbf{O O} \quad \mathbf{G}=\gamma($ var． $\mathrm{O} \gamma)$
Lexical forms：
גАAY，MAAY，NAY，M̄MAY，CNAY，［C）AY］，2NAAY；

$3^{r d}$ person plural pronominal subjects：

Possessive articles：

$3^{\text {rd }}$ person plural suffix pronouns：

```
N\lambda}=\gamma,\overline{NMM}|=\gamma,\Delta\lambda=\gamma,T\lambda\lambda=\gamma
xOO=\gamma,COO=\gamma.
```

Variation：Note the following two exceptions： $2 \boldsymbol{\operatorname { A E O } \gamma}$（Isa．47．7）＂final things＂；${ }^{40} \overline{\mathrm{M}} 2 \mathrm{AO} \gamma$ ＂tomb＂（Isa．65．4）．${ }^{41}$

[^51]
## Case D6: '(C)V.GV(C) and (C)V.'GV(C)

$$
\begin{array}{ll}
\mathbf{V}=\mathbf{O}, \mathbf{I} & \mathbf{G}=\mathbf{O} \gamma \\
\mathbf{V}=\mathbf{H} & \mathbf{G}=\gamma(\text { var. } \hat{\gamma} \sim \mathbf{O \gamma}) \\
\mathbf{V}=\boldsymbol{\lambda}, \mathbf{\epsilon} & \mathbf{G}=\gamma
\end{array}
$$

a) $\quad \mathbf{V}=\mathbf{O}, \mathbf{I} \quad \mathbf{G}=\mathbf{O}$

кооүе, твпооүе, аооүе, мооүе, гтооүе;

b) $\quad \mathbf{V}=\mathbf{H} \quad \mathbf{G}=\gamma($ var. $\hat{\gamma} \sim \mathbf{O} \gamma)$

Table 94: $\mathbf{H}+\gamma \sim \hat{\gamma} v s . O \gamma$

| $\gamma^{\sim} \hat{\gamma}$ | OY |
| :---: | :---: |
| $\begin{aligned} & \text { пнүе (Isa. 49.13) } \\ & 100 \% \end{aligned}$ |  |
| $\begin{aligned} & \text { 2внҮ' (Isa. 60.21, 64.3, 66.18) } \\ & 2 \text { вн } \hat{\gamma} \mathrm{E} \text { (Isa. 66.19) } \\ & 40 \% \end{aligned}$ | $\begin{aligned} & \text { 2вноүе (Isa. } 48.9,59.6 \times 2,64.7,65.7,65.22) \\ & 60 \% \end{aligned}$ |

c) $\quad \mathbf{V}=\boldsymbol{\lambda}, \mathrm{e} \quad \mathbf{G}=\boldsymbol{\gamma}$




[^0]:    1 The attribution of a dialect to a geographical region is problematic, since the origins of manuscripts are often obscure. For a discussion on the problems, cf. Funk (1988). For a summary of the various views on the distribution of the dialects, cf. Kasser (1991d).
    2 Worrell (1934), p. 73; Kahle (1954), p. 233; Polotsky (1970), p. 560; Shisha-Halevy (1991), p. 195.
    3 Shisha-Halevy (1991), p. 195.
    4 Shisha-Halevy (1991), p.195; The question of the origin of Sahidic and the process of its integration into the dialectal framework is much debated. For discussions on the scholarly opinions on the origin of Sahidic, cf.: Shisha-Halevy (1991), p.195; Satzinger (1985); Funk (1988), pp. 152-154; Polotsky (1970), pp. 560-561.
    5 Mink (1978), p. 92.

[^1]:    6 Shisha-Halevy (1991), p. 198, also calls it 'scriptural Sahidic'.
    7 Metzger and Ehrman (2005), pp. 24-31: In the $4^{\text {th }}$ century, with the legalisation of Christianity, it is argued (but not proved) by Metzger and Ehrman that copies of the biblical books were produced by scribes in commercial scriptoria by dictation, which would explain the high degree of variation where scribes might confuse similar sounding letters. From the $5^{\text {th }}$ century, with the strengthening of monasticism, copies were produced in the monastic scriptoria, where, instead of writing by dictation, monks would work individually, copying texts for the needs of the monastery or their benefactors.
    8 Funk (2009), p. 71.
    9 Layton (2004), for example, in his Coptic Grammar, refrains from using examples from the $4^{\text {th }}$ century texts displaying variations claiming: "Those Nag Hammadi texts whose language resembles Sahidic display a nonStandard mix of isoglosses, sometimes fluctuating, from all over Egypt ... dialectal peculiarities ... Even the work entitled Pistia Sophia, whose language in many ways resembles standard biblical Sahidic, shows peculiarities $\ldots$ other texts ... their non-Standard peculiarities are signalled by tacit omission here." p. xii $n$. 5.

[^2]:    10 Cf. Weinreich, Labov, and Herzog (1968), pp. 101, 151.
    11 Roquet (1982).
    12 Roquet (1982), p. 28, defined 'free variation' as a binary linguistic choice, a fluctuation between alternative forms which may occur at every level of language analysis: phono-graphemic, morpho-syntactic, lexical, and even semantic.

[^3]:    13 Funk (1995).
    14 Cherix (1994).
    15 Ghica (2006).

[^4]:    1 Cf. Roquet (1982), Cherix (1994), and Ghica (2006) on variation in relation to the Nag Hammadi texts; cf. also Grossman (2009) and Almond (2010) on variation and the integration of Greek loan words into Coptic.
    2 For theoretical and methodological discussions on language change, cf.: Weinreich, Labov, and Herzog (1968), pp. 97-195; Keller (1994); Lass (1997); Croft (2000); Fleischman (2000), pp. 33-58.

    3 Kahle (1954), p. 263.
    4 Kahle (1954), p. 48-192; for the list of texts from this period, cf. pp. 269-274.

[^5]:    5 On the Nag Hammadi library, cf. Emmel (1991), pp. 1771-1773.
    6 Nagel (1969), pp. 393-469; edition of P.Bodm. 6: Kasser (1960); for dialect P, cf. Nagel (1965), pp. 30-49. 7 Nagel (1969), p. 469.
    8 Layton (1974), pp. 351-425; Layton (1976), pp. 31-101.
    9 Layton (1974), pp. 374, 379.
    10 Layton (1977), p. 66, n. 2.
    11 Shisha-Halevy (1976), p. 353, n. 1; Funk (1993), pp. 163-164; Funk (1993), p. 164: "A legend was born: the legend of most or all of the 'Sahidic' Nag Hammadi texts being to a greater or lesser degree influenced by the Subachmimic dialect, or dialects (whatever this may mean)".

[^6]:    12 Shisha-Halevy (1976), p. 353, n. 1; Shisha-Halevy (1976), p. 353, cites, for example, the attribution $S^{a}$ denoted by Crum (1939), p. xiii - Sahidic with Akhmimic tendency.
    13 Shisha-Halevy (1976), p. 353, n. 1.
    14 Shisha-Halevy (1991), p. 198.
    15 Shisha-Halevy (1976), p. 354, n. 4.
    16 Funk (1993), p. 163.
    17 Funk (1993), p. 164-165.
    18 Funk (1993), pp. 164-165; for a more detailed application of this method, cf. Funk (1995a).

[^7]:    19 Funk (1993), p. 169; Funk (1995a), p. 113.
    20 Funk (1993), pp. 171-172.
    21 Funk (1995a), p. 120.
    22 Funk (1995a), p. 126.
    23 Cherix (1994).
    24 Cherix (1994), p. 25.
    25 Cherix (1994), pp. 141-172.
    26 Cherix (1994), pp. 173-174: On the one hand, Cherix claimed that the majority of variants can be considered archaisms, but some are due to dialectal influence; then a few sentences along he maintained that there is no dialectal influence, that the language reflected that of the pre-classical texts.

[^8]:    27 Cherix (1994), pp. 146, 152, 174.
    28 Roquet (1982), p. 32, premised his approach on the seminal work of Weinreich, Labov, and Herzog (1968).
    29 Roquet (1982), p. 29.
    30 For more recent work on variation and language change, cf. Keller (1994), Lass (1997), Croft (2000), Fleischman (2000), pp. 33-58.
    31 Roquet (1982), p. 28.
    32 Roquet (1982), p. 29: "...la somme de toutes les [variation libre] résolues en règles de grammaire...".

[^9]:    33 Satzinger (1985), p. 310, addressed the issue of the northern CON, PAN and southern CAN, PEN vocalic dichotomy, and sought to explain the presence of the northern vocalism in the southern Sahidic dialect as a result of the idiom of the capital, Memphis, being acquired in the Thebiad at the beginning of the Persian period, as a pathway to political and administrative influence. This led to a situation of diglossia in the south, with the gradual intermingling of the two idioms, with Sahidic being the product of a local variant of the upper class vocalisation.
    34 Ghica (2006), pp. 207-209; 218.
    35 Ghica (2006), p. 219.
    36 Ghica (2006), p. 219.
    37 Shisha-Halevy (1991), p. 195; cf. Worrell (1934), p. 73; Kahle (1954), p. 241.
    38 Ghica (2006), p. 219.
    39 Ghica (2006), p. 221.
    40 Ghica (2006), p. 220; cf. Satzinger (1985), p. 310.
    41 Ghica (2006), p. 222.

[^10]:    42 Sahidic grammars include: Stern (1880); Steindorff (1904); Till (1955); Layton (2004).
    43 For phonological treatments of the vowel-glides, cf.: Peust (1999), pp. 60-61, 260-262; Vergote (1973a), pp. 10-11; Vergote (1973b), p. 49; Hintze (1980); Loprieno (1995), pp. 46-50; Kasser (1980), pp. 80-92; Kasser (1982); Kasser (1983); Kasser (1997), pp. 6-11.

    44 Quecke (1984b), pp. 289-326.
    45 Quecke (1984b), pp. 289-290.
    46 Quecke (1984b), p. 290; Till (1928), § 5c.

[^11]:    47 Kasser (1961); Kasser (1962a); Kasser (1962b); Kasser (1962c); R. Kasser (1964); Kasser (1965).
    48 Quecke (1972); Quecke (1977); Quecke (1984a).
    49 Hintze and Schenke (1970).
    50 Funk (1995b), pp. 13-53: For the vowel-glides, cf. pp. 25-42.
    51 Cherix (1994): For the vowel-glides, cf. pp. 34-45, 122-124.
    52 Ghica (2006): For the vowel-glides, cf. pp. 222-234.
    53 Hintze (1980).
    54 Funk (1995b), p. 26.
    55 Cf. Funk (2009), pp. 71-72; Funk (1993), pp. 164-165.

[^12]:    56 Cherix (1994), pp. 34-119.
    57 Funk (1995b), pp. 27-42.

[^13]:    1 Funk (2009) p. 71.
    2 Polotsky (1957), p. 221, translated by Funk (2009), p. 71.
    3 Labov (1994), p. 11.
    4 Stenroos (2009), pp. 2-3.
    5 Funk (2009), p. 71.
    6 These theories originated from the work of the Swiss linguist Ferdinand de Saussure; cf. Saussure (1983), p. 89.

[^14]:    7 Roquet (1982), pp. 28-36.
    8 For theoretical and methodological discussions on language change, cf.: Weinreich, Labov, and Herzog (1968), pp. 97-195; Keller (1994); Lass (1997); Croft (2000); Fleischman (2000), pp. 33-58.

    9 Weinreich, Labov, and Herzog (1968), p. 98.
    10 Weinreich, Labov, and Herzog (1968), pp. 101, 151.
    11 Weinreich, Labov, and Herzog (1968), pp. 101, 151.
    12 Ghica (2006).
    13 Cherix (1994).

[^15]:    14 Cf. Layton (1985), pp. 149-58; Kasser (1991b), pp. 175-184; Emmel (1993), pp. 22-49; Boud'hors (2006), pp. 95-109; Orsini (2008), pp. 121-150.
    15 Kahle (1954), pp. 260-263.
    16 Kasser (1991b), pp. 179-180.
    17 Schmidt (1925), pp. 312-321 .

[^16]:    18 Budge (1912), p. lxiii.
    19 Hebbelynck and Thompson (1921), p. 80.
    20 Orsini (2008), pp. 133-134.
    21 Budge (1912), pp. xiv- xvii.
    22 Budge (1912), pp. xvi-xvii.
    23 Budge (1912), p. xi.
    24 Budge (1920), pp. 372-374.
    25 Thompson (1913), p. 12.
    26 Thompson (1913), pp. 12-13.
    27 Thompson (1913), pp. 4, 6; Hebbelynck and Thompson (1921), p. 9; Orsini (2008), p. 133; Nagel (1994), pp. 347-355; Budge (1912), p. xii, on the other hand, claims that the three books were written by the same scribe.
    28 Budge (1912) p. lxxxiii.

[^17]:    29 Kasser (1991a), pp. 48-53.
    30 Kasser (1962c), p. 12; Kasser (1965), p. 7, n. 1.

[^18]:    31 Kasser (1988), pp. 191-192.
    32 Robinson (2011), esp. pp. 108-129.
    $33 \operatorname{Kasser}(1962 \mathrm{c})$, p. 12; $\operatorname{Kasser}(1965)$, p. 17.
    34 Orsini (2008), pp. 130-131.
    35 Thompson (1932), p. ix.

[^19]:    36 Thompson (1932), p. x.
    37 Thompson (1932), p. ix: The colophon at the end of Codex C (Ms. 815) invokes "the Father, the Son, the Holy Spirit, our father Michael, our father Gabriel, our mother Mary, our mother Sibylla, Apa Jeremiah, Apa Enoch..." which is the formula regularly used at the Monastery of Apa Jeremiah.
    38 Thompson (1932), pp. ix-x, xix.
    39 Thompson (1932), pp. xv-xx.
    40 Orsini (2008), pp. 138-139.

[^20]:    1 Clark, Yallop and Fletcher (2007), p. 47.
    2 For phonological treatments of the vowel-glides, cf.: Peust (1999), pp. 60-61, 260-262; Vergote (1973a), pp. 10-11; Vergote (1973b), p. 49; Hintze (1980); Loprieno (1995), pp. 46-50; Kasser (1980), pp. 80-92; Kasser (1982); Kasser (1983); Kasser (1997), pp. 6-11.

    3 In Bohairic $/ \mathrm{i} / \sim / \mathrm{j} /$ is realised only as t , and consequently $\mathrm{e} \boldsymbol{I}$ always expresses a phonemic sequence, never a single phoneme. Cf. Peust (1999), p. 61.
    4 For a summary of the evidence which should be taken into account when distinguishing between the two phonological interpretations of the vowel-glides, cf. Peust (1999), pp. 260-262.
    5 Kasser (1980), p. 90.
    6 Kasser (1982).
    7 Vergote (1973b), p. 49 § 41; Loprieno (1995), p. 50; Quecke (1984), p. 290 n. 1.

[^21]:    8 Gardiner (1994), p. 28; cf. Peust (1999), p. 199: "Egyptian had none of these means of vowel notation. Modern egyptologists would agree that, eg. the signs for glides ( $\langle\mathrm{i}\rangle,\langle\mathrm{j}\rangle$ ) were generally not used to write the phonetically related vowels $/ \mathrm{i} /$ or $/ \mathrm{u} / . "$
    9 Peust (1999), p. 261: cf. Steindorff (1951), p. 33 ff.; Vergote (1973b), p. 49 § 41.
    10 Peust (1999), p. 261: cf. Hintze (1980), p. 23-91, especially p. 48; Quecke (1984), p. 290; Loprieno (1995), p. 50.

    11 Funk (1995b), p. 26, and Ghica (2006), p. 223, avoided making a distinction between the two phonemes, giving priority to the orthography over any phonological theory.
    12 Due to font restrictions this is not an accurate representation as the omicron is larger than the character shown here.
    13 This is quite common in the Epistles, for example, Rom. 2.27, 1 Cor. 10.31; but only occurs twice in CB Acts (16.25, 25.3). This form never occurs in P.Bodm. 18, contrary to the claim of Kasser (1962c), p. 13: "les lettres o et $\gamma$ forment le compendium habituel ( O surmonté des branches du $\gamma$ )", nor in P.Bodm. 23 or BL 7594. On the writing of the digraph O ץ, cf. Quecke (1973), pp. 273-284.

    14 Quecke (1984), p. 325.
    15 Quecke (1984), pp. 295-296.

[^22]:    
     [31.1], 31.9, 31.10, 31.14, [31.24], 31.22, 31.30, 32.44, 32.48, 33.1, 33.4, 34.1, 34.4, 34.5, 34.7, $34.8 \times 2,34.9$ x3, 34.10, 34.12) vs. М由үснс (Deut. 5.1, 6.4 32.44, 32.45); BL Acts: МФүснс (Acts 3.22, 6.11, 6.14, $7.20,7.22,7.29,7.31,7.32,7.35,7.40,7.44,13.39,15.1,15.5,15.21)$.
    17 Thompson (1932).
    18 Budge (1912); Kasser (1962c; 1965).

[^23]:    19 Budge (1912), p. xiv; Thompson (1913), p. 9, asserts that these signs were made by a later hand.
    
    
    
    
    21 Kasser (1991c), pp. 215-222.
    22 Girgis (1966), p. 76 §4.
    23 Girgis (1966), p. 78-92 §4-§19; Peust (1999), p. 201.

[^24]:    24 Cf. Kahle (1954), p. 78-80; Kasser (1964), pp. 18-19; Kasser (1961), p. 12; Kasser (1962a), pp. 26-28; Kasser (1962b), pp. 17-18; Quecke (1977), pp. 53-54; Quecke (1972), pp. 30-31; Quecke (1984a), pp. 41-43, 45; Hintze and Schenke, (1970), pp. 11-12; Funk (1995b), pp. 25-37; Cherix (1994), pp. 36-45; Ghica (2006), pp. 222-229.
    $25 E S=$ Early Sahidic, as represented by the three $4^{\text {th }}-5^{\text {th }}$ century manuscripts under investigation: P.Bodm. $18=$ Papyrus Bodmer XVIII, Deuteronomy 1-10, 7; P.Bodm. 23 = Papyrus Bodmer XXIII, Isaiah 47.1-66; BL = British Library Or. 7594 Deuteronomy, Jonah, and Acts.
    $26 C B=$ Chester Beatty Library Ms. 813 (Epistles) and Ms. 814 (Acts) which represents the classical standard.

[^25]:    27 In the edition of Budge (1912) the trema appears over the iota in Acts where it cannot be seen in the photographs of the manuscript: Acts $10.21,10.38,11.20,14.2,16.27,19.37,20.31,21.5,21.10,22.12$. Thompson (1913) makes no emendation here.
    28 Cf. Appendix 4, Table 79.
    29 Cf. Appendix 2, Table 38.
    30 The possible exceptions include: cnap-êepboone ( $B L$ Deut. 28.56), peqed)-êtepbooone (BL Deut. 18.10), and ne2êcıs (BL Deut. 32.14).
    31 Cf. Appendix 1, Table 9.
    32 2д-їдт (CB Acts 26.9).

[^26]:    33 Funk (1995b), pp. 28, 31-32.

[^27]:    39 Cf. Appendix 2, Table 39.
    40 Cf. Appendix 1, Table 11.
    41 Cf. Appendix 2, Table 42.

[^28]:    42 Cf. Appendix 2, Table 44.
    43 Cf. Appendix 3, Table 70.
    44 In Sahidic the verb appears either in the form of Greek $2^{\text {nd }}$ person singular active imperative (Stern (1880), pp. 159-160), or derives from the infinitive (Böhlig (1954), p. 46). The question has not been resolved in the scholarship. For a discussion on the literature, cf. Förster (2002), pp. xv, xxxv.
    45 Cf. Appendix 2, Table 43.
    46 Cf. Appendix 1, Tables 14, 15 and 16.
    47 Cf. Appendix 1, Tables 14 and 15.

[^29]:    48 With the possible exceptions: cnap-êepboone (BL Deut. 28.56) and peqea)-êtpbooone (Deut.
    18.10) 2Єєєıв (Deut. 32.14); cf. Case B4.

    49 Only нê (Isa. (56.7, $58.7 \mathrm{x} 3,65.21$ ) and -ê̂ma- (Isa. $57.16 \times 2$ )
    50 Cf . Appendix 4, Table 82.

[^30]:    51 Cf. Appendix 2, Table 49.
    52 For example: Hı (Acts 7.20).
    
    54 zö̈ne (BL Acts 19.9) vs. zoeine (BL Acts 6.9, 10.23, 12.1, 14.4, 15.1, 15.5, 15.24, 17.4, 17.6, 17.18 x2, 19.13, 19.31, 23.9, 23.12, 27.44 гое[ıne], 28.24); гОїте (BL Acts 23.23) vs. гоеıте (BL Acts 7.58, 9.39, 11.15, 14.14, 16.22, 18.6, 20.33, 22.20); [ג]MHITN̄ (BL Acts 16.36) vs. גMHeitī (BL Acts 16.15) (BL Jon. 1.7).

[^31]:    55 Cf. Appendix 1, Table 20.
    56 Kasser (1962c), p. 13 suggests that in this case it is a malformation of the trema, perhaps caused by writing the trema quickly without raising the calamus from the papyrus. It is rare at the beginning of the manuscript, but increases towards the end.
    57 Cf. Appendix 4, Table 85.

[^32]:    62 Cf. Appendix 1, Table 23.
    63 Cf. Appendix 1, Table 24.
    

[^33]:    65 Cf. Appendix 2, Table 57.
    66 Cf. Appendix 1, Table 27.

[^34]:    67 For examples in other early Sahidic manuscripts, cf. Kahle (1999), pp. 88-89; Kasser (1964), p. 19; Kasser (1961), p. 12; Kasser (1962a), pp. 28-29; Kasser (1962b), p. 20; Quecke (1977), p. 54; Quecke (1972), p. 32; Quecke (1984a), p. 43; Hintze and Schenke, (1970), pp. 16-19; Funk (1995b), pp. 37-42; Cherix (1994), pp. 34-35; Ghica (2006), pp. 230-234.
     23 (Isa. 66.3).

[^35]:    69 Certain nouns denoting divisions of time are prefixed by the long forms of the definite article: 200 ${ }^{2}$ "day",
     discussion on long articles preceding such nouns and the possible phonetic explanations.
    70 Cf. Appendix 1, Table 29.

[^36]:    82 Cf. Appendix 4, Table 93and 94.
    83 Cf. Appendix 4, Table 93.
    84 Cf. Appendix 2, Table 64 and 66.
    85 Cf. Appendix 1, Table 35.

[^37]:    86 Budge (1912), p. lxiii.
    87 Hebbelynck and Thompson (1921), p. 80.
    88 Orsini (2008), p. 133-134.
    89 Orsini (2008), p. 138-139.
    90 Thompson (1932), p. ix.

[^38]:    1 Phonological reconstructions are based on Peust (1999).

[^39]:    2 The only other instance of this scribe's use of the circumflex with the digraph is occasionally at the end of the
     ceì (Acts 27.38).

[^40]:    4 Girgis（2001），pp．72－75 § 191－196．
    5 Girgis（2001），p． 68 § 186.

[^41]:    6 Girgis (1966), p. 87 § 12.

[^42]:    8 Peust (1999), p. 264: or "what?", "seems to be a syllabic variety of $w$ rather than an original vowel /u/...".
    9 Depuydt (1993), p. 375: OYNAM from demotic wnm.
    10 Peust (1999), p. 145: /u.'caj/, although p. 124 /'wcaj/; оү:x. $\boldsymbol{\lambda}$ ï <wd.
    11 Depuydt (1993), p. 375: оү(1) $<w h$.
    12 Peust (1999), p. 214 n. 242: "OүOY in MOYOүT is to be interpreted as /uw/, as evident both from the etymology ( $m w t$ ) and from the status pronominalis of the verb (MOOY'T - /'mowt/)"; n. 241: "( $(\mathbf{C}) \mathbf{l}(\mathbf{\epsilon}) \mathbf{l}$ in dialects other than Akhmimic do not denote a long vowel eg. 21еIT "pit" < demotic hyt is probably /'hjit/; but p. 154: MOYOY"T /mu:t/ where Peust interprets double vowels as a means of lengthening the vowel.
    13 Cf. Thompson (1932), p. 110, who notes this "unusual crasis".

[^43]:    14 Cf. Depuydt (1993), pp. 369-375 for a discussion on long articles preceding nouns denoting time divisions, and the phonemic value of the initial digraph.
    15 Cf. Peust (1999), p. 260; Depuydt (1993), p. 375.

[^44]:    19 Budge (1912) places the trema over the iota in Acts where it is not apparent in the photographs (Acts 10.21, $10.38,11.20,14.2,16.27,19.37,20.31,21.5,21.10,22.12)$.

[^45]:    22 For example: cô̧ô (Deut. 33.28), ïOY.ㅅ.̂̀ (Deut. 34.2, 33.7), nגү̂̂ (Deut. 31.23, 32.44, 34.9).
    23 Cf. Kahle (1954), p. 57.

[^46]:    26 Cf. Kahle (1954), p. 87.

[^47]:    33 According to Kasser (1962c) these could be haplographies p. 16.

[^48]:    36 Cf. Kasser (1965), p. 25.

[^49]:     irregular part of the papyrus and suggests that it could have either been an attempt to write O ，or perhaps the scribe wanted to write neyo yoems＂their light＂．

[^50]:    38 Kasser (1965), p. 24: Accounting for the total possibilities, the following proportions can be calculated:
    before Isa. 60.16 , нү $88 \%$, ноү $12 \%$; after Isa. 60.16 , н $\hat{\text { 人 }}$ нү $44 \%$, ноү $56 \%$.
    39 Crum (1939), p. 448b: тоүхноу $S$; тоүх.ноүт а $B$ form.

[^51]:    40 Crum（1939），p．635a：pl．2ג€（લ）$\gamma$ ，2גЄOҮ $S$ ．
    

