# New Testament Greek Charts for Global Learners 

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## 1. Introduction

I originally wrote up all of these charts for my own use, to help me learn Greek grammar, pronunciation, and general structure, and I still use them frequently. I am a global learner (also called a holistic or "big picture" learner), so I like to know the details, but only in the context of the big picture of the entire structure of a language. Most learners of a language don't learn this way, but for those of you who do, I hope this information will be helpful.

However, I should clarify that these charts alone will not be enough for a beginning student of Greek, but are only intended as an additional resource for the global learner. For the beginner I suggest a traditional Greek text such as New Testament Greek for Beginners by J. Gresham Machen, which I refer to often in this work. This is the text that I studied when I taught myself Greek more than 30 years ago. (To see available editions of this book, including free online versions, see the Bibliography entry on page 56.) The only part of this work that I suggest the beginner should follow instead of Machen is my pronunciation guide (non-technical), in $\$ 2.2$. Greek Pronunciation Guide for Dummies on page 14, since this will make the Greek easier to pronounce for a native English speaker. However, other parts of this work can be consulted as well, even fairly early in the learning process, by those who like to see the big picture.

The data here is still rough and incomplete in many places, and there may be some errors: If you find any errors, or have any other suggestions, please let me know, at Rick@,Aschmann.net.

I have made many changes to this file since 21-Sep.-2010. However, I assume that anyone with interest in this work has already downloaded the 12-Aug.-2014 version, so any earlier changes are irrelevant.

All significant changes between the 12-Aug.-2014 version and this one can be seen as Word for Windows edits, in red with a vertical line in the right margin, in the file aschmann.net/Rick/GreekCharts-changes after 12-Aug-2014.pdf.

I have subsequently made a few changes to the 22 -Feb.- 2017 version. The main change was the addition of the second paragraph above, an important clarification. The only other significant change was the addition of footnote 34.

I am frequently making changes, so check the date at the bottom to make sure you always have the latest edition!

This work is found on the Internet at aschmann.net/Rick/GreekCharts.pdf. As of February 17, 2017 it is also available in Spanish at aschmann.net/Rick/CuadrosGriego.pdf.

In much of this description of Greek phonology and grammar I am following the excellent description provided in New Testament Greek for Beginners by J. Gresham Machen. However, I have tried to make it more rigorous and complete, and to approach the structure of Greek from an analytical linguistic viewpoint.

I have also drawn heavily on the Tables of Paradigms contained in the first part of Harold K. Moulton's Analytical Greek Lexicon Revised. However, he includes many examples and even paradigms from Classical Greek which do not exist in Kow $\eta^{1}$ (New Testament) Greek, all of which I have eliminated. Items eliminated are: 1) words which do not occur in the New Testament (he lists many such words as examples); 2) forms which do not exist in the grammatical structure of Koví Greek, such as the dual ${ }^{2}$. Eliminating these items simplifies much of his material.

[^0]I have attempted to select examples which have the maximum number of forms in the New Testament ${ }^{3}$. For this reason I have not always used the examples listed in Machen or Moulton. The examples were selected by searching through a computer word list of New Testament words. Forms which do not actually occur in the New Testament, but for which there is no doubt about what the form would be, are marked with an asterisk: *. If there is doubt about what the form would be, because there are no examples, the item will be marked with a question mark as well: ?*. If the form does not occur in the New Testament, but does occur in the Septuagint, it is marked with ${ }^{(S)} .{ }^{4}$ If the form occurs in the Septuagint for a different word in the same class, it is marked with $*{ }^{(S)}$. Forms marked with two asterisks ** not only do not occur in the New Testament for this word, but no other comparable word has the form either. (These have been included only to complete the paradigms.)

Numbers included in some of the tables refer to paragraph numbers in Machen's book; elsewhere in the text I will place the symbol I before such paragraph numbers. I will also refer at times to Moulton's book, though his structure is not as simple as Machen's: Roman numerals refer to sections, Arabic numbers refer to notes within the sections, capital letters refer to charts (numbered independently from sections) and parenthesized lower case letters refer to individual items within a chart.
(I already looked up nearly all of the missing examples in the Septuagint to see if they are there, but need to look up the rest! ${ }^{* * *}$ )

[^1]
## 2. The Pronunciation of New Testament Greek

(If all you want is a suggested pronunciation for New Testament Greek, skip the following section, and go on to $\$ 2.2$ on page 14 . You may always come back to this later.)

### 2.1. The Greek Pronunciation System (Technical)



This is the pronunciation Greek had before the major period of Greek classical literature, so there is very little written from this period. However, the spelling system for the vowels was fixed during this time, and was retained largely unchanged to the present day, in spite of massive sound changes along the way!

[^2]
# Classical Greek Pronunciation System (5th Century BC) ${ }^{10}$ 

| Vowels |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | front unrounded | front rounded | central unrounded | back rounded |
| high long | $\underline{1}$ | $\underline{v}^{7}$ |  |  |
| high short | t | $\forall^{7}$ |  |  |
| mid close long | $\varepsilon l^{7}$ |  |  | Ov ${ }^{7}$ |
| mid close short | $\varepsilon$ |  |  | 0 |
| mid open long | $\eta$ |  |  | $\omega$ |
| low long |  |  | $\underline{\alpha}$ |  |
| low short |  |  | $\theta$ |  |

Diphthongs ${ }^{6}$

## Kotví Greek Pronunciation System (1st Century AD) ${ }^{11}$

|  | Vowels ${ }^{12}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | front unrounded | front rounded | central unrounded | back rounded |
| high | $\mathrm{l}, \varepsilon \mathrm{l}^{13}$ | v, ov, (vi) |  | OV |
| mid close | $\eta, \eta$ |  |  | o, $\omega, \omega$ |
| mid open | $\varepsilon, \alpha l$ |  |  |  |
| low |  |  | $\alpha, \underset{\sim}{\alpha}$ |  |



[^3]
# Modern Greek Pronunciation System (All changes complete after about 1000 AD ) ${ }^{14}$ 

Vowels

|  | Front unrounded | central unrounded | back rounded |
| :---: | :---: | :---: | :---: |
| high | $\begin{aligned} & \mathrm{l}, \eta, \mathrm{v}, \mathrm{ol}, \\ & \eta, \varepsilon 1,(\mathrm{vi})^{15} \end{aligned}$ |  | Ov |
| mid | $\varepsilon, \alpha 1$ |  | $\begin{gathered} \mathrm{o}, \\ \omega, \omega \end{gathered}$ |
| low |  | $\alpha, \alpha$ |  |

Diphthongs ${ }^{6}$

|  | Vowel |  | Vovel + [ $\mathrm{v} / \mathrm{f}]$ |
| :---: | :---: | :---: | :---: |
| a | aï,aï | $\rightarrow$ ai | $\alpha v \rightarrow$ af,av |
| e |  |  | £u $\rightarrow$ ef,ev |
| i | ı̈̈,ü̆ | $\rightarrow \mathrm{i}(\mathrm{j})$ | $\eta \cup \rightarrow$ if,iv |
| o | oï,oü,øï,øü | $\rightarrow$ oi |  |
| u | ovi | $\rightarrow$ ui |  |

Consonants


As the charts above show, there were four major stages in the pronunciation of the Greek language, PreClassical, Classical, Kow $\eta$ (the Greek that was in use at the time the New Testament was written), and Modern Greek. ${ }^{16}$ Between each of these stages a number of changes took place in the pronunciation of the language. However, the orthography in which the New Testament was written represents a conservative spelling tradition based on the pronunciation of Pre-Classical and Classical Greek, rather than the pronunciation actually in use at the time the New Testament was written. Several centuries after the New Testament was written, a system of "breathings", (see next section) and accent marks was added by Greek scholars to provide more information about the Classical Greek pronunciation (these were not used in the original manuscripts).

The phonetic value of the vowels and consonants for each stage is shown by their placement in the charts, not by their spelling, which changed very little.

### 2.1.1.Pronunciation of Consonants

All Greek stages up to Koıv́ had an /h/ phoneme, which was apparently only phonemic in word initial position by the Classical period, and which is spelled using the "rough breathing" symbol over the first vowel of the word: $\dot{\alpha}$. On vowel initial words a similar mark, called "smooth breathing", is required: $\dot{\alpha}$. This latter symbol had no pronunciation. (Or was it sometimes a representation of a phonetic glottal stop?) Soon after New Testament times the "rough breathing" ceased to be pronounced, probably at the same time that the voiceless aspirated stops became fricatives. (In the Pre-Classical period this sound was actually written with the letter $\eta$, making this letter ambiguous as either a vowel or a consonant; this letter was borrowed into Latin and became the letter " $h$ "
 ing a convention added many centuries later as a clue to the original pronunciation.)

The three aspirated stops are pronounced as fricatives in Modern Greek. However, in Classical Greek, and apparently also in Kow $\mathfrak{\text { Greek, they }}$, there definitely aspirated stops, and the New Testament orthography follows this older system: when a voiceless stop (not aspirated) at the end of a preposition or prefix (because of predictable vowel loss) is followed by a word which begins with rough breathing, the stop becomes aspirated; thus, غ̇ $\pi \dot{t}+$ $\dot{v} \mu \tilde{\alpha} \varsigma$ becomes $\dot{\varepsilon} \varphi ’ \dot{u} \mu \tilde{\alpha} \varsigma$. Similarly, $\dot{\varepsilon} \pi \dot{t}+\tilde{\varepsilon} \sigma \tau \eta \kappa \varepsilon v$ becomes $\dot{\varepsilon} \varphi \varepsilon ́ \sigma \tau \eta \kappa \varepsilon \nu$. This makes perfect phonetic sense if the $\varphi$ was originally an aspirated stop, not a fricative. We see other situations in which this aspiration appears to function

[^4]as a separate sound, as in the dissimilation patterns for aspirated stops: $\theta \rho \dot{f} \xi, \tau \rho \neq \chi \mathcal{O}^{\prime} \varsigma^{(S)}$ "hair", in which the aspiration is apparently passed from one consonant to another; this makes sense phonetically if these are aspirated stops, but not once these consonants had become fricatives. (In Modern Greek, in which the aspirates have changed to fricatives, the forms have been simplified to $\tau \rho i \not \chi \alpha, \tau \rho i ́ \chi \alpha \varsigma$.

Classical Greek had a velar nasal sound [ $\eta$ ], which only occurred before velar phonemes $(\gamma, \kappa, \chi, \xi)$, and was always spelled $\gamma$. The orthography implies that this sound was an allophone of $\gamma$, rather than of $v$. Linguistically this is possible; however, the linguistic evidence also makes it possible to analyze it as an allophone of $v$, and there is insufficient evidence to demonstrate conclusively which phoneme it belonged to. The evidence for $\gamma$ is, fundamentally, that the [ y ] sound is always spelled $\gamma$, and that all $\gamma$ 's before $\gamma, \kappa, \chi, \xi$ are pronounced as [ $\mathrm{\eta}$ ]. The evidence for $v$ is that when two morphemes come together, all $v$ 's before $\gamma, \kappa, \chi, \xi$ are changed into these same [ y ]'s ${ }^{18}$, which are spelled $\gamma$ (similarly, all $v^{\prime}$ 's before $\beta, \pi, \varphi, \psi$ are changed into $\mu$ 's; actually, this particular point provides evidence for treating [ y ] as an allophone of $\gamma$, by analogy). The historical linguistic evidence available to me was insufficient to settle the matter based on Indo-European roots or Semitic borrowings. I would say that the preponderance of the evidence is slightly on the side of treating [ y ] as an allophone of $\gamma$, just as the spelling indicates! However, en.wikipedia.org/wiki/Ancient Greek phonology\#Nasals assumes the opposite.

The two letters $\xi$ and $\psi$ are not phonemes in themselves, but simply orthographic representations of the consonant clusters $\kappa \sigma^{*}$ and $\pi \sigma^{*}$, which are never written as such. It is odd that special unit letters were used for these clusters, since there is often a morpheme break between the two consonants! An example is $\delta \boldsymbol{t} \boldsymbol{\kappa} \kappa \omega$ "I pursue", $\dot{\varepsilon} \delta \dot{t} \omega \xi \varepsilon v$ "he pursued", where the suffix is actually $-\sigma \varepsilon v$.

### 2.1.1.1.Double (Geminate) Consonants

In all stages of Greek up to and including Kowń, when two identical consonants come together (called "geminate consonants"), the consonant is pronounced twice as long; in other words, both consonants are pronounced, making this distinct from the pronunciation of a single consonant. In the pronunciation of English this is seldom heard, but there are occasional examples, such as the double " $n$ " in "unnecessary". But in Greek the distinction is very important, and there are even a few minimal pairs, such as the following:

| 关 $\beta \alpha \lambda \lambda o v$ | "they were throwing" | ( $3^{\text {rd }}$ person plural Imperfect Indicative) |
| :--- | :--- | :--- |
| $\dot{\varepsilon} \beta \alpha \lambda o v$ | "they threw" | $\left(3^{\text {rd }}\right.$ person plural Aorist Indicative) |
| $\beta \dot{\alpha} \lambda \lambda \omega$ | "I throw" | $\left(1^{\text {st }}\right.$ person singular Present Indicative) |
| $\beta \dot{\alpha} \lambda \omega$ | "(so that) I throw" | ( $1^{\text {st }}$ person singular Aorist Subjunctive) |

Modern Italian has this same system, which is why the mm in mamma mia is so drawn out. However, in Modern Greek these double consonants are no longer pronounced differently from their single counterparts.

### 2.1.2.Pronunciation of Vowels

### 2.1.2.1.Individual Vowels and Diphthongs

The vowel $\mathbf{v}$ (short or long) underwent quite a shift in pronunciation over the period of Greek history. In Pre-Classical Greek it was pronounced as the back vowel $[u],{ }^{19}$ directly inherited from Proto-Indo-European, but in both Classical and Kovv́ Greek it was a high front rounded vowel, like German "ü" (IPA [y]), except when the $v$ was the second member of a diphthong (see $\S 2.1 .2 .3$ below). Finally, in Modern Greek it has merged with $\mathbf{1}$, losing its rounding.

The "diphthong" ov had a similarly complex history, following behind $\underline{v}$ to a certain extent: it was pronounced as a true diphthong [ou] in Pre-Classical, as the long vowel [o:] in Classical, and as a simple high back rounded vowel $[\mathrm{u}]$ from Kow $\dot{\text { t times until the present. }}$

[^5]The "diphthong" $\varepsilon \iota$ had a parallel history to ov: it was pronounced as a true diphthong [ei] in PreClassical, as the long vowel [ $\mathrm{e}:$ ] in Classical, and as a simple [i] from Kowń times until the present.

Not all cases of $\varepsilon ⿺$ and $o v$ in Classical Greek are derived from the Pre-Classical diphthongs: many are derived from contraction of $\varepsilon+\varepsilon$ or $\eta+\varepsilon$ and $o+o$ or $\omega+o$, as seen in §3.4.2.1.

One of the oddest changes from Classical Greek to Kovv $\eta$ is that $\varepsilon$ and $\eta$ have swapped places in terms of phonetic height, as can be seen in the charts. Understanding the Classical pronunciation makes many of the contraction rules shown in §3.4.2.1 make a lot more sense!

### 2.1.2.2.Vowel Length

In the charts above, and throughout this description, I have marked vowel length on $\alpha, \mathbf{i}$ and v whenever it can be determined, using the following conventions: $\theta$ is short and $\underline{\alpha}$ is long; if the evidence for the vowel length is only derived from information outside the New Testament, ${ }^{20}$ the vowels are colored blue: $\boldsymbol{\theta}$ or $\underline{\alpha}$; if I have no information about the vowel length, it is simply colored blue with no length mark: $\alpha$.

The length difference between long and short $\alpha, \mathrm{t}$ and $v$ was never indicated in the Greek writing system, which might suggest that this difference was not phonemic, whereas the difference between 0 and $\omega$ or between $\varepsilon$ and $\eta$ clearly was. However, in actual fact Pre-Classical Greek had a contrast on all five vowels. ${ }^{21}$ This distinction can be seen in the effect that vowel length had on accent, in the fact that vowel length on the $\alpha$ vowel is significant in many grammatical paradigms, and in general in the fact that vowel length is not fully predictable on $\alpha, \mathrm{l}$ and v . This vowel length was inherited from Proto-Indo-European, and various sister languages in the same family, such as Latin and German, have the same system. Presumably length was distinguished in the writing system between $\varepsilon$ and $\eta$ and between $o$ and $\omega$ because these distinctions had a very high functional load, and absolutely had to be indicated ${ }^{22}$, but was not distinguished on $\alpha, 1$ and $v$ because on these vowels it had a much lower functional load, though there were certainly some minimal pairs. ${ }^{23}$

I also mark length on word-final $\alpha \mathrm{l}$ and ol , since these diphthongs can be either long or short (in this situation only). All other diphthongs are always long, so I will not mark length on these. Also, $\alpha$ is always long, and since the iota subscript ( , ) makes this quite clear, no additional length marking will be added.

By Koví times the entire vowel length system had been eliminated: o and $\omega$ were pronounced the same, and the distinction between $\eta$ and $\varepsilon$ was no longer one of length, but simply one of vowel height.

### 2.1.2.3.Diphthongs

The term "diphthong" refers to a sequence of two vowels which occur within a single syllable.
Pre-Classical and Classical Greek had four series of diphthongs, as shown in the charts, and these were originally pronounced (in Pre-Classical times) simply by combining the pronunciations of their two components. The second component of all of these was always either $\mathbf{1}$ or $\mathbf{v}$. By Classical times the pronunciation of the letter $\mathbf{v}$ had changed to that of German ü (IPA [y]), except when it was the second component of a diphthong, in which case it was still apparently pronounced [u].

[^6]By the Classical period two of these diphthongs had become simple long vowels, $\varepsilon 1$ and $o v$, which were new mid close long vowels distinct from the others. The remaining diphthongs were still diphthongs, even those written with "iota subscript" in the New Testament: $\alpha, \eta, \omega$.

By Kovvŋ times all of the Classical Greek diphthongs that ended in 1 had been reduced to simple vowels. These included $\alpha, \eta, \varphi,{ }^{24}$ which were apparently first reduced to the corresponding long vowel, after which vowel length was lost throughout the system.

Those ending in $v$ were not reduced. ${ }^{25}$ The diphthongs $\eta v$ and $\omega \ddot{\ddot{z}}$ are extremely rare, the former occurring only on Aorist and Imperfect Indicative verb forms of verbs beginning with $\alpha v$ or $\varepsilon v$, and the latter occurring in the various forms of only one word in the New Testament, M $\omega \ddot{\ddot{\sigma}} \sigma \boldsymbol{\eta} \varsigma$, which was a Hebrew borrowing during the Kowท́ period.

Later on, after the New Testament period, the $v$ in these diphthongs became pronounced as [v]. Later on this [ v ] became an [ f ] except when followed by a voiced consonant, as is now the case in Modern Greek. For details, refer back to the charts above.

To show that two vowels which might be confused with a (Pre-Classical or Classical Greek) diphthong are to be pronounced as two separate syllables (or vowels), a dieresis is used on the second one, as in Axö̈t " "Achaia". This device was not written in Classical or Kovv́ times, and was probably added precisely because most diphthongs had been reduced. (This is probably why some authorities write a dieresis on $\mathrm{M} \omega \ddot{\ddot{\theta}} \boldsymbol{\sigma} \tilde{\mathrm{\eta}}$, to show that the two vowels are to be pronounced individually. This diphthong was pronounced [oy], just like the German diphthong eu or äu, with the lips rounded throughout the diphthong, but sounding otherwise very much like English oy. A dieresis is never written on $\eta v$, since in Modern Greek the second part became [v], not [i]!)

### 2.1.2.4.Vowel Accents

In addition to the phonemes listed in the chart of vowels and consonants, Classical Greek also had three phonemes of pitch accent or word tone. These are written with the acute, the grave and the circumflex accents, written over a vowel as $\dot{\alpha}, \grave{\alpha}$ and $\tilde{\alpha}$ respectively, which in phonetic terms were probably high tone, low tone, and falling tone (which can be viewed as a combination of high tone followed by low tone, and often resulted from just such a combination when two syllables combined).

Only one accent can occur within a given word (with enclitics being exceptions to this rule in several ways), and they can only occur on one of the last three syllables of a word. In addition, there are other restrictions, based on syllable length, which are described in the following chart.

| Length of last three syllables in word | Antepenultimate accent | Penultimate accent | Ultimate accent |
| :---: | :---: | :---: | :---: |
| $\alpha \alpha \omega$ | (not permitted) | $\alpha \alpha \alpha^{\prime} \omega$ | $\alpha \alpha \omega ́ ~ / ~ \alpha \alpha \tilde{\omega}$ |
| $\alpha 00$ | 人́OO | $\alpha$ о́o | 人oó |
| $\alpha \omega 0$ | $\alpha \alpha^{\alpha} \omega$ | $\alpha \tilde{0} 0$ | $\alpha \omega$ ó |

In the chart above, $\omega$ means a long syllable, o means a short syllable, and $\alpha$ means any syllable. A short syllable is defined as any syllable which contains a short vowel or a short diphthong (all diphthongs are considered long except final $\alpha 1$ and $o t$, which are sometimes short and sometimes long for purposes of accent placement ${ }^{26}$ ).

[^7]For purposes of counting syllables for accenting purposes, the vowel sequence $\varepsilon \omega$, which is definitely not a diphthong, since it can be accented on either vowel, is counted as a single syllable (i.e. as a long diphthong), ${ }^{27}$ as in $\pi o ́ \lambda \varepsilon \omega \varsigma$ "of a city", $\pi$ ó $\lambda \varepsilon \omega v$ "of cities".

To state the chart in prose form:

1) Accents can only fall on one of the last three syllables.
2) The contrast between acute and circumflex is only fully seen on the ultima. On the penult (with a short ultima) the vowel length determines the accent to be used, and only the acute is permitted on the antepenult or on the penult with long ultima.
3) Circumflex may only occur on a long vowel.

An additional rule is that the acute accent on the ultima is replaced by the grave except at the end of a phonological phrase (before punctuation) or before an enclitic.

In many cases it is apparent that the circumflex accent is the result of two syllables being collapsed into one, the first having originally had an acute accent, and the second having been unaccented (which phonetically would have been realized as low tone or grave accent). Thus the circumflex can be seen as the combination of an acute accent followed by a grave accent. ${ }^{28}$

All accents and breathings on diphthongs are written over the second vowel of the diphthong (i.e. the nonsyllabic vowel).

By Koví times the three kinds of accents were all pronounced the same, simplifying the system to a simple stress-accent system. Also, there was no longer any true distinction between long and short vowels, but the rules of accent placement still applied, as if the vowels were still short or long, so that the original logic of the system was no longer apparent, even though its effect on words still was!

### 2.1.3.General Assimilation and Contraction Rules

In many words, especially verbs and nouns, when two morphemes come together, there is frequently assimilation or contraction. Specifically, consonants frequently assimilate to the following consonant, and two vowels frequently contract to a single vowel or diphthong. Some of these rules are universal, in that they represent active restrictions in the language. Other rules are not universal, but are limited to a particular construction. The former are included here, whereas the latter are listed in the relevant section of the grammar.

### 2.1.3.1.Consonant Assimilation Rules

In the following rules, the term "stop" refers to the stops of Pre-Classical, Classical, and Kovví Greek as seen in the charts on pages $\mathbf{3}-4$, not those of Modern Greek shown on page $\mathbf{5}$, where the aspirated stops have become fricatives.

1) Stops before $\sigma$. These rules are especially relevant in the aorist and future of verbs with consonant-final stems, since these suffixes all begin with $\sigma$. (See $₫ 3.4 .2 .1$ on page 46.). They also apply when the nominative singular ending $-\varsigma$ or the dative plural ending $-\sigma \mathfrak{t v}$ are added to third-declension nouns:
a) Heterorganic stops (i.e. not dental or alveolar) before $\sigma$ become voiceless unaspirated. The result is spelled using one of the letters $\psi$ or $\xi$, which are just Greek shorthand for $\pi \sigma$ and $\kappa \sigma$ :

$$
\begin{aligned}
& \pi, \beta, \varphi+\sigma \rightarrow \psi \text { (i.e. } \pi \sigma \text { ). e.g. } \lambda \alpha i ́ \lambda \not \lambda \pi-+-\varsigma \rightarrow \lambda \alpha i ̃ \lambda \nLeftarrow \psi \text { "windstorm", "A } \rho \notin \beta-+-\varsigma \rightarrow{ }^{\prime} A \rho \notin \psi^{(s)} \\
& \text { "Arab", } \dot{\varepsilon}-+\lambda \notin \mu \pi-+-\sigma \varepsilon v \rightarrow \text { ह̈ } \lambda \Theta \mu \psi \varepsilon v \text { "it shone", } \delta 1 \text { є́- }+\dot{\varepsilon}-+\tau \rho \underline{1} \beta-+-\sigma \alpha v \rightarrow
\end{aligned}
$$

$$
\begin{aligned}
& \kappa, \gamma, \chi+\sigma \rightarrow \xi \text { (i.e. } \kappa \sigma \text { ). e.g. } \sigma \nprec \kappa-+-\varsigma \rightarrow \sigma \dot{\varphi} \rho \xi \text { "flesh", } \varphi \lambda \sigma \gamma-+-\varsigma \rightarrow \varphi \lambda \text { ó }{ }^{\prime} \text { "flame", }
\end{aligned}
$$

[^8]will persecute", $\dot{\alpha} \nu{ }^{\prime} \hat{o}^{\gamma}-+-\sigma \omega \rightarrow \dot{\alpha} v o i ́ \xi \omega$ "I will open", $\dot{\varepsilon} \lambda \varepsilon \gamma \chi-+-\sigma \varepsilon 1 \rightarrow \dot{\varepsilon} \lambda \varepsilon ́ \gamma \xi \varepsilon \varepsilon$ "he will convict".
b) Homorganic stops (i.e. dental or alveolar) before $\sigma$ are lost:
$$
\tau, \delta, \theta+\sigma \rightarrow \sigma . \text { e.g. } \varphi \omega \tau-+-\varsigma \rightarrow \varphi \tilde{\omega} \varsigma \text { "light", "A } \rho \tau \varepsilon \mu t \delta-+-\varsigma \rightarrow \text { "A } \rho \tau \varepsilon \mu t \varsigma \text { "Artemis", vөк }-+-\varsigma
$$

c) With non-stops the rules are much less consistent, but many examples can be seen by comparing nomi-native-singular and genitive-singular forms in $\mathbf{3} \mathbf{3 . 1 . 1}$.3.1 on page 25, and by comparing Present and Aorist forms in $\S 3.4 .2$. 1 on page 46.
2) Two stops together. Here the following general rule applies:

If two stops occur together, they must both be either aspirated, voiceless, or voiced, and if necessary, the first one must change to make this happen.
a) Stops before $\theta$. These rules are especially relevant in aorist passive and similar verb forms whose suffixes start with $\theta$ (those listed in column 6 of the chart in $\$ 3.4 .2 .1$ ):
$\pi, \beta, \varphi+\theta \rightarrow \varphi \theta$. e.g. $\dot{\varepsilon}-+\pi \varepsilon \mu \pi-+-\theta \eta \rightarrow \dot{\varepsilon} \pi \varepsilon \dot{\varepsilon} \mu \varphi \theta \eta$ "he was sent" Luke 4:26, $\sigma v v-+\tau \varepsilon-+$ $\tau \rho \underline{1} \beta-+-\sigma \theta \notin t \rightarrow \sigma v v \tau \varepsilon \tau \rho \tilde{i} \varphi \theta \notin t$ "to have been smashed" Mark 5:4, $\dot{\varepsilon} \xi \alpha \lambda \varepsilon \iota \varphi-+-\theta \tilde{\eta} v \notin \rightarrow \dot{\varepsilon} \xi \alpha \lambda \varepsilon l \varphi \theta \theta \tilde{\eta} v e t$ "to be wiped away" Acts 3:19.
 $\dot{\varepsilon}-+\dot{\alpha} v o r \gamma-+-\theta \eta \sigma \Theta v \rightarrow \eta \dot{\eta} v o ́ \chi \theta \eta \sigma \nLeftarrow v$ "they were opened" Rev. 20:12, $\dot{\varepsilon} \lambda \varepsilon \gamma \gamma \chi-+-\theta \tilde{\eta}$ $\rightarrow \dot{\varepsilon} \lambda \varepsilon \gamma \gamma \chi \theta \tilde{\eta}$ "be exposed" John 3:20.
$(\tau, \delta), \theta+\theta \rightarrow \sigma \theta$. e.g. $\dot{\varepsilon}-+\pi \varepsilon \imath \theta-+-\theta \eta \sigma \notin \geqslant \dot{\varepsilon} \pi \varepsilon \varepsilon^{\prime} \sigma \theta \eta \sigma \notin v$ "they were persuaded" Acts 5:39.
b) Stops before $\tau$ :
$\pi, \beta, \varphi+\tau \rightarrow \pi \tau$. e.g. $\gamma \varepsilon-+\gamma \rho \notin \varphi-+-\tau \notin \rightarrow \gamma \varepsilon ́ \gamma \rho \notin \tau \tau \notin$ "it has been written" Mat. 2:5.
$\kappa, \gamma, \chi+\tau \rightarrow \kappa \tau$. e.g. $\dot{\varepsilon} \kappa \lambda \varepsilon \gamma-+$ - $\tau$ ós $\rightarrow \dot{\varepsilon} \kappa \lambda \varepsilon \kappa \tau$ ós "chosen" Luke 23:35, $\delta \varepsilon-+\delta \varepsilon \chi-+-\tau \notin \rightarrow$ ס́́סєкєєt "it has accepted" Acts 8:14.
$\tau, \delta, \theta+\tau \rightarrow$ ??. (There do not seem to be any examples. Stems ending in these are much less frequent than other stops.)
3) Stops before $\mu$. These rules are especially relevant for participial forms ending in $-\mu \varepsilon ́ v o \varsigma$. (See $\S 3.4 .2 .1$.):
$\pi, \beta, \varphi+\mu \rightarrow \mu \mu$. e.g. көtө- $+\lambda \varepsilon-+\lambda \varepsilon 1 \pi-+-\mu \varepsilon ́ v o s \rightarrow \kappa \notin \tau \notin \lambda \varepsilon \lambda \varepsilon 1 \mu \mu \varepsilon ́ v \circ \varsigma$ "having been left behind" Acts 25:14, $\tau \varepsilon-+\theta \lambda_{1} \beta-+-\mu \varepsilon ́ v \eta \rightarrow \tau \varepsilon \theta \lambda \tau \mu \mu \varepsilon ́ v \eta$ "having been constricted" Mat. 7:14, $\gamma \varepsilon-+\gamma \rho \Theta \varphi-+-\mu \varepsilon ́ v \alpha \rightarrow \gamma \varepsilon \gamma \rho \alpha \mu \mu \varepsilon ́ v \alpha$ "having been written" John 12:16.
$\kappa, \gamma,(\chi)+\mu \rightarrow \gamma \mu$ e.g. $\delta \varepsilon-+\delta \omega \kappa-+-\mu \varepsilon ́ v ө t \rightarrow \delta \varepsilon \delta \omega \gamma \mu \varepsilon ́ v ө t$ "having been persecuted" Mat. 5:10,

$(\tau, \delta), \theta+\mu \rightarrow \sigma \mu$. e.g. $\pi \varepsilon-+\pi \varepsilon \imath \theta-+-\mu \notin \rightarrow \pi \varepsilon ́ \pi \varepsilon \iota \sigma \mu \notin$ "I have been persuaded" Rom. 8:38.
4) Many other changes occur when two consonants come together, as can be seen in $\S$ 3.4.2.1, but it is difficult to formulate general rules.

### 2.1.3.2.Vowel Contraction Rules

The vowel assimilation rules are, frankly, fairly messy. The best thing to do is simply to search through this file and find every case of the word "contract" to see all the examples.

### 2.1.4.How should we pronounce New Testament Greek?

For practical purposes, the best plan is to use the Pre-Classical or Classical Greek pronunciation as much as possible, since this matches the actual spelling more closely than does the Kovv' pronunciation, and since the spelling is all we have, there is really little reason not to do this. A phonetician who is comfortable with the pronunciation of German, with its long and short vowels and the "ü" vowel (IPA [y]) will be able to handle the vowel system quite well, except for some of the diphthongs. The diphthongs are more like those of Spanish, as are most of the consonants.

The pronunciation system used by most traditional grammars of New Testament Greek, in particular Machen's, and which could be called the Traditional Hybrid Pronunciation, mostly follows the Classical or PreClassical pronunciation. (See the chart on page $\mathbf{1 2}$ below.) However, it also differs in a number of cases from the Pre-Classical or Classical pronunciations, as detailed below.

### 2.1.4.1.Difficulties in the Classical Pronunciation, and Common Differences between it and the "Traditional Hybrid Pronunciation"

One difference is the pronunciation of several of the vowels. Because of the shifts in the vowel height of some of the vowels from Classical to Kovv', and since the Kovin vowel heights match the long and short vowel systems of English and German much better than the Classical ones, the German system is generally followed.

Another difference is the pronunciation of $\varphi, \theta_{2}$ and $\chi$. In both Classical and Kow $\mathfrak{\eta}$ Greek these were actually aspirated voiceless stops, which were distinguished from the unaspirated voiceless stops $\pi$, $\tau_{2}$ and $\kappa$. Thus, $\varphi$ was pronounced much like the p in English "pan", with aspiration, whereas $\pi$ was pronounced like the $\mathbf{p}$ in Spanish "pan" (bread), without aspiration.

Actually, English has both aspirated and unaspirated stops, but uses them in different contexts. In the chart on the right, the red sounds in the first column are aspirated, whereas those in the second column are not. Are you skeptical that these are really different sounds? Hold your wrist up close to your mouth, and pronounce each pair of words: you will feel a puff of air with the ones

| English |  | Spanish |
| :--- | :---: | :---: |
| Aspirated |  |  |
| $\left[\mathrm{p}^{\mathrm{h}}\right]$ Unaspirated Unaspirated  <br> $[\mathrm{t}]$ top $[\mathrm{p}]$ span $[\mathrm{p}]$ pan "bread" <br> $\left[\mathrm{k}^{\mathrm{h}}\right]$ kill $[\mathrm{k}]$ stop skill $[\mathrm{t}]$ toro "bull" $\mathrm{lk]} \mathrm{kilo} \mathrm{"kilo"}$ |  |  | in the first column, but not with the others. That puff of air is the aspiration. In English this is not a significant difference, but in Ancient Greek it was! ${ }^{29}$

Spanish, on the other hand, has only unaspirated stops, as shown in the chart, and so does Modern Greek.
Besides Ancient Greek, this same distinction between aspirated and unaspirated stops is found in a number of modern languages such as Mandarin Chinese, Hindi, or the various Quichua languages of the highlands of Ecuador.

The "rough breathing" and its effect on neighboring sounds makes perfect sense if these letters were pronounced as aspirated stops (see $\$ 2.1 .1$ on page 5). However, since in English these sounds are not distinguished, for practical purposes this pronunciation would simply be confusing, even for me as a phonetician, not to mention anyone I might try to pronounce a word for. Therefore, for practical purposes these letters should be pronounced as fricatives, even though this pronunciation was not actually used until after New Testament times.

Finally, the letter $\zeta$ was probably pronounced [dz] in Pre-Classical, though it apparently changed to [z] at some point in the Classical period. Machen suggests that it be pronounced [dz], but this is really not practical, especially when not preceded by a vowel.

These exceptions reflect for the most part the pronunciation traditionally used in teaching New Testament Greek. These exceptions are shown in the chart below, in the "Traditional Hybrid Pronunciation" column. In red in each row are the forms or features adopted in the Traditional Hybrid Pronunciation. As can be seen, it picks and chooses from various periods. (All of the letters and combinations not listed here follow the Pre-Classical and Classical pronunciation.)

As an academic exercise it might be instructive to use the Kovv自 pronunciation in reading the New Testament instead of the Classical one, since this was the way the language was really pronounced at the time. However, the extra effort this would involve does not seem to me to be justified by any possible benefits, so I prefer the Classical pronunciation for practical reasons (except for the differences mentioned above). The Modern Greek pronunciation would be even more impractical, since some very essential contrasts have been lost!

[^9]
## Chart Comparing the Different Stages in the Pronunciation of Greek with the "Traditional Hybrid Pronunciation"

| Spelling | $\begin{gathered} \text { Pre- } \\ \text { Classical } \end{gathered}$ | Classical | Traditional Hybrid Pronunciation | Kovv́́ | Modern |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\alpha$ | a:i | aii | a: | a | a |
| $\varepsilon$ | e | e | $\varepsilon$ | $\varepsilon$ | e |
| $\varepsilon 1$ | ei | e: | $\begin{gathered} \text { mine: i: } \\ \text { (traditional: } \varepsilon \text { i) }^{30} \end{gathered}$ | i | i |
| $\eta$ | $\varepsilon:$ | $\varepsilon:$ | e: | e | e |
| $\eta$ | ع: | ع:i | e: | e | e |
| o | o | 0 | J | o | o |
| ov | ou | $\mathrm{O}_{\underline{1}}$ | u: | u | u |
| $\omega$ | э: | 3: | O: | 0 | 0 |
| $\omega$ | 3:i | ji | o: | 0 | o |
| $v$ | u | $\mathrm{y}^{31}$ | $\mathrm{y}^{31}$ | $\mathrm{y}^{31}$ | i |
| $\varphi$ | $\mathrm{p}^{\text {h }}$ | $\mathrm{p}^{\text {h }}$ | f | $\mathrm{p}^{\text {h }}$ | f |
| $\theta$ | $\mathrm{t}^{\text {h }}$ | $\mathrm{t}^{\text {h }}$ | $\theta$ | $\mathrm{t}^{\text {h }}$ | $\theta$ |
| $\chi$ | $\mathrm{k}^{\text {h }}$ | $\mathrm{k}^{\text {h }}$ | X | $\mathrm{k}^{\text {h }}$ | X |
| $\zeta$ | dz | z | z | z | z |

### 2.1.4.2.Sample Text for Pronunciation Comparison

I will show the differences between the probable pronunciations of the various stages of Greek, from PreClassical to Modern Greek, using the following text from Luke 2. I have not included Classical Greek since it only differs from the Pre-Classical in the pronunciation of $\varepsilon$, ov, and $v .{ }^{32}$ The Traditional Hybrid pronunciation (with $\varepsilon l$ pronounced as [i:] according to my preference) is included for comparison.
(The pronunciation given in the last column of the chart below does not actually represent the Modern Greek language, since there have been a huge number of changes in vocabulary, grammar, and pronunciation details: this is simply how a Modern Greek speaker would pronounce the Ancient Greek text, often with only limited understanding. In the same way, the pronunciation in the second column does not exactly match the Pre-Classical Greek language, since there were more changes besides simple sound changes, including various vowel contractions.)

[^10]R. Aschmann - March 2, 2018

| Kovv́ Greek with polytonic diacritics for Ancient Greek | Pre－Classical Pronunciation | Traditional Hybrid Pronunciation | Kowv́ Pronunciation | Modern Pronunciation ${ }^{33}$ |
| :---: | :---: | :---: | :---: | :---: |
|  <br>  $\mu \alpha \pi \alpha \rho \dot{\alpha}$ K $\alpha i ́ \sigma \alpha \rho o s ~ \alpha v ̉-~$ үои́бтоv ג̇лоүра́ $\varphi \varepsilon \sigma \theta \alpha ı$ $\pi \tilde{\alpha} \sigma \alpha \nu \tau \eta ̀ v$ oỉкоч $\mu \varepsilon ́ v \eta \nu$ ． ${ }_{2} \alpha$ ब̃兀ๆ $\dot{\alpha} \pi \sigma \gamma \rho \alpha \varphi \eta \dot{\eta} \pi \rho \omega \dot{\tau} \tau \eta$ <br>  <br>  غ̇лорєи́ovто $\pi \alpha ́ v \tau \varepsilon \varsigma ~ \dot{\alpha} \pi о-$ $\gamma \rho \alpha ́ \varphi \varepsilon \sigma \theta \alpha 1$, є̈кабтоৎ $\varepsilon i \varsigma$ <br>  <br>  дı $\lambda \alpha i ́ \alpha \varsigma ~ \varepsilon ̇ к ~ \pi о ́ \lambda \varepsilon \omega \varsigma ~ N \alpha \zeta \alpha-~$ <br>  $\pi o ́ \lambda ı v \Delta \alpha v i ̀ \delta ~ \eta ँ \tau \iota \varsigma ~ \kappa \alpha \lambda \varepsilon i ̃ \tau \alpha ı$ <br>  <br>  $\tilde{\alpha}_{\varsigma} \Delta \alpha v i ́ \delta,{ }_{5} \alpha \dot{\alpha} \pi \sigma \gamma \rho \alpha ́ \psi \alpha \sigma \theta \alpha \imath$ бòv Mapıò $\mu \tau \tilde{̃}$ ह̇ $\mu v \eta \sigma \tau \varepsilon v-$ <br>  <br>  <br>  <br>  <br>  тòv $\pi \rho \omega$ то́токоข，каì $̇$ ह́б－ $\pi \alpha \rho \gamma \alpha ́ v \omega \sigma \varepsilon v \alpha$ బủtòv каì <br>  <br>  غ̇v $\tau \underline{\varrho}$ к $\alpha \tau \alpha \lambda \dot{\mu} \mu \alpha \tau ı .{ }_{8} K \alpha i ̀$ <br>  $\tau \tilde{1} \alpha v ๋ \tau \tilde{n} \alpha \gamma \rho \alpha \cup \lambda о \tilde{v} v \varepsilon \varsigma \kappa \alpha \grave{~}$ <br>  <br>  ఎข̉tธัข． | 1 egéneto dè en tâis he：mé－ rais ekéinais eksê：lt ${ }^{\text {h }}$ en dóg－ ma parà káisaros augóus－ tou apográp ${ }^{\text {h }}$ est $^{\text {hai }}$ pâ：san tè：n oikouméne：n． 2 háute： apograp $^{h}$ ह̀：prótte：egéneto he：gemonéuontos tê：s surí－ a：s kure：níou．з kái eporéu－ onto pántes apográp ${ }^{\text {h }}{ }^{\text {est }}{ }^{\text {hai }}$ ， hékastos èis tè：n heautôu pólin． 4 anébe：dè kái jo：sè：$p^{h}$ apò tê：s galiláia：s ek póleכ：s nadzarèt ${ }^{\text {h }}$ èis tè：n joudáia：n èis pólin dauìd hé：tis kalêi－ tai be：t ${ }^{\mathrm{h}}$ léem，dià tò êinai autòn eks óikou kái patriâts dauíd，${ }_{5}$ apográpsast ${ }^{\text {hai }}$ sùn mariàm tê：i emne：steumé－ ne：i autôti，óusع：i eŋkúכi． 6 egéneto dè en tô：i êinai au－ toùs ekêi eplé：st ${ }^{\text {h }}$ ： ：san hai he：mérai tôu tekêin auté：n， 7 kái éteken tòn huiòn autê：s tòn protótokon，kái espar－ gáno：sen autòn kái anékli－ nen autòn en $\mathrm{p}^{\mathrm{h}}$ átnع：i，dióti ouk $\hat{\varepsilon}: n$ autôis tópos en tôıi katalúmati．skài poiménes $\hat{\varepsilon}$ ：san en tê：i khórrasi tếi au－ tê：i agraulôuntes kài $p^{\mathrm{h}} u$－ lássontes $\mathrm{p}^{\mathrm{h}}$ ulakà：s tê：s nuktòs epì tè：n pòimne：n autồn． | 1 عgéncto dè $\varepsilon n$ tâis he：mé－ rais $\varepsilon k i ́ n a i s ~ \varepsilon k s e ̂: l \theta \varepsilon n ~ d o ́ g-~$ ma parà káisaros augústu： apográfrsӨai pâ：san tè̀n эi－ ku：méne：n． 2 háute：apogra－ fè：prótte：$\varepsilon g$ éncto he：gemo－ néuontos tềs syrías kyre：ní－ u：． 3 kái $\varepsilon$ рэгѓuวnto pántes apográfesӨai，hékastos ì：s tè̀n heautû：pólin． 4 anćbe： dè kái jo：sè̀f apò tê：s gali－ láias $\varepsilon \mathrm{k}$ pólqo：s nazarè $\theta$ ì：s tèrn ju：dáian ì：s pólin dauìd hétis kalîttai be： $\operatorname{ll}$ ć $\varepsilon m$ ，dià t̀̀ îmai autòn $\varepsilon k s$ óiku：kái patriâ：s dauíd， 5 apográ－ psasӨai sỳn mariàm tê： عmne：stعuméne：autô：，ú：se： عŋkýo：．${ }_{6}$ egéncto dè $\varepsilon$ en tô： î：nai autùs $\varepsilon k i ̂: ~ \varepsilon p l e ́: s \theta e: s a n ~$ hai he：mérai tû：tekî：n au－ té：n， 7 kái $\varepsilon$ ćt $\varepsilon k \varepsilon n$ tòn hyiòn autê：s tòn pro：tótokon，kái єspargáno：sen autòn kái anćklinen autòn $\varepsilon$ हn fátne：， dióti u：k êm autôis tópos $\varepsilon n$ tô：katalýmati． 8 kài poimé－ nes ê：san $\varepsilon n$ tê：k ${ }^{\text {hór }}$＇ra tê： autê：agraulûintes kài fylás－ sontes fylakàs tê：s nyktòs عpì tè̀n pòimne：n autô：n． | ${ }_{1}$ عgénéto dé $\varepsilon n$ tés hemé－ res $\varepsilon$ kínes $\varepsilon k s e^{\text {lt }}{ }^{\text {h }} \varepsilon$ n dóg－ ma pará késaros augústu apográp ${ }^{\mathrm{h}} \varepsilon \mathrm{st}^{\mathrm{h}} \varepsilon$ pásan tén ykuménen． 2 háute apo－ grap ${ }^{h}$ é próte $\varepsilon g \varepsilon ́ n \varepsilon t o ~ h e-~$ gemonéuontos tés syrías kyreníu． $3^{\text {k }}$ モ́ عporéuonto pántes apográp ${ }^{\mathrm{h}} \varepsilon \mathrm{st}^{\mathrm{h}} \varepsilon$ ，hé－ kastos ís tén heautú pólin． ${ }_{4}$ anćbe dé ké josép ${ }^{\mathrm{h}}$ apó tés galiléas $\varepsilon \mathrm{k}$ pólıos na－ zarćt ${ }^{\text {h }}$ ís tén judéan ís pó－ lin dauíd hétis kalít bet $^{\text {h }}$－ lé $\varepsilon m$ ，diá tó ín $\varepsilon$ autón $\varepsilon k s$ ýku ké patriás dauíd， ${ }_{5}$ apográpsast ${ }^{\text {h }} \varepsilon$ sýn mari－ ám té $\varepsilon m n e s t \varepsilon u m$ éne autó， <br>  tó íne autús $\varepsilon$ kí $\varepsilon$ plést ${ }^{\text {h }} \mathrm{e}$－ san he hemér $\varepsilon$ tú tعkín au－ tén， 7 k $\varepsilon$ ćtzken tón hyión autés tón protótokon，ké espargánosen autón ké anéklinen autón $\varepsilon n \mathrm{p}^{\mathrm{h}}$ át－ ne，dióti uk én autýs tópos en tó katalýmati． 8 ké py－ ménes ésan $\varepsilon n$ té $\mathrm{k}^{\text {hóra té }}$ auté agraulúntes ké $\mathrm{p}^{\mathrm{h}} \mathrm{y}$－ lássontes $\mathrm{p}^{\mathrm{h}}$ ylakás tés nyktós $\varepsilon$ pí tén pýmnen autón． | 1 eyéneto ðé en tés imé－ res ekínes eksílӨen ðóy－ ma pará késaros avyús－ tu apoyráfes $\theta$ e pásan tín ikuménin． 2 áfti apoyrafí próti eyéneto ǐemoné－ vondos tís sirías kiriníu． ${ }_{3}$ ké eporévondo pándes apoyráfes $\theta e$ e ékastos ís tín eaftú pólin． 4 anévi ðé ké josíf apó tís yaliléas ek póleos nazaré $\theta$ ís tín juðéan ís pólin ðavíð ítis kalíte viӨléem，ðiá tó íne aftón eks íku ké patriás ðavíð， 5 apoyrápsas日e sín mariám tí emnistev－ méni aftó，úsi engío． ${ }_{6}$ eyéneto ðé en tó íne af－ tús ekí eplís $\theta$ isan e imé－ re tú tekín aftín， 7 ké éte－ ken tón ión aftís tón pro－ tótokon，ké esparyáno－ sen aftón ké anéklinen aftón en fátni，ðióti uk ín aftís tópos en tó katalí－ mati． 8 ké piménes ísan en tí xóra tí aftí ayrav－ lúndes ké filásondes fila－ kás tís niktós epí tín pí－ mnin aftón． |

[^11]
### 2.2. Greek Pronunciation Guide for Dummies

The guides below show the pronunciation I suggest for students who just want to use the sounds found in English to pronounce New Testament Greek. These guides follow the Classical pronunciation more closely than they do the Kovv́, mostly for practical reasons, since the Greek spelling system represents the former.

In the next to the last column the pronunciation that I suggest is given, using the pronunciation system used in most standard American English dictionaries. ${ }^{34}$ (This guide will work for both North American and British English, in spite of their different vowel systems. See footnote 42 below. The underlined part of each word is the stressed syllable, the one with primary emphasis.)

In addition to the letters, New Testament Greek has two "breathing" marks and three accent marks, all of them written over the vowel they apply to. In the examples that follow these are placed over the $\alpha$ vowel.

The "breathing" marks are $\dot{\alpha}$ and $\dot{\alpha}$; the first is the "rough breathing", and is pronounced like " $h$ " in English "hit"; the second is the "smooth breathing", and is not pronounced. Both of these marks only occur on vowels (or "diphthongs") that begin words, and one or the other is required on such words.

The Greek accent marks are $\dot{\alpha}, \dot{\alpha}$ and $\tilde{\alpha}$. These are the acute, the grave and the circumflex, respectively. Originally these had distinct pronunciations, but by Kovv́ times they were pronounced the same. They indicate which syllable received the stress. For more information (but only if you are particularly interested), see $\$ 2.1 .2 .4$ on page 8.

### 2.2.1.Consonants

| Letter Pronunciation |  |  | Example |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\boldsymbol{\beta}$ | b | "boy" | $\beta \lambda غ ́ \pi \omega$ | blĕpō | "I see" |
| $\gamma$ | g 35 | "girl" | $\gamma \dot{\theta} \lambda \lambda$ | gälä | "milk" |
| $\gamma \gamma$ | ng | "anger" | àprapsúc | ängärĕvō | "I compel" |
| $\gamma \kappa$ | nk | "sinking" | d̀v ${ }^{\text {áykn }}$ | änängkā | "necessity" |
| $\gamma \xi$ | nks | "links" |  | ělĕngksē | "he will show" |
| $\gamma \chi$ | ngKH |  | $\dot{\varepsilon} \lambda \overline{\text { ćr }} \chi \chi \omega$ | ělĕngKHō | "I show" |
| $\boldsymbol{\delta}$ | d | "dog" | סóga | dồksä | "glory" |
| $\zeta$ | $\mathrm{z}^{37}$ | "zip" | $\zeta \dot{\sim}$ | Zōnā | "belt" |
| $\boldsymbol{\theta}$ | th ${ }^{39}$ | "thin" | $\theta \varepsilon$ ¢́s | thêôs | "god" |
| $\kappa$ | k | "kit" | ко́ $\dagger \eta$ | kômā | "hair" |
| $\lambda$ | 1 | "lip" | $\lambda \dot{\text { ćr }}$, | lĕgō | "I say" |
| $\mu$ | m | "man" | $\mu \varepsilon ́ v \omega$ | měnō | "I remain" |


| Letter Pronunciation |  |  | Example |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $v$ | n | "no" | vópos | nômôs | "law" |
| $\xi$ | ks | "books" | ¢́xioos | ksĕnôs | "strange(r)" |
| $\pi$ | p | "pit" | $\pi \alpha$ ĩ | pīs | "child" |
| $\rho$ | r | "rat" | $\dot{\rho} \tilde{\mu} \mu \theta$ | rāmä | "saying" |
| //¢ ${ }^{36}$ | S | "sit" | б่́ $\rho \xi$ | särks | "flesh" |
| $\tau$ | t | "tip" | $\tau$ т́̇えos | tělôs | "end" |
| $\varphi$ | f 39 | "fit" | $\varphi \check{\sim} \varsigma$ | fōs | "light" |
| $\chi$ |  | German "machen" | $\chi$ 人ípo | KHīrō | "I rejoice" |
| $\psi$ | ps | "lips" | $\psi \varepsilon$ ט̃ 0 ¢ | psĕvdôs | "a lie" |



### 2.2.2.Vowels and "Diphthongs"

The first group of vowel combinations in the following chart (beginning with $\boldsymbol{\alpha}$ ) are called "diphthongs", and are pronounced as one syllable. To show that two vowels which might be confused with one of these "diphthongs" are to be pronounced as two separate syllables (or vowels), a dieresis (") is used on the second one, as seen in the second group of vowel combinations.

[^12]| Letter |  | Pronunciation | Example |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\boldsymbol{\alpha}$ | ä | ＂fäther＂ | ө้ $\gamma \omega$ | ägō | ＂I lead＂ |
| $\varepsilon$ | ĕ 40 | ＂bĕd＂ | غ̇ү⿳㇒⿻⿱一⿱日一丨一力 | ĕgō | ＂I＂ |
| $\eta$ | ā | ＂bāke＂ | ぞ | à | ＂or＂ |
| 1 | $\begin{aligned} & \hline \mathrm{i} \\ & \overline{\mathrm{e}} \\ & \mathrm{y} \\ & \hline \end{aligned}$ | ＂pĭt＂if short ${ }^{41}$ <br> ＂bē＂if long（or just easier） unaccented before a vowel | $\because \delta \varepsilon$ <br> îpts <br> iatpós | Ĭdĕ <br> ērĭs <br> yätrôs | ＂Look！＂ <br> ＂rainbow＂ <br> ＂physician＂ |
| o | $\begin{array}{\|l\|} \hline \hat{0} \\ (\bar{o}) \end{array}$ | $\begin{aligned} & \text { "aw" in "saw"42 } \\ & \text { ("nō") } \end{aligned}$ | őלદı | ôzē | ＂he stinks＂ |
| $v$ | yōo ${ }^{43}$ | ＂yōohoo＂ | ษ̋\％Oऽ | $\underline{\text { hyōpsôs }}$ | ＂height＂ |
| $\omega$ | $\bar{\square}$ | ＂nō＂ | $\tilde{\omega} \delta \varepsilon$ | ōdĕ | ＂here＂ |
| $\boldsymbol{\alpha l}$ | ī | ＂bīte＂ | $\chi \alpha i p \omega$ | KHīrō | ＂I rejoice＂ |
| $\alpha \mathrm{ov}$ | ou | ＂loud＂ | גv̉兀ós | outôs | ＂he＂ |
| \＆ı | $\overline{\mathrm{e}}^{44}$ | ＂bē＂ | ธĩ $\pi \varepsilon v$ | ēpĕn | ＂he said＂ |
| Ev | ĕv ${ }^{45}$ | ＂nĕver＂ | \＆v̉ º́á | ĕvdēä | ＂fair weather＂ |
| ףv | āv ${ }^{45}$ | ＂sāve＂ | ๆல̉入í̧¢то | āvlēzĕtô | ＂he was spending the night＂ |
| Ot | oi | ＂join＂ | －ĩvos | oinôs | ＂wine＂ |
| Ov | $\overline{00}$ | ＂bōt＂ | oṽv | O－n | ＂therefore＂ |
| vi | wē | ＂wē＂ | $\Delta \alpha v i ́ \delta$ | däwēd | ＂David＂ |
| גï | $\begin{array}{\|l\|} \hline a ̈-1 ̆ \\ \text { ä-ē } \\ \text { ä-y } \\ \hline \end{array}$ | ```or (if easier) unaccented before a vowel``` | Naïv <br> A $\alpha$ ơta $\alpha$ <br> Ѓ́z̈os | näĭn äкнäēä gäyôs | ＂Nain＂ <br> ＂Achaia＂ <br> ＂Gaius＂ |
| $\boldsymbol{\alpha} \ddot{\text { ü }}$ | ä－yō |  | $\pi \rho \alpha \ddot{\ddot{*}} \mathrm{~S}$ | präyōs | ＂gentle＂ |
| \＆ï | ĕ－ı̆ | or ĕ－ē or ĕ－y |  | sĕmĕ1̆n | ＂Semein＂ |
| iï | ē－1̆ | or ē－ē or ē－y |  | dēĭskyōorēzĕtô | ＂he insisted＂ |
| ı̈̈ | $\overline{\text { è－yō }}$ |  |  | dēyōolēzôntěs | ＂straining out＂ |
| ӧ̈ | Ô－1̆ | or ô－ē or ô－y | Хоїко́ऽ | KHôilkôs | ＂made of earth＂ |
| oï̀ | oi－1̆ | or oi－ē or oi－y | $\dot{\alpha} \gamma \in \theta$ олой̈̈̆ $\alpha$ | ägäthôpoięä | ＂doing good＂ |
| Ö̈ | Ô－yō |  | $\pi \rho о \ddot{\pi}$ п̃ $\rho \chi \varepsilon \nu$ | prôyōopārкнĕn | ＂he was formerly＂ |
| v̈̈ | yō－1 | or y $\overline{00}-\mathrm{e}$ or or $\overline{0} \mathbf{-}-\mathrm{y}$ | о̇б¢乇́̇̈ | ôsfyooē | ＂loins＂ |
| $\omega \ddot{\mathrm{t}}$ | ō－1̆ | or $\overline{\mathrm{o}}$－ e | $\pi \rho \omega$ ӥvós | prō1̆nôs | ＂early＂ |
| $\omega \ddot{\boldsymbol{u}}$ | $\overline{0}-\mathrm{yo} \overline{0}$ |  | M $\omega$ シ̈бர̃ऽ | mōyōosās | ＂Moses＂ |

## 2．2．3．Vowel Length

Classical Greek had five short vowels $\notin, \varepsilon, \mathfrak{t}, \boldsymbol{o}, \forall$ ，and five long vowels $\underline{\alpha}, \eta, \underline{1}, \omega, \underline{v}^{46}$（The bars and under－ lines are my additions；they are not used in the Greek writing system．）Only the distinction between two of these long－short pairs was ever actually written，leaving $\alpha, 1$ and $v$ ambiguous as far as length is concerned．However， this distinction is useful in understanding the use of the accents in the New Testament text，and in a number of grammatical situations．

[^13]For this reason, throughout this description I have marked vowel length on $\alpha, 1$ and $v$ whenever it can be determined, using the following conventions: $\notin$ is short and $\underline{\alpha}$ is long; if the evidence for the vowel length is only derived from information outside the New Testament ${ }^{47}$, the vowels are colored blue: $\theta$ or $\underline{\alpha}$; if I have no information about the vowel length, it is simply colored blue with no length mark: $\alpha$.

I have also marked length on word-final $\alpha \mathrm{l}$ and ol , since these diphthongs can be either long or short (in this situation only). All other diphthongs are always long, and I will not mark length on these. Also, $\alpha$ is always long, and since the iota subscript ( . ) makes this quite clear, no additional length marking will be added.

For more information (if you are interested), see $\$ 2.1$.2.4 on page 8 .

[^14]
## 3. New Testament Greek Grammar

In the tables that follow, the capital letter "V" stands for any Greek vowel, and the capital letter "C" stands for any consonant.

### 3.1. Nouns and Adjectives

I include nouns and adjectives together in this section because, though they are used somewhat differently in Greek grammar, they are declined very similarly. If each adjective is separated into its three genders, each of these is declined in the same way that nouns are. In the succeeding section I will simply describe which declensions are combined in a full adjective declension.

### 3.1.1.Individual Declensions

Nouns in Greek are traditionally cited with two citation forms, the nominative singular and the genitive singular. This is a good system, since all of the forms of each noun can usually be derived from these two forms alone, except for the most irregular. In all that follows, nouns will be cited in this way. Third declension nouns will normally be cited with the dative plural as well, because of their greater variability. However, if additional examples work the same as the main example in a column, sometimes only the nominative singular is listed.

At the head of each column I have included some identifying information. The first line contains my code for the declension, followed in parentheses by the nominative and genitive singular endings, and sometimes another important ending such as the genitive plural. Thus the very first declension below has the code 1Fa $(-\boldsymbol{\eta} / \boldsymbol{\eta} \boldsymbol{\varsigma} / \tilde{\mathbf{Q}} \mathbf{v})$ at the top of the column.

1Fa indicates that this is a First Declension Feminine form. The letters a, b, c, etc. simply indicate individual declensions. Similarly, 2Na indicates a Second Declension Neuter form, declension a. And $\mathbf{3 M F j}$ indicates a Third Declension which can include either Masculine or Feminine forms, declension $\mathbf{j}$.
$(-\boldsymbol{\eta} / \boldsymbol{\eta} \varsigma / \tilde{\mathbf{\omega}} \mathbf{v})$ indicates that the nominative singular ends in $-\eta$, and the genitive singular in $-\eta \varsigma$. The third ending is not always listed: in this case it shows that the genitive plural ends in - $\tilde{\sigma} v$ with final accent, no matter where the inherent accent falls. (However, the third column is exceptional in this respect; I have used a dotted line to try and make this clear.)

On the next line the code (e.g. 1Fa) is repeated for each column, followed by a superscript number ${ }^{1},{ }^{2}$, or ${ }^{3}$ indicating which syllable has the inherent accent.

On the line below this there is sometimes information about what kind of stem endings may occur (e.g. -V for Vowel only, -C for Consonant only, etc.). And on the last line there are often various numbers, which are paragraph numbers from Machen's book or locations in Moulton's book.

Machen states that "In nouns, the accent remains on the same syllable as in the nominative singular, so nearly as the general rules of accent will permit" (page 16, 【14). However, this is not strictly true, and counterex-
 $\delta \varepsilon \sigma \pi o ́ \tau \eta \varsigma, \delta \varepsilon \sigma \pi o ́ \tau o v^{(s)}$, vocative singular $\delta \varepsilon ́ \sigma \pi o \tau \notin$. In each of these cases, the "inherent accent" is on the antepenultimate syllable, but this is not seen on either of the citation forms since these have long vowels in the final syllable, but instead is seen on some other form such as the nominative plural or the vocative singular. Thus, the real rule should be:

Any given noun (or adjective) has an inherently accented syllable. The accent will appear on this syllable in all forms of the noun or adjective for which the general rules of accent will permit it.

An exception to this rule is that in the First Declension the genitive plural suffix - $\tilde{\omega} v$ almost always attracts the accent, except for the $\mathbf{1 F e}$ and $\mathbf{1 F a}{ }^{\mathbf{3}}$ forms. Also, several third declension nouns break this rule, since they lose the final syllable completely in certain forms, although even in these cases it is almost always possible to identify an inherent accent.

The number of examples given in a particular column does not imply how common the particular declension is, but may indicate how complex the variations are.

In all of the charts below, items surrounded by double lines are adjectives, or function like adjectives and have more than one gender. Items surrounded by thick lines are verb participles.

### 3.1.1.1.First Declension (Parisyllabic)

This declension and the second declension are referred to as "parisyllabic", meaning that all forms have the same number of syllables. This is the most common declension for feminine nouns and adjectives. The masculine forms are much less common, especially the $\mathbf{1 M b}$ declension, which is only used for proper names of men with the one exception of $v \varepsilon \underline{\alpha} v \dot{1} \underline{\alpha} \subseteq \mathbf{1 M b}$, which only occurs in the singular in the New Testament (though it does occur in the plural in the Septuagint). Masculine proper names in the New Testament seem to be about equally divided between the $\mathbf{1 M b}$ and the $\mathbf{1 M c}$ groups. (Moulton says the latter group is Attic Greek.) Other proper names,


Note that most of the feminine endings in this declension and all of the masculine ones contain inherently long vowels, either $\eta$ or $\alpha$, except for $\mathbf{1 F b}$ and $\mathbf{1 F c}$, which have a short - $\theta$. However, this inherent vowel only appears in three of the feminine singular forms (nominative, accusative, and vocative); in the other forms the vowel is either always long (genitive and dative singular and genitive, dative, and accusative plural) or always short (nominative plural, except for the contracted forms). In most of the forms with $\theta$ in the ending the vowel length is clear either because a circumflex occurs in the penultimate or the accent is antepenultimate. Thus the circumflex occurs on the nominative plural for $\delta \iota \theta \theta \eta \dot{\eta} \eta$, and the inherent stress on the $\dot{\varepsilon}$ in $\delta \varepsilon \sigma \pi$ ó $\tau \eta \varsigma$ only shows up in the vocative singular and the nominative plural (though the latter doesn't occur in the New Testament). Thus vowel length affects position and type of accent in many forms.

The vocative singular forms of $\mathbf{1 M a}$ (masculine) have a short $-\theta$, whereas all the other singular forms are long, which does not really fit into the inherent vowel length scheme set forth in the preceding paragraph. Oh well, all rules have their exceptions.

In this declension the genitive plural ending - $\omega v$ always attracts the accent to itself, whether masculine or feminine, except for the $\mathbf{1 F e}$ columns, which are used almost entirely for adjectives, and the $\mathbf{1 F a}{ }^{\mathbf{3}}$ column, which is
 ent syllables, since the dative plural is $\mu \not \chi \alpha \iota \rho \tilde{\omega} v$.

In this declension, as we have seen, if the nominative and vocative singular end in $\alpha$, this $\alpha$ can be either long or short, and this significantly affects stress placement in many cases. The length and nature of the final vowel is largely determined by how the stem ends, though not completely. Items such as $\dot{\alpha} \mu \alpha \rho \tau \underline{i} \underline{\alpha}$ and к $\underline{u} \rho \underline{\underline{\alpha}} \underline{\alpha}$ have a short $\mathfrak{t}$ and a long $\underline{\alpha}$. The shortness of the $\mathfrak{t}$ can be clearly seen in every case, from the nominative plural form $\dot{\alpha} \mu \alpha \rho \tau^{\prime} \alpha t:$ the $-\alpha t$ and $-\theta t$ plural endings are always short, throughout the noun system, and if this is the case, then the $\mathfrak{t}$ must also be short in this word because of the accent used. Similarly, the length of the $\underline{\alpha}$ can be seen from the fact that $\kappa \underline{v} \underline{\rho} \underline{\underline{\alpha}} \underline{\alpha}$ is the feminine of $\kappa \underline{v} \rho t o s$ "lord", which has inherently antepenultimate stress; therefore the accent could only be on the penult in $\kappa \underline{v} \rho \underline{\underline{\alpha}} \underline{\alpha}$ if the final vowel were long. In fact, it is possible that many nouns ending in - $\underline{t} \underline{\alpha}$ and $-\underline{\alpha} \underline{\varsigma}$ have inherently antepenultimate stress, but because most of them only occur in the singular (being mostly names), the long endings prevent this from surfacing in any of the forms.

Thus in the $\mathbf{1 F a}$ declension the accent can fall on any one the last three syllables, in the $\mathbf{1 F d}$ declension it can fall on either of the last two syllables, and in the $\mathbf{1 F e}$ declension it can only fall on the penultimate or antepenultimate. $\mu \underline{\underline{1}} \kappa \rho \underline{\alpha}$ has inherently ultimate accent, $\omega^{\circ} \underline{\underline{\alpha}}$ and 'Iov $\delta \alpha \underline{\alpha} \underline{\alpha}$ have inherently penultimate accent, and $\delta$ tк $\alpha \underline{i} \underline{\alpha}$ and $\gamma \varepsilon v o \mu \varepsilon ́ v \eta^{(s)}$ have inherently antepenultimate accent (the latter only shows up on the nominative plurals $\delta \dot{\text { fr } \kappa \alpha \downarrow \notin t}$ and $\gamma \varepsilon v o ́ \mu \varepsilon v \notin t$, since all the other endings are long). The difference between $\mathbf{1 F d}$ and $\mathbf{1 F e}$ is that in $\mathbf{1 F d}$ (as with nearly all first declension types) the genitive plural suffix - $\tilde{\omega} v$ attracts the accent, whereas in $\mathbf{1 F e}$ it does not. $\mathbf{1 F e}$ is used almost exclusively for adjectives.

I am not certain that all nouns in the $\mathbf{1 F \boldsymbol { F } ^ { 1 }}$ column historically had a long $\underline{\alpha}$ in the nominative and vocative singular, but for purposes of declension this really doesn't matter. Many feminine adjectives would fall into this category, and Machen states on page 34 ( $\$ 62$ ) the following, which clarifies that at least all adjectives in this category do have the long $\alpha$. He also explains the peculiarities of the genitive plural:
"62. Learn the declension of $\mu 1 \kappa$ póg, small, and of $\delta$ ík人los, righteous (in $\$ \$ 569,570$ ). Note that long $\alpha$ not $\eta$ stands in the feminine of these adjectives when the preceding letter is $\rho$ or a vowel (compare $\$ 55$ ). The accent in the genitive plural feminine of all adjectives of the second and first declension follows the regular noun rule [i.e. follows the inherent accent] and not the special rule for nouns of the first declension [i.e. always on the final syllable] (\$51)."

### 3.1.1.1.1.First Declension Feminine



It would be impossible to tell whether $\kappa \underline{u} \rho \underline{\rho} \underline{\alpha} \underline{\text { " }}$ lady" belonged to $\mathbf{1 F d}{ }^{\mathbf{2}}$ or $\mathbf{1 F e}^{\mathbf{3}}$, since it only occurs in the singular in the New Testament, except that it is derived from אúptos "lord", which clearly shows where its inherent accent falls. In fact, the two forms together are declined just like an adjective, and I have marked them as such!

The forms in the table below are contracted first declension adjectives and nouns. All forms take the circumflex. I have also listed the feminine adjective $\dot{\notin \rho \gamma} \vartheta \rho \tilde{\alpha}^{(s)}$, mentioned by Moulton (which has a $\rho$ before the vowel); this occurs frequently in the feminine in the Septuagint, though not in the New Testament, only the masculine and the neuter.
(Do statistical counts of all of the declensions, ***)

## -

| Contracted First Declension Feminine Forms |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $1 F_{W^{1}}(-\tilde{\eta} / \tilde{\eta} \varsigma / \tilde{\eta} v)$ $1 F_{W^{1}}$ <br> (Contr. of $\mathbf{1 F \boldsymbol { F d } ^ { 2 }}$ ) | $\begin{gathered} 1 \boldsymbol{F x}^{1}(-\tilde{\boldsymbol{\eta}} / \tilde{\boldsymbol{\eta}} \varsigma / \tilde{\boldsymbol{a}} \boldsymbol{v}) \\ 1 \boldsymbol{F x}^{1} \\ \text { (Contr. of } \boldsymbol{1 F a ^ { 2 }} \text { or } \boldsymbol{1 F \boldsymbol { F } ^ { 2 }} \text { ) } \\ \text { VII.5(b) } \\ \hline \end{gathered}$ | $\begin{gathered} 1 F \boldsymbol{y}^{1}(-\tilde{\boldsymbol{\eta}} / \tilde{\boldsymbol{\eta}} \varsigma / \tilde{\boldsymbol{a} v}) \\ 1 \boldsymbol{F} \boldsymbol{y}^{\mathbf{1}} \\ \text { (Contr. of } \boldsymbol{1 F} \boldsymbol{d}^{2} \text { ) } \end{gathered}$ | $$ |
| Sg. Nom. <br> Gen. <br> Dat. <br> Acc. <br> Voc. | "earth, land" originally $\gamma \dot{\varepsilon} \underline{\alpha}^{*}$ (Moulton 78) | "golden" ${ }^{49}$ originally $\chi \boldsymbol{\rho} \underline{\underline{v}} \sigma \varepsilon ́ \eta * 50$ | $\begin{aligned} & \text { "of iron" }{ }^{49} \\ & \text { originally } \sigma \iota \delta \eta \rho \varepsilon \varepsilon^{*} \underline{*}^{*} \\ & \text { (Moulton 366) } \end{aligned}$ | "mina" originally $\mu \nu \alpha \alpha^{*}$ (Moulton 271) |
|  | $\gamma \tilde{\eta}$ <br> $\gamma \tilde{\Omega}$ <br> $\gamma \tilde{1}$ <br> $\gamma \tilde{\eta} v$ <br> $\gamma \tilde{\eta}$ | $\chi \rho \underline{\sigma} \sigma \tilde{\eta}$ <br> $\chi$ ф $\underline{\sim} \sigma \tilde{\eta} \varsigma^{(s)}$ <br> $\chi \rho \underline{v} \sigma \tilde{a}^{*}\left(\chi \rho \underline{v} \sigma \tilde{n}^{(s)}\right)$ <br> $\chi \rho \underline{v} \sigma \tilde{\alpha} v\left(\chi \rho \underline{v} \sigma \tilde{\eta} v^{(s)}\right)$ <br> $\chi \rho \underline{\underline{v}} \tilde{\eta}^{*}$ | ```\sigma\iota\delta\eta\rho\tilde{\eta}* \sigma\iota\delta\eta\rho\tilde{\eta}\mp@subsup{\varsigma}{}{*}(\sigma\iota\delta\eta\rho\tilde{\alpha}\mp@subsup{\varsigma}{}{(S)}) \sigma\iota\delta\eta\rho\tilde{a} \sigma\iota\delta\eta\rho\tilde{v}v``` | $\mu v \tilde{\alpha}$ <br> $\mu \nu \tilde{\alpha} \varsigma^{*(s)}$ <br> $\mu v \tilde{a}^{*}$ <br> $\mu v \tilde{\alpha} v$ <br> $\mu v \tilde{\alpha}^{*}$ |
| Pl. Nom. Gen. <br> Dat. <br> Acc. | (no plural) | $\chi \underline{\chi} \sigma \alpha \tilde{i}^{(s)}$ <br> $\chi \rho \underline{0} \sigma \tilde{\sigma} v$ <br>  <br> $\chi \rho \underline{0} \sigma \tilde{\alpha} \varsigma$ | $\sigma 1 \delta \eta \rho \alpha i^{(\text {(s) }}$ бьঠทюа̃v* $\sigma ı \delta \eta \rho \alpha i \varsigma^{(s)}$ $\sigma \iota \delta \eta \rho \tilde{\alpha} \varsigma^{(8)}$ | $\mu v \underline{\hat{i}}{ }^{(\text {S })}$ <br> $\mu \nu \tilde{\omega} v^{(5)}$ <br> $\mu v \alpha i{ }^{*} *$ <br> $\mu v \alpha ̃ \varsigma$ |
|  |  | M. $\chi \rho \underline{\underline{v} \sigma о \tilde{} s^{(S)}}$ |  |  |
|  |  | $\begin{aligned} & \delta+\pi \lambda \tilde{\eta}^{(s)}, \delta t \pi \lambda \tilde{\eta} \varsigma^{\prime \prime} \text { double", } \\ & \text { M. } \delta t \pi \lambda 0 \tilde{v} \varsigma^{(s)}, \\ & \text { originally } \delta \pi \pi \lambda \text { ó }{ }^{*} \\ & \text { Moulton 103) } \\ & \hline \end{aligned}$ |  | $\dot{\theta} \rho \gamma \forall \rho \tilde{\alpha}^{(s)}$, $\dot{\theta} \rho \gamma \vartheta \rho \tilde{\alpha} \varsigma^{(s)}$ "of silver", originally |
|  |  |  |  |  |

[^15]
## 3．1．1．1．2．First Declension Masculine

Oddly enough，in the $-\eta \varsigma$ stems in the chart below the vocative has a short $\theta$ ，as evidenced by $\delta \boldsymbol{\varepsilon} \sigma \pi \sigma \tau \theta$ ， whereas in the－$\underline{\alpha} \varsigma$ stems the vocative has a long $\underline{\alpha}$ ，as evidenced by＇łov́ $\delta \underline{\alpha}$ ．

Note that $\delta \varepsilon \sigma \pi$ ó $\tau \boldsymbol{\eta}$ has inherently antepenultimate stress，whereas $\pi \rho \circ \varphi \eta \dot{\tau} \eta \zeta$ has inherently penultimate stress．The difference can only be seen in the vocative singular and the nominative plural．

It appears that $\mathbf{1 M c}_{-}^{1}$ nouns always take the circumflex，unlike other first declension nouns．This may have to do with the fact that these are all non－native names．

| First Declension Masculine |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sg．Nom． <br> Gen． <br> Dat． <br> Acc． <br> Voc． |  |  |  | $1 M b\left(-\alpha_{\varsigma} / \mathrm{ov}\right)$ | 1Mc | （－ac／a） |
|  | $1 \mathrm{Ma}^{1}$ | $1 \mathrm{Ma}^{2}$ | $1 M a 3^{3}$ | $1 \mathrm{Mb}^{2}$ | $1 \mathrm{Mc}^{1}$ | $1 M^{2}$ |
|  | （－C） | （－C） |  | （－V） | （－C） | （－C） |
|  | 556；B（c） | 556；B（c） |  | B（d） | II． 4 | II． 4 |
|  | ＂disciple＂ | ＂prophet＂ | ＂master＂ | ＂young man＂ | ＂Satan＂ | ＂Judas／Jude＂ |
|  | $\mu \notin \theta \eta \tau$ т́s | $\pi \rho о \varphi \eta$ ¢п¢ | סєбло́тทऽ | $v \varepsilon \underline{\alpha} v^{\prime} \underline{\underline{\prime}} \underline{S}$ |  | ＇†ov́ $\underline{\alpha}$ ¢ |
|  | $\mu \not \theta \eta \tau о$ ข̃ | $\pi \rho о \varphi$ ¢́тоv | $\delta \varepsilon \sigma \pi$ о́тоv ${ }^{(s)}$ | veavviov | इetevã | ＇†ov́ $\underline{\alpha}$ |
|  | $\mu \not \theta \theta \eta \tau \underline{\square}$ | $\pi \rho о \varphi \eta \sim \tau \eta$ | $\delta \varepsilon \sigma \pi$ о́тท | $v \varepsilon \underline{\alpha} v v^{t} \alpha^{(s)}$ |  | ${ }^{\prime} \dagger 0$ ט́ $\alpha^{\alpha}$ |
|  | $\mu \otimes \theta \eta \tau \mathfrak{q}$ | $\pi \rho о \varphi \eta ์ \tau \eta \nu$ | $\delta \varepsilon \sigma \pi$ ó $\tau \eta \nu$ | $v \varepsilon \underline{\alpha} v \nu^{\underline{\alpha}} \underline{\nu}$ | इetevã | ＇†ov́ $\underline{\alpha}$ v |
|  | $\mu \otimes \theta \eta \tau \dot{\theta}^{*}$ | $\pi \rho о \varphi \tilde{\eta} \tau \epsilon^{*}$ | бと́блотө |  | $\Sigma \notin \tau \notin v \tilde{\alpha}$ | ＇†ov́סa |
| Pl．Nom． <br> Gen． <br> Dat． <br> Acc． | $\mu \not \mu \theta \eta \tau \notin \underbrace{\prime}$ | $\pi \rho о \varphi \tilde{\eta} \tau \notin t$ | סと́блотөt＊ | veavitet ${ }^{\text {（s）}}$ |  |  |
|  | $\mu \not \theta \eta \tau$ ¢̃ | $\pi \rho о \varphi \eta \tau \sim \nu$ | $\delta \varepsilon \sigma \pi$ об $\chi^{(s)}$ | $v \varepsilon \alpha \nu t \bar{\omega} v^{(s)}$ |  |  |
|  | $\mu \notin \theta \eta \tau \alpha i ̃ \varsigma$ | $\pi \rho о \varphi \dot{\tau} \tau \alpha 1 \varsigma$ | ঠعбло́таıऽ | $v \varepsilon \alpha v^{\prime} \alpha \underline{1} c^{(s)}$ |  |  |
|  | $\mu \notin \theta \eta \underline{\underline{\alpha}}{ }^{\text {c }}$ | $\pi \rho о \varphi \eta$ ¢ $\underline{\underline{\alpha}}$ | $\delta \varepsilon \sigma \pi$ о́tas | $v \varepsilon \underline{\alpha} v^{\prime} \underline{\underline{\alpha}} \varsigma^{(s)}$ |  |  |
|  |  |  |  |  |  |  |
|  |  | кардто $\vee \omega \sigma \tau \eta$, <br> ＂heart knower＂， |  | Zaxөptas， <br> Zaxepı́ov | B $\propto \rho \varepsilon \notin \beta \tilde{\alpha}$ |  |
|  |  | Voc．Sg． |  | ＂Zechariah＂ | ＂Barnabas＂ |  |
|  |  |  |  | Avס的 $\underline{\sim}$ ， | Kך¢ã¢， |  |
|  |  | †๓óvvŋs＂John＂ （Apparently has |  | Avסрє́ov ＂Andrew＂ | К $\eta \varphi \tilde{\alpha}$ ＂Cephas＂ |  |
|  |  | irregular Voc．Sg． |  |  | В $\alpha \rho \beta \beta \beta \tilde{\alpha}$ ， |  |
|  |  | ¥＠óvv ${ }^{(s)}$ ，which |  |  |  |  |
|  |  | only occurs in |  |  | ＂Barabbas＂ |  |
|  |  | the Septuagint．） |  |  |  |  |

Exceptions：Moulton gives the form＇$\ddagger \omega \sigma \tilde{\eta} \varsigma^{*}$ ，＇$\omega \sigma \tilde{\eta}^{*}$＂Joses＂．However，this word does not occur in the most reliable texts declined in this way，usually being replaced by＇$\oplus \sigma \neq \varphi$＂Joseph＂，an indeclina－ ble noun．The one time＇$\ddagger \omega \sigma \tilde{\eta} \varsigma^{*}$ does occur in the most reliable texts（Mark 6：3）it is de－ clined as a third declension noun，with genitive＇$\ddagger \omega \sigma \tilde{\eta} \tau o \varsigma$ ．There do not appear to be any other nouns declined like＇$\Psi \omega \sigma \tilde{\eta} s^{*}$ ，${ }^{\prime} \Psi \omega \sigma \tilde{\eta}^{*}$ ．）

### 3.1.1.2.Second Declension (Parisyllabic)

This is the most common declension for masculine and neuter nouns and adjectives. The feminine forms are much less common.

Moulton includes an additional type which is a neuter declension $\mathrm{C}(\mathrm{e})$, like ${ }^{A} \pi \bar{\pi} \lambda \lambda \tilde{\omega} \varsigma$, but there appear to be no examples in the New Testament.

In this declension the genitive plural ending $-\omega v$ does not attract the accent as in the first declension.

### 3.1.1.2.1.Standard Second Declensions

The last three columns in the chart are examples of contracted second declension nouns and adjectives. All forms take the circumflex. However, all of the noun examples of $\mathbf{2 M y}$ and $\mathbf{2 N y}$ given by Moulton happen to be declined as third declension in the New Testament (e.g. 4Mfvoṽ,$\pi \lambda 0 \tilde{v}^{*}$ ) or are exceptional (ò otoṽv).

| Standard Second Declensions |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { 2MFa }{ }^{1} \\ & 557,39 ; \\ & \text { C(a) } \end{aligned}$ | $\begin{aligned} & 2 M F a \\ & 2 M F a^{2} \\ & \text { C(b) } \end{aligned}$ | $\begin{aligned} & \mathbf{( - \mathbf { o g } / \mathbf { o v } )} \mathbf{2 M F a}^{3} \\ & 557,31 ; \\ & \mathrm{C}(\mathrm{a}) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2 \mathbf{N a}^{1} \\ & 557,41 ; \\ & \mathrm{C}(\mathrm{c}) \end{aligned}$ | $\begin{aligned} & \quad \begin{array}{l} 2 \mathbf{N a}^{2} \mathrm{Na} \\ 557,41 ; \\ \mathrm{C}(\mathrm{c}) \end{array} \\ & \hline \end{aligned}$ | $\begin{aligned} & (\mathbf{- o v} / \mathbf{o v}) \\ & \quad 2 \mathbf{N a}^{3} \\ & 557,41 ; \\ & \mathrm{C}(\mathrm{c}) \\ & \hline \end{aligned}$ | $\left\lvert\, \begin{aligned} & 2 M F x(-\tilde{\omega} c / \tilde{\omega}) \\ & 2 M F x^{i} \\ & \text { C(d) } \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 2 M y(-o \tilde{c} / \sigma \tilde{v}) \\ & 2 M_{y} \\ & \text { III.3, VI.3, } \\ & \text { VII.5(b) } \end{aligned}\right.$ | $\begin{array}{\|l} 2 N_{y}(-\mathbf{o v} v / 0 \tilde{v}) \\ \quad 2 N y^{1} \\ \text { III.3, } \\ \text { VII.5(b) } \\ \hline \end{array}$ |
|  | $\begin{aligned} & \text { "son" } \\ & \text { (M) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { "slave" } \\ & \text { (M) } \end{aligned}$ | $\begin{aligned} & \text { "person" } \\ & \text { (M) } \end{aligned}$ | $\begin{aligned} & \text { "bath" } \\ & (\mathrm{N}) \end{aligned}$ | $\begin{aligned} & \text { "gif" } \\ & \text { (N) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { "flock" } \\ & (\mathrm{N}) \end{aligned}$ | $\begin{array}{\|l} \hline \text { "Apollos" } \\ \text { (M) } \\ \hline \end{array}$ | $\begin{aligned} & \text { "golden"51 } \\ & \text { (M) } \end{aligned}$ | $\begin{aligned} & \text { "golden" } \\ & \text { (N) } \end{aligned}$ |
| Sg. Nom. Gen. Dat. Acc. Voc. | $\begin{aligned} & \text { viós } \\ & \text { viõ̃ } \\ & \text { viọ } \\ & \text { vióv } \\ & \text { ví̌i } \\ & \hline \end{aligned}$ | סоṽไos סov́久ou бои́ $\omega$ סoṽไov бои̃ $\varepsilon$ | व̈vөрютоऽ <br>  $\dot{\alpha} \nu$ Өрю́л $\omega$ ӓv $\theta$ рштог $\alpha \ddot{\alpha}$ Өр $\omega \pi \varepsilon$ | גovтрóv* خоитрои̃ $\lambda$ дитр̣̆ גovтро́v* גоитро́v* | $\delta \omega ̃ \rho o v$ <br> $\delta \dot{\omega} \rho \boldsymbol{o v}^{(s)}$ <br> $\delta \omega ́ \rho \varphi$ <br> бต̃pov <br> ठั̃pov* | тоí $\mu \mathrm{viov}{ }^{(s)}$ <br> тоциі́о <br> лощvị́ <br> тоі́ $\mu v$ оо <br>  | Ало $\lambda \lambda \tilde{\omega} \varsigma$ <br> А $л о \lambda \lambda \tilde{\omega}$ <br> Алоддаَ* <br> Ало $\lambda \lambda \tilde{\omega}(v)$ <br> Ало $\lambda \lambda \tilde{\omega} \varsigma^{*}$ | $\chi \rho \underline{v} \sigma o \tilde{v} \varsigma^{(s)}$ $\chi \rho \underline{v} \sigma \circ \tilde{v}^{(s)}$ $\chi \rho \underline{0} \sigma \underline{̣}$ $\chi \rho \underline{0} \sigma 0$ ṽ $\chi \rho \underline{\sigma} \sigma \tilde{v}^{*}$ | $\chi$ ขِбоข̃v(s) <br> $\chi \rho \underline{0} \sigma 0$ ṽ <br> $\chi \rho \underline{\underline{v}} \sigma \tilde{9}^{(s)}$ <br> $\chi \rho \underline{v} \sigma о$ ṽ <br> $\chi \rho \underline{0} \sigma \tilde{v}{ }^{*}$ |
| Pl. Nom. Gen. Dat. Acc. | vió <br> viãv <br> vioĩs <br> viov́s | סoṽ $\lambda ө t$ $\delta o v i \lambda \omega v$ бои́ $\lambda \mathrm{or}$ ऽ <br>  | $\alpha \ddot{\alpha} v \rho \omega \pi \theta 九$ $\alpha \dot{\alpha} v \rho \rho^{2} \pi \omega v$ а̀ $v$ Өр́́логऽ <br>  | $\lambda o v \tau \rho \dot{\alpha}^{*}$ $\lambda о v \tau \rho \tilde{v} v^{*}$ גоитроі̃я* $\lambda o v \tau \rho \dot{a ́}^{*}$ | $\delta \tilde{\rho} \rho \theta$ <br> $\delta \dot{\omega} \rho \omega v^{(s)}$ <br> ठळ́pors <br> ठั̃рa | $\pi о$ о́ $\mu v \not$ ® $^{(S)}$ <br> $\pi о \mu v i \omega v^{(s)}$ <br> $\pi$ о $\mu v$ v́o!s ${ }^{(S)}$ <br>  |  | $\chi$ рибой ${ }^{(S)}$ $\chi \rho \underline{0} \sigma \tilde{\omega^{(s)}}$ $\chi \rho \underline{0} \sigma \circ \tilde{\varsigma}^{(S)}$ хрибои̃ร | $\chi \rho \underline{\sigma} \sigma \tilde{\alpha}$ <br> $\chi \rho \underline{v} \sigma \tilde{\omega} v^{(s)}$ <br> хрибоі̃ऽ** <br> $\chi \rho \cup \sigma \tilde{\alpha}$ |
|  |  | $\beta \dot{f} \beta \lambda \mathrm{o}$, <br> $\beta \dot{\beta} \beta \lambda \mathrm{ov}$ <br> "book" (F) <br> $\lambda$ ó $\gamma \mathrm{oc}$, | Aîүvлтos, Aiүv́лtє "Egypt" <br> Kúptos, |  | àvaүкаiov, àvaүка́óv* "necessary" | Exceptional: ó́ßßetov, o $\beta$ ß́́́tov "Sabbath", | $\left\lvert\, \begin{aligned} & \text { K } \tilde{\omega} \varsigma^{*}, \\ & \text { Kã* }^{*} \\ & \text { "Cos" (F), } \\ & \text { Acc. K } \tilde{\omega} \end{aligned}\right.$ | ӫ $\rho \gamma \nLeftarrow \rho о \tilde{\varsigma}$, өр $\gamma$ ๒рои̃* "of silver" <br> $\delta \pi \lambda \tilde{v}^{(S)}$ | ёрүษрои̃v*, ө่рүнрои̃* "of silver", Nom.\&Acc.Pl. |
|  |  | $\lambda$ órov <br> "word" <br> (M) <br> Iov (aios, |  |  |  | Dat.Pl. <br> $\sigma \dot{\beta} \beta \beta \alpha \sigma t v$ <br> (like $3^{\text {rd }}$ <br> decl.) |  | $\delta i \pi \lambda 0 \tilde{v}^{*}$ "double" б८$\delta \eta \rho \circ$ ũऽ, $\sigma เ \delta \eta \rho о \tilde{v}^{*}$ |  |
|  | $\begin{array}{\|c\|} \hline \dot{\alpha} \gamma \alpha \theta \dot{o ́ s}, \\ \dot{\alpha} \gamma \alpha \theta o \tilde{v} \\ \text { "good" } \end{array}$ | $\left\lvert\, \begin{aligned} & \text { Iovóáov } \\ & \text { "Jewish" } \\ & \text { (M) } \\ & \hline \end{aligned}\right.$ | $\\| \begin{aligned} & \text { aimviov } \\ & \text { "eternal" } \\ & \left(\text { MFF }^{52}\right. \end{aligned}$ | "bad" |  |  |  | "of iron" | бเঠๆрои̃v ${ }^{(s)}$, $\sigma \iota \delta \eta \rho о \tilde{v}^{*}$ "of iron" |
|  |  |  |  |  |  |  |  |  |  |

 other forms in the New Testament, both uncontracted and declined like 2Na.
The declension of 'I $\eta \sigma 0$ ṽ " "Jesus" is similar to the $2 \mathbf{M y}^{1}$ declension, but is actually distinct, having 'I $\eta \sigma 0$ ṽ in the dative and vocative as well as in the genitive. It is declined unlike any other noun or adjective in the New Testament. It obviously has no plural. ${ }^{53}$

[^16]
### 3.1.1.2.2.Highly Irregular Second Declension Adjectives

These two adjectives have unusual shortened forms in the nominative and accusative singular of the masculine and neuter only. Moulton says that these nouns are third declension in these forms, and first in all other forms (he must mean second as well, though he does not say so).

|  |  | $\left\lvert\, \begin{gathered} \text { 2Ni( (-仑́/oṽ) } \\ \text { 2Ni} \\ 574,370 ; \text { VII. } 8 \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \mathbf{2 M j}(-\boldsymbol{\theta} \boldsymbol{G} / \mathbf{o v}) \\ 2 \boldsymbol{2 M \boldsymbol { M } ^ { 2 }} \\ 575,370 ; \text { VII } 8 \end{gathered}\right.$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | "much" | "much" | "big, great" | "big, great" |
| Sg. Nom. <br> Gen. <br> Dat. <br> Acc. <br> Voc. | лoдध́s $\pi \mathrm{o} \lambda \lambda \mathrm{o}$ $\pi о \lambda \lambda \tilde{\omega}$ лодध́v | $\pi \mathrm{o} \lambda \dot{\theta}$ <br> $\pi \rho \lambda \lambda \sigma \tilde{v}$ <br> $\pi о \lambda \lambda \tilde{\varphi}$ <br> $\pi \mathrm{o} \mathrm{\lambda} \mathrm{\dot{㇒}}$ | $\mu \varepsilon ́ \gamma \in S$ $\mu \varepsilon \gamma \dot{\lambda} \lambda о ⿱$ $\mu \varepsilon \gamma \dot{\epsilon} \lambda \omega$ $\mu \dot{\gamma} \nLeftarrow \vartheta$ $\mu \varepsilon \gamma \hat{\theta} \lambda \varepsilon^{*}$ | $\mu \varepsilon ́ \gamma \theta$ <br> $\mu \varepsilon \gamma \dot{\theta} \lambda{ }^{\prime}{ }^{(\mathrm{s})}$ <br> $\mu \varepsilon \gamma \dot{\theta} \lambda \omega$ <br> $\mu \varepsilon ́ \gamma \notin$ <br> $\mu \varepsilon ́ \gamma \not \epsilon^{*}$ |
| Pl. Nom. Gen. Dat. Acc. | $\pi \rho \lambda \lambda \theta \dot{t}$ <br> $\pi о \lambda \lambda \tilde{\omega} v$ <br> $\pi о \lambda \lambda о і ̃ \varsigma$ <br> ло $\lambda \lambda \frac{0}{}$ | $\pi \mathrm{o} \lambda \lambda \dot{\theta}$ $\pi о \lambda \lambda \tilde{\omega} v$ $\pi о \lambda \lambda о$ ĩऽ $\pi о \lambda \lambda \dot{́}$ | $\mu \varepsilon \gamma \dot{\theta} \lambda \boldsymbol{\lambda} \theta$ <br> $\mu \varepsilon \gamma \dot{\epsilon} \lambda \omega v$ <br> $\mu \varepsilon \gamma \dot{\theta} \lambda \mathrm{or} \varsigma^{(\mathrm{s})}$ <br> $\mu \varepsilon \gamma \dot{\epsilon} \lambda \mathrm{ov}$ | $\mu \varepsilon \gamma \dot{\epsilon} \lambda \lambda \neq$ <br> $\mu \varepsilon \gamma \dot{\theta} \lambda \omega v^{(\mathrm{s})}$ <br> $\mu \varepsilon \gamma \dot{\theta} \lambda \mathrm{or} \varsigma^{(\text {s) }}$ <br> $\mu \varepsilon \gamma \dot{\theta} \lambda \epsilon$ |

### 3.1.1.3.Third Declension (Imparisyllabic)

This declension is referred to as "imparisyllabic", meaning that not all forms have the same number of syllables. In this declension the standard form of the stem is found not in the nominative but in the genitive, which always has the ending -oç. In the nominative the noun root has usually undergone changes. In this declension it is not sufficient to give the nominative and genitive endings to identify each individual declension, since the genitive is always the same, and the nominative has a large number of endings, whose relationship to the genitive produces even more combinations. Therefore I will use codes of other sorts to identify each major grouping, primarily on the basis of the other endings.

As in previous declensions, in this declension it is possible to determine which syllable has the inherent accent. In fact, it is very simple: the inherent accent is always the one which is accented in the genitive singular. However, the accent can and often does move away from this syllable, both to the left and to the right. Usually this accent shift is fully predictable, but for nouns whose inherent accent is on the ultima of the genitive singular, the accent in the dative and genitive plurals can either be ultimate or penultimate, and I have provided separate columns for these two cases.

### 3.1.1.3.1.Standard Third Declensions

In the dative plural, a similar change is effected to the noun root as in the nominative, though not always identical. For this reason this form will usually be cited as well (unless the noun is only used in the singular). In the vast majority of the cases, this form ends in a $v$. In a few cases before a word beginning with a consonant this $v$ is lost. However, there is no good rule. I have listed the $v$ in every case (other grammars typically put it in parentheses).

The endings in this declension are quite different from those in the other two declensions. Unlike the first and second declensions, nearly all of the endings in this declension have short vowels.

In the third declensions, I have marked the final stem consonants in red, and cases where these are lost or changed in green. Additional changes are marked in pink. For this purpose the genitive form is assumed to show the unchanged form of the stem, not the nominative.

A large number of third declension neuter nouns have the endings $-\mu \notin$, $-\mu \notin \tau \sigma$; in fact, of the 483 neuter nouns used in the New Testament, 152 have this declension, which is $31 \%$ of all neuter nouns. These are represented in the chart by just 2 , ővouөt and $\pi v \varepsilon \tilde{u} \mu \theta$. However, there are other third declension neuter nouns with other endings, as shown in the last four columns of the chart.

## Standard Third Declensions

|  | $$ | $\begin{array}{r} \mathbf{3 M F a} \\ \mathbf{3 M F \mathbf { a } ^ { \mathbf { 1 + } }} \\ 573,365 ; \\ \mathrm{H}(\mathrm{~b}) \\ \hline \end{array}$ |  | $\begin{array}{ll}  & 3 \mathbf{M F a}^{3} \\ 559,211 ; & \\ \mathrm{D}(\mathrm{a}) & \\ \hline \end{array}$ | $3 \mathrm{Na}^{1}$ | $\begin{array}{r} \mathbf{3 N a} \\ \mathbf{3 N \mathbf { N a } ^ { \mathbf { 1 + } }} \\ 573,365 ; \\ \mathrm{H}(\mathrm{~b}) \\ \hline \end{array}$ | $\begin{aligned} & \boldsymbol{a}(-[\mathrm{C}] / \mathbf{C o s}) \\ & 3 \mathbf{N a}^{2} \\ & \text {; } ; 561,222 ; \\ & \mathrm{D}(\mathrm{c}) \\ & \hline \end{aligned}$ | $3 \mathrm{Na}^{3}$ | $\begin{array}{\|l\|} \mathbf{3 N c}(-/ \mathbf{C o s}) \\ 3 \boldsymbol{N} \boldsymbol{c} \\ 561,222 ; \\ \mathrm{D}(\mathrm{c}) \\ \hline \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ＂foot＂（M） | ＂every， <br> all＂（M） | ＂lamp＂（F） | ＂witness＂（M） | ＂ear＂ | ＂every， all＂ | ＂what was said＂ | ＂water＂ | ＂name＂ |  |
| Sg．Nom． Gen． Dat． Acc． Voc． | $\pi 0 u ́ s$ <br> $\pi \mathrm{o} \mathrm{\delta ós}$ <br> $\pi \mathrm{o} \delta_{\mathfrak{i}}(\mathrm{S})$ <br>  <br> $\pi \mathrm{ov́}{ }^{*}$ | $\pi \tilde{\alpha} \varsigma$ тथv tós $\pi \notin v i ́$ те́vтє $\pi \tilde{\alpha}_{\varsigma}$ | heرuлés <br> дөилө́б́os ${ }^{(s)}$ <br>  <br> 久धил́́ $\delta \boldsymbol{a}^{(s)}$ <br> дөилө́я＊ | $\mu \alpha ́ \rho \tau \forall s$ <br> $\mu \alpha ́ \rho \tau \nLeftarrow \rho o s$ <br> $\mu \alpha ́ \rho \tau \succcurlyeq \rho$ t $^{*}$ <br> на́ртөрө <br> $\mu \alpha ́ \rho \tau ө \rho * 54$ | oṽ์ ف́то́s ${ }^{(S)}$ ف̀ $\hat{e ́ t}^{*}$ วũร oũs＊ | $\pi \tilde{\alpha} \nu$ <br> $\pi \notin v \tau o ́ s$ <br> $\pi \notin v \tau ́$ <br> $\pi \tilde{\alpha} v$ <br> $\pi \tilde{\alpha} v$ | $\begin{array}{\|l} \dot{\rho} \eta \theta \dot{\varepsilon} v \\ \dot{\rho} \eta \theta \dot{\varepsilon} v \tau o s^{*} \\ \dot{\rho} \eta \theta \dot{\varepsilon} v \tau t^{*} \\ \dot{\rho} \eta \theta \dot{\varepsilon} v \\ \dot{\rho} \eta \theta \dot{\varepsilon} v * \\ \hline \end{array}$ | $\because \delta \omega \rho$ <br>  <br>  <br> $\ddot{\forall} \delta \omega \rho$ <br> ช̈ $\delta \omega \rho^{*}$ | ővo $\mu *$ ỏvó $\mu \notin \tau$ сs ỏvó $\mu \notin \tau t$ ővo $\mu \notin$ о̋vо $\mu \neq$ |  |
| Pl．Nom． Gen． Dat． Acc． | $\pi$ т́ठ $\varepsilon \varsigma$ <br> $\pi o \delta \tilde{\omega} v$ <br> $\pi 0 \sigma$ tiv <br> $\pi$ ó $\alpha$ аs | $\pi \dot{v} v \tau \varepsilon \varsigma$ $\pi \dot{v} v \tau \omega v$ $\pi \tilde{\alpha} \sigma t v$ ле́vтеs |  | $\mu \alpha ́ \rho \tau \succcurlyeq \rho \varepsilon \varsigma$ $\mu \alpha \rho \tau \dot{\rho} \rho \omega v$ $\mu \alpha ́ \rho \tau \succcurlyeq \sigma \not v v$ но́ртөрая | $\begin{array}{\|l\|} \hline \tilde{\omega} \tau \alpha \\ \dot{\omega} \tau \tilde{\omega} v^{*} / \omega ٌ \tau \omega v^{(s)} \\ \tilde{\omega} \sigma \dot{t} v \\ \tilde{\omega} \tau \alpha \\ \hline \end{array}$ | $\pi \dot{́} v \tau \theta$ <br> $\pi \dot{́} v \tau \omega v$ <br> $\pi \tilde{\alpha} \sigma \mathfrak{t} v$ <br> $\pi \dot{\varkappa} \nu \tau \theta$ | $\begin{aligned} & \dot{\rho} \eta \theta \dot{\varepsilon} v \tau \alpha^{*} \\ & \dot{q} \eta \theta \dot{\varepsilon} v \tau \omega v^{*} \\ & \dot{\rho} \eta \theta \varepsilon \tilde{\sigma} \sigma \tau v^{*} \\ & \dot{\rho} \eta \theta \dot{\varepsilon} v \tau \epsilon^{(s)} \\ & \hline \end{aligned}$ | 豸゙ठatє ஸ்ச́́tตv ガסatav ̈ס $\alpha \tau$ | ỏvó $\mu \notin \epsilon$ ỏvo $\mu \dot{́} \tau \omega v$ óvó $\mu \notin \sigma t v^{(s)}$ ỏvó $\mu \notin \epsilon$ |  |
| $\mathrm{C}>\mathrm{S}$ in <br> Nom．Sg． <br> and <br> Dat．Pl． <br> （all <br> examples <br> within <br> red <br> border） |  |  | $\tau \dot{\mathfrak{t}} \mathrm{G}, \tau \mathfrak{t} v \mathbf{O}, \tau \mathfrak{t} \sigma \boldsymbol{t} V$ ＂who？，which？，what？＂ <br> （M／F） <br> $\dot{\varepsilon} \lambda \pi \dot{t} \zeta, ~ \dot{\varepsilon} \lambda \pi \dot{t} \delta o \varsigma$ ， <br>  <br> Voc．Sg．$\dot{\varepsilon} \lambda \pi \mathfrak{t}^{* *} 54$ |  |  |  |  غ̇лルлєлтшко́тоऽ＊＊， غ̇лィлєлтตко́бтv＊＊ ＂having fallen on＂ |  | $\pi v \varepsilon v \tilde{\mu} \notin$ ， $\pi \vee \varepsilon$ ย́ $\mu \notin \tau \circ \varsigma$, $\pi v \varepsilon v ́ \mu \notin \sigma v$ ＂breath， spirit＂ үө́ $\lambda \alpha$ ， үө́лөєктоs ＂milk＂， no plural $\tau \mathfrak{\tau}, \tau \in \vee \varsigma^{*}$ ， てtót $v^{*}$ ＂something＂ | C＞＿－in Nom．Sg． and Dat．Pl． （all examples within blue border） |
| $\rho>\rho$, $v>v$ <br> in Nom． Sg．， （Vowel changes） |  |  |  àбтр́́бtv＊＂＂star＂（M） $\sigma \omega \tau \eta ́ \rho, \sigma \omega \tau \tilde{\rho} \rho \frac{\varsigma}{}$ ， $\sigma \omega \tau \tilde{\eta} \rho \sigma \mathfrak{t v} *$＂savior＂（M） גiఱ́v ${ }^{(S)}$ ，גiãvos， $\alpha i \tilde{\omega} \sigma t v$＂age＂（M） |  |  ＂fire＂， no plural |  | $\mu \dot{́} \lambda \alpha v^{*}, \mu \varepsilon ́ \lambda \alpha v o \varsigma$ ， $\mu \varepsilon ́ \lambda \alpha \sigma \mathfrak{t v}$＊＂black＂ <br>  ӓрробтv＊＂foolish＂ |  |  |  |
| $\begin{aligned} & \hline \mathrm{C}>\xi \\ & \text { in Nom. } \\ & \text { Sg. and } \\ & \text { Dat.Pl. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  | $\dot{\varepsilon} \lambda \theta \dot{\omega} v, \dot{\varepsilon} \lambda \theta \theta$ óvtoऽ， $\dot{\varepsilon} \lambda \theta$ oũ $\sigma ı *$＂＂having come＂ | $v C>v:$ ảкоv́ $\omega v, \alpha \mathfrak{\alpha} \kappa o v ́ o v \tau o s$, ג̀кov́ovotv＂hearing＂ |  |  |  |  |  |  |

[^17]Inherent accent is shown for each column in the chart above. The difference between $\mathbf{3 M F a}{ }^{\boldsymbol{1}}$ and $\mathbf{3 M F a}{ }^{\boldsymbol{1} \boldsymbol{t}}$ or between $\mathbf{3 N a}{ }^{\boldsymbol{1}}$ and $\mathbf{3 N a}^{\boldsymbol{1} \boldsymbol{i}}$ is seen only in the genitive and dative plurals: the former in both cases has the accent on the final syllable, whereas the latter has it on the penultimate.

## Irregular Third Declensions

|  | 565; VI.1, VI.2565; VI.1, VI. 2 (- ${ }^{\text {3MFg/Cós/Cet) })}$ |  |  |  | $\begin{aligned} & \mathbf{3 F i}(-/ \mathbf{C o ́} \mathbf{c} / \mathbf{C} \boldsymbol{\theta}) \\ & 559,211,221, \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\frac{566 ; \text { VI.4(b) }}{\text { "woman" (F) }}$ |
| Sg.Nom. | $\pi \nsim \tau \grave{\rho}$ | セ่v่์ | $\mu \eta \tau \eta \rho$ | $\theta$ өүа́兀п¢ | y*v'́ |
| Gen. | лөт¢ós | èv $v$ ¢ós | $\mu \eta \tau \rho o ́ \varsigma$ | Өvरat¢ós | үъvaikós |
| Dat. | $\pi \nsim \tau \rho$ t́ | $\dot{\theta} \mathrm{v} \delta \rho^{\text {ét }}$ | $\mu \eta \tau \rho i ́$ | $\theta$ өүat¢í | yəvalkí |
| Acc. | $\pi ө \tau \varepsilon ́ \rho \theta$ | êv $\delta \rho \theta$ |  | Өuүat<́pet | үөvaĩкє |
| Voc. | $\pi \dot{\epsilon} \tau \varepsilon \rho$ | êv $\varepsilon \rho$ | $\mu \tilde{\eta} \tau \varepsilon \rho^{(s)}$ | Өо́ $\chi^{\circ} \tau \varepsilon \rho$ | yúvar |
| Pl.Nom. | $\pi \not \tau \varepsilon ́ \rho \varepsilon \varsigma$ | ěv ${ }^{\text {enec }}$ | $\mu \eta \tau \varepsilon \rho \varepsilon \varsigma^{(s)}$ |  | үөvaĩкєऽ |
| Gen. | $\pi ө \tau \varepsilon ́ \rho \omega \nu$ |  | $\mu \eta \tau \dot{\varepsilon} \rho \omega v^{(s)}$ | $\theta 0 \gamma \alpha \tau \varepsilon ์ \rho \omega v$ | үъvaıкต̃v |
| Dat. | $\pi \not \tau \tau$ ¢́́бтv |  | $\mu \eta \tau \rho \dot{́ r \sigma t v}{ }^{(s)}$ | $\theta v \gamma \alpha \tau \rho \dot{\sigma} \sigma \mathfrak{v} v^{(s)}$ |  |
| Acc. | $\pi \nsim \tau$ ¢́pas | êv | $\mu \eta \tau$ ¢́¢ |  |  |
| C>C, (Vowel changes) | $\pi \nsim \tau \mathfrak{\rho} \rho \uparrow$ | ®̇vท́¢ $\uparrow$ | แท่тทค $\uparrow$ | Өvүátn¢ $\uparrow$ |  |
| C> |  |  |  |  | $\gamma \vartheta \vee ท$ ¢ |

One noticeable oddity about these, which sets them apart from nearly all other nouns (but see $\mathbf{4 M e}$ below), is that it is not possible to determine which is the inherently accented syllable, since the accent jumps around.

## 3．1．1．3．2．Third Declension Contracted Comparatives

|  | $3 \mathrm{MFj}^{3}$ | $3 N j^{3}$ |
| :---: | :---: | :---: |
|  | Accusative different | Accusative different |
|  | 571，459， 461 | 571，459， 461 |
|  | ＂more＂ | ＂more＂ |
| Sg．Nom． | $\pi \lambda \varepsilon \varepsilon^{\prime} \omega v^{*}$ | $\pi \lambda \varepsilon$ т̃ |
| Gen． | $\pi \lambda$ cíovos | $\pi \lambda \varepsilon$ ciovos＊ |
| Dat． | $\pi \lambda \varepsilon^{\text {íovt }}{ }^{\text {（ })}$ | $\pi \lambda \varepsilon$ ćovt＊ |
| Acc． | $\pi \lambda \varepsilon i ́ o v e, ~ \pi \lambda \varepsilon i ́ \omega *$ | $\pi \lambda \varepsilon \tilde{1}$ ov＊，$\pi \lambda$ ćov |
| Voc． | $\pi \lambda$ cí $\omega v^{*}$ | $\pi \lambda \varepsilon \tau_{0}{ }^{*}$ |
| Pl．Nom． | $\pi \lambda \varepsilon$ ¢́oveऽ，$\pi \lambda \varepsilon$ в́ous | $\pi \lambda \varepsilon$ íove＊，$\pi \lambda \varepsilon$ ¢í $\omega^{*}$ |
| Gen． | $\pi \lambda \varepsilon$ וóv $\omega$ | $\pi \lambda \varepsilon$ וóv $\omega v$ |
| Dat． | $\pi \lambda \varepsilon$ ¢́ootv | $\pi \lambda \varepsilon$ ¢́oбtv＊ |
| Acc． | $\pi \lambda \varepsilon$ íoveş，$\pi \lambda$ cíous | $\pi \lambda$ cíovet，$\pi \lambda$ cí $\omega$ |


| $\mu \varepsilon i ́ \zeta \omega v, \mu \varepsilon i ́ \zeta о v o \varsigma$, $\mu \varepsilon i \zeta$ обtv＊＂greater＂， Acc．Sg．$\mu \varepsilon i \zeta$ оvet，$\mu \varepsilon i \zeta \omega$ | $\mu \varepsilon і ॅ \zeta o v, \mu \varepsilon i ́ \zeta o v o \varsigma^{*}$ ， $\mu \varepsilon i \zeta$ обtv＊＂greater＂， Acc．Pl．$\mu \varepsilon i \zeta o v \star, \mu \varepsilon i \zeta \omega$ |
| :---: | :---: |
| غ̀ $\lambda \dot{\alpha} \sigma \sigma \omega v^{*}, \dot{\text { en }} \lambda \alpha ́ \sigma \sigma o v o \varsigma^{*}$ ， <br> غ̇ $\lambda \dot{\alpha} \sigma \sigma \circ \sigma \mathfrak{t v} v^{*} / \dot{\varepsilon} \lambda \alpha \dot{\alpha} \tau \tau \circ \sigma \mathfrak{t v}{ }^{(S)}$＂less＂， <br> Acc．Sg．$\dot{\varepsilon} \lambda \alpha ́ \sigma \sigma \omega$ |  غ̇ $\lambda \alpha ́ \tau \tau o \sigma t v * " l e s s " ~$ |
| крєі́тєшv，крві́тто⿱о丂， крєítтобtv＂better＂ |  |
| $\chi \varepsilon i ́ \rho \omega v, \chi \varepsilon i ́ \rho o v o s$, $\chi \varepsilon i ́ \rho o \sigma t v *$＂worse＂ | $\chi \varepsilon \tau ̃ \rho о, \chi$ ві́ ºvos $^{*}$ ， <br> $\chi \varepsilon$ q́pootv＊＂worse＂ |
|  | к人́ $\lambda \lambda 10{ }^{55}$ ，к $\alpha \lambda \lambda$ íovos ${ }^{*}$ ， $\kappa \alpha \lambda \lambda$ íootv＊＂better＂， Acc．Pl．$\kappa \alpha \lambda \lambda$ íova $^{(s)}$ |
|  | та́ $\chi 10 v^{55}, \tau \alpha \chi$ íovos＊， <br> т $\alpha$ र́ótv＊＂＂quicker＂ |

Various accusative and nominative forms of $\mathbf{3 M F} \boldsymbol{j}^{\mathbf{3}}$ and $\mathbf{3 N} \boldsymbol{j}^{\mathbf{3}}$ are optionally contracted．Except for this they are the same as $\mathbf{3 M F a} \mathbf{a}^{\mathbf{3}}$ and $\mathbf{3 N a}{ }^{\mathbf{3}}$ ，specifically like $\alpha \boldsymbol{\alpha} \rho \rho \mathrm{v}$＂foolish＂or＇Iá $\sigma \omega v$＂Jason＂，among many other adjectives and nouns．Machen and Moulton both imply that other third declension comparatives are declined in the same way，but the first three adjectives above are the only ones which show contracted forms in the New Testament．

[^18] treated them as nouns．

## 3．1．1．4．Contracted Third Declension Nouns and Adjectives（Imparisyllabic）

These are really third declension nouns and adjectives，but the stem originally ended in a vowel，which has resulted in contraction of the two vowels and a resulting new set of endings．The original vowels are not always easy to determine，so I have not attempted to do so．

Because of their complexity，I will assign codes to them as if they were separate from the third declension，｜ with the number 4.

## 3．1．1．4．1．Contracted Third Declensions used Primarily for Nouns

|  | $\begin{gathered} 4 M F a \\ (-\boldsymbol{t c / - \varepsilon \omega c / - v )} \\ 4 \boldsymbol{M F a ^ { 3 }} \\ 349, \mathrm{E}(\mathrm{c}) \\ \hline \end{gathered}$ | $\begin{gathered} 4 M b \\ (-\varepsilon v \varsigma /-\varepsilon \omega \varsigma /-a) \\ 4 M b^{2} \\ 355, \mathrm{E}(\mathrm{~d}) \end{gathered}$ | $\begin{gathered} 4 M p \\ (-\vartheta \zeta /-\varepsilon \omega \zeta /-v) \\ 4 M p^{3} \end{gathered}$ | $\begin{gathered} 4 M q \\ (-\eta \xi /-\varepsilon \omega \zeta /-v) \\ 4 M q^{2} \end{gathered}$ |  | $\begin{gathered} \boldsymbol{4} \boldsymbol{M \boldsymbol { d } ^ { 2 }} \\ \mathrm{E}(\mathrm{~g}) \end{gathered}$ | $\begin{gathered} 4 M d \\ (-\forall g /-\forall \sigma G /-v) \\ 4 M d^{3} \end{gathered}$ | $\begin{gathered} 4 \mathrm{Me} \\ (-\mathrm{ovg} /-\mathrm{oog} /-\mathrm{v} \\ 4 M e \\ \mathrm{VI} .4(\mathrm{~h}) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ＂city＂（F） | ＂king＂ | ＂cubit， forearm＂ | ＂Moses＂ | ＂nation＂ | ＂fish＂ | ＂head of grain＂ | ＂ox＂ | ＂reverence， modesty＂ |
| $\begin{array}{r} \text { Sg. } \mathrm{N} \\ \mathrm{G} \\ \mathrm{D} \\ \mathrm{~A} \\ \mathrm{~V} \end{array}$ | $\pi$ о́ $\boldsymbol{\lambda}_{\mathrm{t}}$ <br> $\pi o ́ \lambda \varepsilon \omega \varsigma$ <br> $\pi$ т́ $\lambda \varepsilon \iota$ <br> $\pi o ́ \lambda \neq v$ <br> $\pi o ́ \lambda \mathrm{t}^{* *}$ | Beøt $\lambda \varepsilon$ ќs <br> $\beta$ ब夫т $\lambda \varepsilon ́ \omega s$ <br> $\beta \notin \sigma t \lambda \varepsilon \tau$ <br> $\beta \notin \sigma+\lambda \tilde{\varepsilon ́ \theta}$ <br> $\beta \notin \sigma+\lambda \varepsilon \varepsilon ̃$ | $\pi \tilde{\eta} \chi \varsigma^{(S)}$ <br> $\pi \grave{\chi} \chi \varepsilon \sigma \zeta^{(S)}$ <br> $\pi ท ่ \chi \varepsilon \iota^{(\mathrm{S})}$ <br> $\pi \tilde{\chi} \chi \forall$ <br> $\pi \tilde{\eta} \chi \Downarrow^{*}$ | М $\omega \ddot{\sigma \sigma ท ̃ \varsigma ~}$ <br> М $\omega$ ひ̈бと́ $\omega \varsigma$ <br>  <br> М $\omega \ddot{\sigma \tilde{̃} v^{57}}$ <br> $\mathrm{M} \omega \ddot{\mathrm{z}} \tilde{\eta}^{(\mathrm{s})}$ | ह̈月vos ह̈ $\theta$ vous と̈ $\theta \mathrm{v} \varepsilon$ ı ह̌月vos と̈ $\theta$ vos＊ |  | $\sigma \tau \alpha ́ \chi \vartheta \varsigma^{(s)}$ бта́хซос＊ бта́хみй $\sigma \tau \alpha ́ \chi \forall v$ $\sigma \tau \dot{\alpha} \chi \psi^{* *}$ | ßoṽs <br> ßoós ${ }^{(5)}$ <br> ßо等（S） <br> ßoũv <br> ßои̃＊＊ | аiठஸ́c＊＊ <br> גiסoṽร <br> 人iסoị？＊＊ <br> $\alpha i \delta \dot{\omega}^{(s)}$ <br> $\alpha i \delta \omega ́ \varsigma^{* *}$ |
| Pl． N G D A | $\pi$ о́ $\lambda \varepsilon ı \varsigma$ $\pi o ́ \lambda \varepsilon \omega v$ $\pi o ́ \lambda \varepsilon \sigma \not v$ $\pi o ́ \lambda \varepsilon 1 \varsigma$ | $\beta \nexists \sigma+\lambda \varepsilon \tau \tau$ $\beta \notin \sigma t \lambda \varepsilon ́ \omega v$ $\beta \notin \sigma t \lambda \varepsilon v ̃ \sigma t v$ $\beta \theta \sigma t \lambda \varepsilon \tau<$ | $\pi ท ் \chi \varepsilon ા \varsigma^{(\text {S）}}$ <br> $\pi \eta \chi$ ต̃v／$\pi \dot{\prime} \chi \varepsilon \omega v^{(s)}$ <br> $\pi \dot{\prime} \chi \varepsilon \sigma v^{(S)}$ <br> $\pi \eta \dot{\chi \varepsilon L c^{(5)}}$ |  | ど $\theta \mathrm{v} \eta$ $\dot{\varepsilon} \theta v$ ต̃v と̈Өvยのтv <br>  |  ¡み日も́ $\omega v$ í $\chi$ も́ $\sigma$ v＊＊＊ ix日úas | $\sigma \tau \dot{\alpha} \chi \forall \varepsilon \varsigma^{(S)}$ $\sigma \tau \dot{\alpha} \chi \mapsto{ }^{(s)}$ $\sigma \tau \dot{\alpha} \chi \ni \sigma \not v^{(s)}$ <br>  | 阝ó $\boldsymbol{c}^{(3)}$ <br> ßоп̃v <br> ßoưív（s） <br> Bóas |  |
|  | ठغ́ท $\sigma \leftarrow$ ， <br>  <br>  ＂supplication＂ <br> （F） <br> $\beta \rho \omega ̃ \sigma t \varsigma$ ， ßрө́бєюऽ， ＂food，eating， rust＂（F）， no plural $\dot{\alpha} \gamma \alpha \lambda \lambda i \underline{\alpha} \sigma t \varsigma$, $\dot{\alpha} \gamma \alpha \lambda \lambda \underline{\alpha} \sigma \varepsilon \varepsilon \omega \varsigma$, ＂exultation＂ （F）， <br> no plural <br> ö $\varphi \varsigma$ ，ö $\varphi \varepsilon \omega \varsigma$ ， ö甲६бт ＂snake＂（M） |  а̀ рхєєрє́ต૬ <br>  ＂high priest＂ |  |  | ү́́vos， үદ́vous， үغ́veбtv（s） ＂race（of people）＂ <br>  $\tau \varepsilon$ д́̌ous， $\tau \varepsilon \dot{\chi \varepsilon \sigma ซ v)^{(s)}}$ ＂wall＂ <br> 阝é̈ос，阝áOous， $\beta \dot{\theta} \theta \varepsilon \sigma є v^{*}$ ＂depth＂ | i๘xús， іَ $\chi$ ต́os ＂strength＂， no plural ö $\sigma \varphi \dot{q} \xi^{(s)}$ ， ȯб $\varphi$ 乇́os， òб $\varphi$ ษ́бт＊＊＊ ＂loin（s）＂ | アо́трөร ${ }^{(s)}$ ， <br> 阝о́тръос ${ }^{(s)}$ ， <br> ßо́тр४бтv ${ }^{(s)}$ <br> ＂cluster＂， <br> Acc．Pl． <br> ßótpyas | voũs， voós ＂mind＂， <br> Dat．Sg．vö̈， <br> no plural <br> $\pi \lambda 0 \tilde{c^{*}}{ }^{*}$ ， <br> $\pi \lambda$ oós <br> $\pi \lambda 00 \sigma$ ív＊ <br> ＂voyage＂ |  |

Exception：ő $\rho o \varsigma$ ，ő $\rho o v \varsigma$＂mountain＂，Gen．Pl．ó $\rho \varepsilon ́ \omega v: ~ 4 N c$ ，but with uncontracted Gen．Pl．
For these contracted forms it is nearly always possible to determine the inherently accented syllable，by looking at the longest forms．The only exception to this is $\mathbf{4 M e}$ ，since the accent jumps around．

[^19]
## 3．1．1．4．2．Contracted Third Declensions used Primarily for Adjectives

|  | $\begin{gathered} 4 M F g \\ (-\eta \xi /-0 v \varsigma) \\ 4 M F g^{2} \end{gathered}$ | $\begin{gathered} 4 N g \\ (-\varepsilon \varsigma /-0 v \varsigma) \\ 4 N g^{2} \end{gathered}$ | $\begin{gathered} 4 M h \\ (-v \varsigma /-\varepsilon \omega \varsigma /-v) \\ 4 M h^{2} \end{gathered}$ | $\begin{gathered} 4 N h \\ (-v /-\varepsilon \omega \varsigma) \\ 4 N h^{2} \end{gathered}$ | $\begin{gathered} 4 M i \\ (-\forall c /-0 v \xi /-v) \\ 4 M i^{3} \end{gathered}$ | $\begin{gathered} 4 N i \\ (-\forall /-0 v \zeta) \\ 4 N i^{3} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 572，360， | 572，360， | $\mathrm{E}(\mathrm{e})$ ， | $\mathrm{E}(\mathrm{f})$ ， | VII． 7 | VII． 7 |
|  | E（a），G（b） | G（b） | $\mathrm{H}(\mathrm{g})$ | $\mathrm{H}(\mathrm{g})$ |  |  |
|  | ＂true＂ | ＂true＂ | ＂deep＂ | ＂deep＂ | ＂half＂ | ＂half＂ |
| Sg．Nom． | ө̀入れ $\theta$ ¢́s | ө̀ $\lambda \eta \theta$ ćs | $\beta \in \theta \dot{q} \varsigma^{(8)}$ | $\beta \times \theta \dot{q}$ | $\eta{ }^{\prime} \mu+\sigma \forall \varsigma^{*}$ | $\eta \chi^{\prime \prime} \chi^{(8)}$ |
| Gen． | 文 $\lambda \eta \theta$ Oõs | ө̀ $\lambda \eta \theta$ oũs＊ | $\beta \notin \theta \varepsilon ́ \omega s$ | $\beta \in \theta \varepsilon ́ \omega \varsigma^{*}$ | $\dot{\eta} \mu \mathrm{t} \sigma$ ¢ $\boldsymbol{\varsigma}^{(s)}$ | $\dot{\eta} \mu$＇tбovs |
| Dat． | 㐫 $\lambda \eta \theta \varepsilon i^{*}$ | $\dot{\oplus} \lambda \eta \theta \varepsilon \varepsilon^{*}$ | $\beta \in \theta \varepsilon ⿺ 𠃊$ | $\beta \times \theta \varepsilon i^{(s)}$ | $\dot{\eta} \mu \dot{t} \sigma \varepsilon 1^{(\mathrm{s})}$ | $\dot{\eta} \mu \dot{t} \sigma \varepsilon 1^{(s)}$ |
| Acc． | $\dot{\theta} \lambda \lambda \eta \theta \tilde{\eta}$ | $\dot{\theta} \lambda \eta \eta \theta \dot{\varepsilon} \varsigma$ | $\beta \in \theta$ ¢́v＊ | $\beta \in \theta \dot{\theta}^{(s)}$ | $\eta \chi^{\prime \prime} \mu \sigma \forall v^{*}$ | $\eta \mu \nmid \sigma \forall$ |
| Voc． | 文 $\lambda \eta \theta$ ćs＊ | ө̀入ך és $^{*}$ | 阝e日里＊ | $\beta \mathrm{\theta} \theta \mathrm{t}^{*}$ |  | ทँ $\mu+\sigma \psi^{*}$ |
| Pl．Nom． | $\dot{\theta} \lambda \eta \theta \varepsilon i ̃$ | $\dot{\theta} \lambda \lambda \eta \theta \tilde{\eta}$ | $\beta \notin \varepsilon i \varsigma^{*}$ | $\beta \notin \theta \dot{\varepsilon} \theta^{(s)}$ | $\dot{\eta} \mu \dot{\chi} \sigma \varepsilon \varepsilon \varsigma^{\text {s }}$（ |  |
| Gen． | ¢̀ $\lambda \eta \theta$ ã ${ }^{*}$ | ¢̀ $\lambda \eta \theta \underline{\omega} v^{*}$ | $\beta \beta \theta \dot{\varepsilon} \omega v^{(s)}$ | $\beta \times \theta \varepsilon ́ \omega v^{*}$ | $\dot{\eta} \mu \mathrm{t} \mathrm{\sigma} \varepsilon^{\prime} \omega \nu^{*}$ |  |
| Dat． | $\dot{\theta} \lambda \lambda \eta \theta \varepsilon ́ \sigma t v^{*}$ |  | $\beta$ ¢өモ̇́ctv＊ | $\beta$ ¢ө́̇бtv＊ | $\dot{\eta} \mu \dot{\prime} \sigma \varepsilon \sigma \tau v^{(8)}$ | $\dot{\eta} \mu \dot{\dagger} \sigma \varepsilon \sigma \underline{\text { v }}{ }^{*}$ |
| Acc． | ¢่ $\lambda \eta \theta \varepsilon i \varsigma^{*}$ | $\dot{\theta} \lambda \lambda \theta \hat{\eta}$ | $\beta \notin \varepsilon i \tau^{*}$ | $\beta$ ¢ $\theta$ ¢́ध | $\eta \mu$ t́ $\sigma \varepsilon \iota^{\text {s }}$（ ${ }^{\text {（ }}$ |  |



Apparently the older form of the genitive singular of $\mathbf{4 M} \boldsymbol{h}$ and $\mathbf{4 N} \boldsymbol{h}$ was $-\varepsilon \in \rho$ rather than $-\varepsilon \boldsymbol{\varepsilon} \omega \varsigma$ ，and this is represented by the alternate form of the genitive singular of $\pi \rho \alpha \ddot{\forall} \zeta$ found in some editions．Moulton does not even list the－$\dot{\varepsilon} \omega \boldsymbol{\zeta}$ form in his paradigms，even though it is the standard form in the New Testament．

[^20]
## 3．1．2．Full Declensions of Adjectives

Since in the preceding section I have included the declensions of the individual adjective genders with the nouns，in this section I will simply try to show all of the combinations（though this list may not be complete as far as handling all possible positions for the inherent accent），specifying the column code for each gender．Note that the masculine and neuter forms always belong to the same declension，but that the feminine may be of a different declension．Note also that some adjectives have identical forms in the masculine and feminine．

Note that the inherent accent almost always matches for all three genders，even on forms that include third or fourth declensions．In fact，the only exception I have found is $\pi \tilde{\alpha} \varsigma$ ．

I have included all types of verb participles in the table．These are all in boldface．（Present＝Pr，Perfect 三 Pf，Aorist＿三Ao，Future＿三Fu，Active＿＿Ac，Middle＿＝＿Mi，Passive＿三Pa，Middle－Passive＿＝＿MP；deponent may take the place of middle or passive．）

| Masculine | Feminine | Neuter | Masc．Fem．Neut． |  |
| :---: | :---: | :---: | :---: | :---: |
| 人̀jo日大os | àra日̇́ | àje日óv | $2 \mathrm{MFa}^{1} 1 \mathrm{Fa}^{1} \quad 2 \mathrm{Na}^{1}$ | ＂good＂568， 61 |
| $\pi \rho$ ¢̃tos | $\pi \rho \omega$ ¢ | $\pi \rho$ ¢ิtov | $2 \mathrm{MFa}^{2} 1 \mathrm{Fa}^{2} \quad 2 \mathrm{Na}^{2}$ | ＂first＂ |
|  | ท̄रıaбućvך |  | $2 \mathrm{MFa}{ }^{2} 1 \mathrm{IFa}^{2} \quad 2 \mathrm{Na}^{2}$ | ＂having been made holy＂（PfMP） |
|  | Вaбavi̧ouév | ßeбavi̧ónevov | $2 M F a^{3} \quad 1 \mathrm{Fa}^{3} \quad 2 \mathrm{Na}^{3}$ | ＂being distressed＂（PrMP） |
| топПбépevos | топПбөнธ́v ${ }^{*}$ |  | $2 \mathrm{MFa}^{3} 1 \mathrm{IFa}^{3} \quad 2 \mathrm{Na}^{3}$ | ＂doing（for oneself）＂（AoMi） |
|  | غ̇tépa | ย่̇ะpov | $2 M F a^{3} 1 F^{3}{ }^{3} \quad 2 \mathrm{Na}^{3}$ | ＂other＂ |
| цıкро́s | $\mu$ цккро́ | нıкро́v | $2 \mathrm{MFa}{ }^{1} 1 \mathrm{FFd}^{1} \quad 2 \mathrm{Na}^{1}$ | ＂small＂569， 62 |
| 人̇vaүкаı̃os ${ }^{(s)}$ | àvaүкаía＊ | ávaүкаĩov | $2 M F a^{2} \quad 1 \mathrm{Fd}^{2} \quad 2 \mathrm{Na}^{2}$ | ＂necessary＂ |
| ठ́tkouos | Stkaía | ठ́tкalov | $2 \mathrm{MFa}^{3} 1 \mathrm{Fe}^{3} \quad 2 \mathrm{Na}^{3}$ | ＂righteous＂570， 62 |
| тоди́s | $\pi$ т $\lambda \lambda$ п́ | толи́ | $\begin{array}{llll}2 M \mathrm{i}^{1} & 1 \mathrm{Fa}^{1} & 2 N \mathrm{Ni}^{1}\end{array}$ | ＂much＂574，370，VII． 8 |
| $\mu \dot{\gamma} \gamma \bar{\alpha}$ | $\mu \varepsilon \gamma \dot{\theta} \lambda \lambda \eta$ | $\mu \varepsilon ́ \gamma \alpha$ | $2 \mathrm{Mj}{ }^{1} \quad 1 \mathrm{Fa}^{1} \quad 2 \mathrm{~N} \mathrm{j}^{1}$ | ＂big＂575，370，VII． 8 |
|  | $\chi$ ¢йбท̃ | $\chi \rho \underline{0} \sigma 0$ ṽ ${ }^{(s)}$ |  | ＂golden＂VII．5（b） |
| $\alpha$ 人ívıos ${ }^{(\mathrm{S}) 60}$ | aímvos | $\alpha i o ́ v ı o v$ | $2 \mathrm{MFa}^{3} 2 \mathrm{MFa}^{3} 2 \mathrm{Na}^{3}$ | ＂eternal＂ |
|  |  |  | $3 \mathrm{MFa}^{3} 1 \mathrm{FFb}^{3} \quad 3 \mathrm{Na}^{3}$ | ＂black，ink＂H（a） |
|  |  |  | $3 \mathrm{MFa}^{3} \quad 1 \mathrm{Fb}^{3} \quad 3 \mathrm{Na}^{3}$ | ＂having＂576，H（d）（PrAc） |
|  $\pi$ ои́бovбtv＊＊ | $\pi 0 \eta ́ \sigma \sigma v \sigma \epsilon^{* *}, \pi о \eta \sigma o v ́ \sigma \eta \varsigma^{* *}$, лопךбои́баıs＊＊ | тоџŋ̃бov＊＊，$\pi$ ой́бovтоऽ＊＊， $\pi$ ои́бovø七七＊＊ | $3 M F a^{3} 1 F^{3} \quad 3 \mathrm{Na}^{3}$ | ＂being about to do＂（FuAc） |
| $\begin{aligned} & \pi \varepsilon \pi \tau \omega \kappa \omega ́ \varsigma^{(s)}, \\ & \pi \varepsilon \pi \tau \omega \kappa o ́ \tau o \varsigma^{*}, \\ & \pi \varepsilon \pi \tau \omega \kappa \text { óvtv* } \end{aligned}$ | $\begin{aligned} & \pi \varepsilon \pi \tau \omega \kappa v i ̃ A^{(s)}, \\ & \pi \varepsilon \pi \tau \omega \kappa v i ́ S^{*}, \\ & \pi \varepsilon \pi \tau \omega \kappa v i \alpha s^{* *} \end{aligned}$ | $\pi \varepsilon \pi \tau \omega \kappa o ́ \varsigma^{(s)}$ ， $\pi \varepsilon \pi \tau \omega \kappa$ ќтоз＊＊， $\pi \varepsilon \pi \tau \omega \kappa$ о́ $\downarrow \downarrow * * *$ | $3 \mathrm{MFa}{ }^{2} \mathbf{1 F c}^{2} \quad 3 \mathrm{Na}^{2}$ | ＂having fallen＂（PfAc） |
| д̈локрі $\theta$ сі́， д̀локрı日่́vтоऽ＊， ג் окрı $\theta \varepsilon і ̃ \sigma v^{(s)}$ | дंлокрөөєі̃бө， д̀локрı日вíбๆร＊， д̀ $\pi о к р ө \theta \varepsilon i ́ \sigma \alpha ı \varsigma^{* *}$ | д̈локрı $\theta$ غ́v， д̀локрөө́vтоз＊， <br>  | $3 M F a^{2} 1 F^{2} 3 \mathrm{Na}^{2}$ | ＂answering＂（AoPa） |
|  |  | őv，ővtos，oũ̃าv（s） | $3 \mathrm{MFa}^{2} 1 \mathrm{Fbb}^{2} \quad 3 \mathrm{Na}^{2}$ | ＂being＂（PrAc irregular）${ }^{61}$ |
| غ̇ $\lambda \theta \dot{\omega} v, \dot{\text { é }} \lambda \theta$ óvtos， غ̇ $\lambda \theta$ Oṽбเข＊ | غ̇ं $\lambda$ Ooṽ $\theta, ~ \grave{~} \lambda \theta$ ov́бทऽ， غ̇ $\lambda \theta$ ov́б人ıs＊ | غ̇ $\lambda \theta o ́ v, ~ غ ̇ \lambda \theta o ́ v \tau o s^{*}$ ， <br>  | $3 \mathrm{MFa}^{2} 1 \mathrm{FFb}^{2} \quad 3 \mathrm{Na}^{2}$ | ＂having come＂（AoAc irregular）${ }^{61}$ |
|  จŁסои̃のтv＊ | $\begin{aligned} & \text { ס+ } \delta o v ̃ \sigma \epsilon^{*}, \delta+\delta o v ́ \sigma \eta \varsigma^{*} \\ & \delta+\delta o v ́ \sigma \alpha \varsigma^{*} \end{aligned}$ | סtסov́v＊，$\delta$ tסóvtos＊ סtסoṽซıv＊ | $3 \mathrm{MFa}^{2} 1 \mathrm{Fbb}^{2} 3 \mathrm{Na}^{2}$ | ＂giving＂（PrAc irregular）${ }^{61}$ |
| ג̀кои́баऽ，ג̀коv́бधvтоऽ＊， ג̀кои́б人бtv | $\dot{\alpha} \kappa о v ́ \sigma \alpha \sigma \theta, \dot{\alpha} \kappa 0 \nu \sigma \alpha \dot{\alpha} \sigma \eta \varsigma^{*}$ ， <br>  | $\dot{\alpha} \kappa о \tilde{0} \sigma \not \sigma v^{*}, \dot{\alpha} \kappa о \text { v́ } \sigma \theta \tau \tau \varsigma^{*},$ $\dot{\alpha} \kappa o v ́ \sigma \alpha \sigma t v^{* *}$ | $3 \mathrm{MFa}{ }^{3} 1 \mathrm{Fb}^{3} \quad 3 \mathrm{Na}^{3}$ | ＂having heard＂（AoAc） |
|  | $\pi \tilde{\alpha} \sigma \theta, \pi \underline{\alpha} \sigma \eta$ ¢ | $\pi \alpha ̃ v, \pi \notin v$ ós | $3 \mathrm{MFa}^{1+} 1 \mathrm{Fb}^{2} 3 \mathrm{Na}^{1+}$ | ＂every，all＂573，365，H（b） |
| $\ddot{\theta} \varphi \rho \omega v, \ddot{\theta} \varphi \rho \rho^{\prime}{ }^{(s)}$ ， ёрробтv（s） | $\ddot{\theta} \varphi \rho \omega^{(s)}, \ddot{ө} \varphi \rho \rho^{\prime} \varsigma^{*}$ ， थ̈рробни＊ |  ӫ甲роотv＊ | $3 \mathrm{MFa}^{3} 3 \mathrm{MFa}^{3} 3 \mathrm{Na}^{3}$ | ＂foolish＂ |
| $\mu \varepsilon i \zeta \omega v, \mu \varepsilon i \zeta o v o \varsigma$, $\mu \varepsilon i \zeta o \sigma t v *$ | $\mu \varepsilon i \zeta \omega v, \mu \varepsilon i \zeta o v o \varsigma$, $\mu \varepsilon i \zeta$ обtv＊ | $\mu \varepsilon і ً$ оv，$\mu \varepsilon і$ ícovos＊， $\mu \varepsilon i \zeta o \sigma t v *$ | $3 M F j^{3} \quad 3 M F j^{3} 3 N j^{3}$ | ＂greater＂571，459， 461 |
|  |  | $\begin{aligned} & \beta \in \theta \dot{\theta}, \beta \not \beta \theta \dot{́} \omega \varsigma^{*}, \\ & \beta \in \theta \varepsilon ́ \sigma t v^{*} \end{aligned}$ | $4 M h^{2} \quad 1 F^{2} \quad 4 N h^{2}$ | ＂deep＂H（g） |
| $\eta ँ \mu+\sigma \forall \varsigma^{*}, \dot{\eta} \mu \dot{t} \sigma \sigma v \varsigma$, $\dot{\eta} \mu \dot{\epsilon} \sigma \varepsilon \sigma \tau v{ }^{(s)}$ | $\dot{\eta} \mu \dot{\chi} \sigma \varepsilon \epsilon \epsilon^{*}, \dot{\eta} \mu \mathrm{t} \sigma \varepsilon \underline{\alpha} \varsigma^{*}$ | $\eta ँ \mu+\sigma \forall, \eta \dot{\eta} \neq \sigma 0 \nu \varsigma$, ทֹ $\mu$ t́ $\sigma \varepsilon \sigma t v^{*}$ | $4 \mathrm{Mi}^{3} \quad 1 \mathrm{Fc}^{3} \quad 4 \mathrm{Ni}^{3}$ | ＂half＂VII． 7 |
| $\theta \tilde{\eta} \lambda \theta \varsigma^{*}, \theta \dot{\eta} \lambda o u \varsigma^{*}$ ， $\theta \dot{\eta} \lambda \varepsilon \sigma t)^{*}$ | $\theta \eta \dot{\prime} \lambda \varepsilon 1^{(s)}, \theta \eta \lambda \varepsilon \alpha^{\prime} \alpha \varsigma$ | $\theta \tilde{\eta} \lambda \forall \varsigma^{*}, \theta \dot{\eta} \lambda$ ous＊， $\theta$ $\dagger \lambda \varepsilon \sigma t v^{*}$ | $4 \mathrm{Mi}^{3} \quad 1 \mathrm{Fc}^{3} \quad 4 \mathrm{Ni}{ }^{3}$ | ＂female＂ |
| $\begin{aligned} & \dot{\theta} \lambda \eta \theta \dot{\eta} s, \dot{\otimes} \lambda \eta \theta \text { oṽ } s^{*}, \\ & \dot{\dot{\theta} \lambda \eta \theta \dot{\varepsilon} \sigma t v^{*}} \end{aligned}$ | $\dot{\theta} \lambda \eta \theta \dot{\eta} \varsigma, \dot{\theta} \lambda \eta \theta 0$ õs，白 $\lambda \eta \theta \dot{\varepsilon} \sigma \tau v^{*}$ | $\dot{\oplus} \lambda \eta \theta \dot{\varepsilon} \varsigma, \dot{\oplus} \lambda \eta \eta \theta 0 \tilde{v} \varsigma^{*}$,㐫 $\lambda \eta \theta \dot{\varepsilon} \sigma \nleftarrow v^{*}$ | $4 \mathrm{MFg}^{2} 4 \mathrm{MFg}^{2} \mathbf{4 N g}{ }^{2}$ | ＂true＂572，360，G（b） |

[^21]
## 3．1．3．Comparative and Superlative Adjectives

## 3．1．3．1．Regular Comparative Adjectives

The comparative forms of almost all adjectives end in $-\tau \varepsilon \rho \circ \varsigma$ and belong to the $2 \mathbf{M F a}^{3}-1 \boldsymbol{F e}^{3}-2 \mathbf{N a}^{3}$ declen－ sion，no matter what declension the plain adjective belongs to，as the following chart shows．Sometimes an adver－ bial form is used，ending in $-\tau \varepsilon ́ \rho \omega \varsigma$ and marked with the Friberg code ABM，meaning＂comparative adverb＂（some of these adverbial comparatives are derived from adjectives，and some from adverbs）．Comparatives are relatively infrequent，so in most cases I have given every form that actually occurs．${ }^{62}$

The $-\tau \varepsilon \rho o \varsigma$ ending is evidently added to the unchanged neuter stem after removing the $-v$ ，except that sometimes stem－final $o$ is changed to $\omega$ ．Why？I have not been able to come up with any explanation，though I have explored various possibilities，including inherent accent and stem ending．If anyone has one，I＇d love to hear it！

| Declension |  |  |  | Plain <br> Adjective | Comparative Forms | $\begin{aligned} & \text { Friberg } \\ & \text { code } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | $F$ | $N$ |  |  |  |  |  |
| $2 \mathrm{MFa}^{1}$ | $1 \mathrm{Fa}^{1}$ | $2 \mathrm{Na}^{1}$ | ＂new＂ | Kalvós ${ }^{(S)}$ | каıVó $\tau \varepsilon \rho 0 \vee$ | A－MAN－S | Acts 17：21 |
| $2 \mathrm{MFa}^{1}$ | $1 \mathrm{Fa}^{1}$ | $2 \mathrm{Na}^{1}$ | ＂miserable＂ | غ̇入 2 cıvós | غ̇入 $\varepsilon \varepsilon \varepsilon 1$ טó $\tau \varepsilon \rho \Theta t$ | A－MNM－P | 1 Co．15：19 |
| $2 \mathrm{MFa}^{\text {a }}$ | $1 \mathrm{Fa}^{1}$ | $2 \mathrm{Na}^{1}$ | ＂high＂ | $\dot{v} \psi \eta \lambda$ ó $\varsigma^{(s)}$ | טัษท入ó $\tau \varepsilon \rho \circ$ ¢ | A－MNM－S | He．7：26 |
| $2 \mathrm{MFa}^{\text { }}$ | $1 \mathrm{Fa}^{1}$ | $2 \mathrm{Na}^{1}$ | ＂abundant＂ | $\pi \varepsilon \rho 1 \sigma \sigma$ ó $\varsigma^{(S)}$ | $\pi \varepsilon \rho 1 \sigma \sigma о \tau \varepsilon ์ \rho \alpha$ | A－MDF－S | 2 Co．2：7 |
|  |  |  |  |  | $\pi \varepsilon \rho 1 \sigma \sigma 0 \tau \varepsilon$ ¢́ $\underline{\underline{\alpha}}$ | A－MAF－S | 1 Co．12：23 1 Co．12：23 1 Co．12：24 |
|  |  |  |  |  | $\pi \varepsilon \rho ⿺ 𠃊 \sigma о ́ \tau \varepsilon \rho о \vee$ | A－MAN－S | Mark 12：40 Luke 20：47 |
|  |  |  |  |  | $\pi \varepsilon \rho ⿺ 𠃊 \sigma о ́ \tau \varepsilon \rho о \vee$ | A－MNN－S | Mat．11：9 Mark 7：36 Mark 12：33 Luke 7：26 1 Co．15：10 |
|  |  |  |  |  | $\pi \varepsilon \rho 1 \sigma \sigma 0 \tau \varepsilon ์ \rho \omega \varsigma$ | ABM | 2 Co．1：12 2 Co．2：4 2 Co．7：13 2 Co．7：15 2 Co．11：23 |
| $2 \mathrm{MFa}^{1}$ | $1 \mathrm{Fa}^{1}$ | $2 \mathrm{Na}^{1}$ | ＂wise＂ | бOQós |  | A－MNN－S | 1 Co．1：25 |
| $2 \mathrm{MFa}^{1}$ | $1 \mathrm{Fd}^{1}$ | $2 \mathrm{Na}^{1}$ | ＂strong＂ | íбupós | iбхиро́тєроऽ | A－MNM－S | Mat．3：11，Mark 1：7 Luke 3：16 Luke 11：22 |
|  |  |  |  |  | íбхणро́тєроऽ | APMNM－S | Mark 1：7 Luke 3：16 Luke 11：22 |
|  |  |  |  |  | íбхणро́тєрөt | A－MNM－P | 1 Co．10：22 |
|  |  |  |  |  | ı̇б $\chi$ ¢о́ $\tau \varepsilon \rho \circ \vee$ | A－MNN－S | 1 Co．1：25 |
| $2 \mathrm{MFa}^{\text {a }}$ | $1 \mathrm{Fd}^{1}$ | $2 \mathrm{Na}^{1}$ | ＂small＂ | $\mu 1 к \rho о ́ \varsigma$ | $\mu 1 к \rho о ́ \tau \varepsilon \rho о \varsigma ~$ | A－MNM－S | Luke 9：48 Mat．11：11 Luke 7：28 |
|  |  |  |  |  | $\mu ⿺ 𠃊 \rho о ́ \tau \varepsilon \rho о \vee ~$ | A－MNN－S | Mat．13：32，Mark 4：31 |
| $2 \mathrm{MFa}^{1}$ | $1 \mathrm{Fd}^{1}$ | $2 \mathrm{Na}^{1}$ | ＂bad＂ | тоvŋро́s | $\pi о \vee \eta \rho о ́ \tau \varepsilon \rho \Theta$ | A－MAN－P | Mat．12：45 Luke 11：26 |
| $2 \mathrm{MFa}^{1}$ | $1 \mathrm{Fd}^{1}$ | $2 \mathrm{Na}^{1}$ | ＂frequent＂ | $\pi$ ккvós＊ | $\pi$ тикขо́тєроข | ABM | Acts 24：26 |
| $2 \mathrm{My}^{1}$ | $1 \mathrm{Fw}^{1}$ | $2 \mathrm{Ny}^{1}$ | ＂double＂ | $\delta 1 \pi \lambda 0 \tilde{v} \varsigma^{(S)}$ | $\delta 1 \pi \lambda$ ó $\tau \varepsilon \rho$ ov | A－MAM－S | Mat．23：15 |
| $2 \mathrm{MFa}^{2}$ | $1 \mathrm{Fd}^{2}$ | $2 \mathrm{Na}^{2}$ | ＂necessary＂ | $\dot{\alpha} \nu \alpha \gamma \kappa \alpha \tilde{\sim} \varsigma^{(s)}$ | $\alpha{ }^{\alpha} \alpha \gamma \kappa \alpha 10 ́ \tau \varepsilon \rho \circ \vee$ | A－MNN－S | Php．1：24 |
| $2 \mathrm{MFa}^{2}$ | $1 \mathrm{Fd}^{2}$ | $2 \mathrm{Na}^{2}$ | ＂new，young＂ | vÉOS | vєஸ́тєроऽ | A－MNM－S | Luke 15：13 John 21：18 Luke 15：12 Luke 22：26 |
|  |  |  |  |  | vєஸ́tєрөt | APMNM－P | Acts 5：6 |
|  |  |  |  |  | vعفтદ́pous | APMAM－P | 1 Tim．5：1 Ti2：6 |
|  |  |  |  |  | ขєஸ́тєคөt | APMVM－P | 1 Pe．5：5 |
|  |  |  |  |  | vعفтย́pas | A－MAF－P | 1 Tim．5：11 1 Tim．5：2 1 Tim．5：14 |
| $2 \mathrm{MFa}{ }^{2}$ | $1 \mathrm{Fd}^{2}$ | $2 \mathrm{Na}^{2}$ | ＂diligent＂ | $\sigma \pi 0 v \delta \alpha i ̃ 0 \varsigma^{*}$ | блоvסגı́тєроv | A－MAM－S | 2 Co．8：22 |
|  |  |  |  |  | блоטঠגı́тєроऽ | A－MNM－S | 2 Co．8：17 |
|  | $A B$ |  | ＂earnestly＂ | $\sigma \pi \mathrm{ov} \mathrm{\delta} \mathrm{\alpha í} \mathrm{\omega s}$ | $\sigma \pi$ оv $\alpha \alpha 10 \tau \varepsilon ์ \rho \omega \varsigma$ | ABM | Php．2：28 |
| $2 \mathrm{MFa}^{3}$ | $1 \mathrm{Fa}^{3}$ | $2 \mathrm{Na}^{3}$ | ＂despised＂ | ӧтı ${ }^{\text {os }}$ |  | A－MAN－P | 1 Co．12：23 |
| $2 \mathrm{MFa}^{3}$ | $1 \mathrm{Fa}^{3}$ | $2 \mathrm{Na}^{3}$ | ＂honored＂ | غ̌v $\tau 1 \mu \mathrm{O}$ | غ่v $\tau \iota \mu$ о́ $\tau \varepsilon \rho \circ \varsigma$ | APMNM－S | Luke 14：8 |
| $2 \mathrm{MFa}^{3}$ | $1 \mathrm{Fb}^{3}$ | $2 \mathrm{Na}^{3}$ | ＂different＂ | סıа́¢ороऽ＊ | $\delta 1 \alpha \varphi о р \omega \tau \varepsilon ́ \rho \underline{\underline{\prime}}$ | A－MGF－S | He．8：6 |
|  |  |  |  |  | $\delta 1 \alpha \varphi о \rho \omega ́ \tau \varepsilon \rho о \vee$ | A－MAN－S | He．1：4 |
| $2 \mathrm{MFa}^{3}$ | $1 \mathrm{Fe}^{3}$ | $2 \mathrm{Na}^{3}$ | ＂reliable＂ | $\beta$ ¢́ß $\alpha 10 \varsigma$ | $\beta \varepsilon \beta \alpha$ о́ $\tau \varepsilon \rho \circ$ v | A－MAM－S | 2 Pe．1：19 |

${ }^{62}$ There are actually a lot more comparative forms that I have not included，because they do not derive directly from any adjective that actually is used in the New Testament，such as крєít $\tau \omega v$ or к $\rho \varepsilon i ́ \sigma \sigma \omega v^{*}$＂better＂，which does not derive from $\kappa \alpha \lambda$ ós＂good＂and which is much more common than $\kappa \alpha \dot{1} \lambda \lambda 10 v$＂better＂，which does，but only occurs once，as an adverb．Most of the other underived or underivable comparatives are similarly irregular．

| $2 \mathrm{MFa}^{3}$ | $1 \mathrm{Fe}^{3}$ | $2 \mathrm{Na}^{3}$ | ＂blessed＂ | $\mu \alpha \kappa \alpha ́ p l o s ~$ | $\mu \alpha \kappa \alpha \rho 1 \omega \tau \varepsilon ́ \rho \alpha$ | A－MNF－S | 1 Co．7：40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2 \mathrm{MFa}^{3}$ | $1 \mathrm{Fe}^{3}$ | $2 \mathrm{Na}^{3}$ | ＂complete＂ | $\tau \varepsilon ́ \lambda \varepsilon 10 \varsigma$ | $\tau \varepsilon \lambda \varepsilon 10 \tau \varepsilon ์ \rho \underline{\underline{\alpha}}$ | A－MGF－S | He．9：11 |
| $2 \mathrm{MFa}^{3}$ | $2 \mathrm{MFa}^{3}$ | $2 \mathrm{Na}^{3}$ | ＂costly＂ | $\pi \mathrm{o} \lambda$ ט́ $\tau \mu \mathrm{o} \varsigma^{*}$ | то入vтıцо́тє¢оข | A－MNN－S | 1 Pe．1：7 |
| $2 \mathrm{MFa}^{3}$ | $2 \mathrm{MFa}^{3}$ | $2 \mathrm{Na}^{3}$ | ＂wise＂ | ¢ ¢óvıนо丂 | $\varphi \rho о v \leftharpoonup \omega$ ¢́ $\tau$ ¢өt | A－MNM－P | Luke 16：8 |
| $4 \mathrm{MFg}^{2}$ | $4 \mathrm{MFg}^{2}$ | $4 \mathrm{Ng}^{2}$ | ＂exact，strict＂ | $\dot{\alpha} \kappa \rho ı \chi^{\prime} \varsigma^{(S)}$ |  | ABM | Acts 18：26＋ |
| $4 \mathrm{MFg}^{2}$ | $4 \mathrm{MFg}^{2}$ | $4 N g^{2}$ | ＂weak＂ | $\alpha{ }_{\alpha} \sigma \theta \varepsilon v \eta ์ \varsigma$ | $\alpha{ }_{\alpha} \sigma \theta \varepsilon v \varepsilon \sigma \tau \varepsilon ์ \rho \varphi$ | A－MDN－S | 1 Pe．3：7 |
|  |  |  |  |  | $\dot{\alpha} \sigma \theta \varepsilon v \varepsilon ́ \sigma \tau \varepsilon \rho \Theta$ | A－MNN－P | 1 Co．12：22 |
| $4 \mathrm{MFg}^{2}$ | $4 \mathrm{MFg}^{2}$ | $4 N g^{2}$ | ＂intense＂ | غ̇к $\tau \varepsilon \vee \eta \varsigma^{*}$ | ̇̇К兀є | ABM | Luke 22：44 |
| $4 \mathrm{MFg}^{2}$ | $4 \mathrm{MFg}^{2}$ | $4 \mathrm{Ng}^{2}$ | ＂well－born＂ | \＆v̉үยvฑ่s |  | A－MNM－P | Acts 17：11 |
| $4 M^{2}$ | $1 \mathrm{Fc}^{2}$ | $4 \mathrm{Nh}^{2}$ | ＂heavy＂ | $\beta \alpha \rho \forall ์ s^{(S)}$ | $\beta \alpha \rho$ ¢́т\＆рє | APMAN－P | Mat．23：23 |
| $A B$ |  |  | ＂at a distance＂ | то́ррю | $\pi о \rho \rho \omega ́ \tau \varepsilon \rho о \vee$ | ABM | Luke 24：28 |

## 3．1．3．2．Irregular Comparative Adjectives

A very small number do not follow this pattern and must be considered irregular．They almost all follow the same pattern， $\mathbf{3 M F} \boldsymbol{j}^{\mathbf{3}}, \mathbf{3 M F j} j^{3}, \mathbf{3 N j}{ }^{3}$ ．

${ }^{63}$ This is an odd one，since it mixes a regular ending with an irregular stem！

## 3．1．3．3．Regular Superlative Adjectives

The superlative of＂regular＂adjectives，corresponding to the Regular Comparative Adjectives in－$\tau \varepsilon \rho \circ \varsigma$ ， end in $-\tau \alpha \tau o \varsigma$. However，these are quite rare，and the irregular superlatives are much more common．I have given every form that actually occurs in the New Testament below．

|  | Plain <br> Adjective | Comparative <br> Forms | $\begin{aligned} & \text { Friberg } \\ & \text { code } \end{aligned}$ |  | Superlative <br> Forms | $\begin{aligned} & \text { Friberg } \\ & \text { code } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ＂holy＂ | ö $\gamma 10$ S |  |  |  | $\dot{\alpha} \gamma 1 \omega \tau \alpha ́ \tau \eta$ | A－SDF－S | Jude 1：20 |
| ＂exact，strict＂ | $\dot{\alpha} \kappa \rho 1 \beta \chi^{(S)}$ |  | ABM | Acts 18：26＋ | $\dot{\alpha} \kappa \rho 1 \beta \varepsilon \sigma \tau \alpha ́ \tau \eta \nu$ | A－SAF－S | Acts 26：5 |
| ＂valuable＂ | тíplos |  |  |  | $\tau \mu \iota \omega \tau \alpha ́ \tau \varphi$ | A－SDM－S | Rev．21：11 |
|  | тíplos |  |  |  | $\tau \iota \mu 1 \omega \tau \alpha ́ \tau 0 v$ | A－SGN－S | Rev．18：12 |

## 3．1．3．4．Irregular Superlative Adjectives

The irregular superlatives end in－iбtos．These sometimes correspond to irregular comparatives，as in the first four examples below，but far more often do not derive in any regular way from ordinary or comparative ad－ jectives，as in the remaining examples．（In some cases the plain or comparative adjective and superlative are indeed related，but the derivation is not regular，as in the case of $\dot{v} \psi \eta \lambda$ ós $\varsigma^{(\mathrm{s})}$ ．）

|  | Plain <br> Adjective | Comparative Forms | Friberg code |  | Superlative <br> Forms | Friberg code |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ＂great＂ | $\mu \varepsilon ́ \gamma \alpha ¢$ | $\mu \varepsilon i ́ \zeta \omega v$ | A－MNM－S | Mat． <br> 11：11＋ | $\mu \varepsilon ́ \gamma 1 \sigma \tau *$ | A－SAN－P | 2 Pe．1：4 |
| $\begin{aligned} & \text { "much", } \\ & \text { "many" } \end{aligned}$ | $\pi 0 \lambda v ́ \zeta$ | $\pi \lambda \varepsilon i ́ \omega v^{*}$ | A－MNM－S |  | $\pi \lambda \varepsilon \tilde{1} \sigma \tau O \nu$ | APSAN－S | 1 Co．14：27 |
|  |  | $\pi \lambda \varepsilon i ́ \omega v^{*}$ | A－MNM－S |  | $\pi \lambda \varepsilon \tilde{1} \sigma \tau \notin t$ | A－SNF－P | Mat．11：20 |
|  |  | $\pi \lambda \varepsilon i ́ \omega v^{*}$ | A－MNM－S |  | $\pi \lambda \varepsilon \tilde{1} \sigma \tau O \zeta$ | A－SNM－S | Mat．21：8，Mark 4：1 |


| ＂less＂ |  | ¢＇$\lambda \alpha \tau \tau 0 \vee$ | ABM | 1 Tim．5：9 | ċ入 $\alpha \chi \chi 1 \sigma \tau 0 \zeta$ | A－SNM－S | Mat．5：19 1 Co．15：9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | غ̇入 $\alpha \sigma \sigma \omega$ | APMAM－S | John 2：10 |  | A－SNF－S | Mat．2：6 |
|  |  | Ė入áơoovı | APMDM- <br> S | Rom．9：12 |  | A－SGN－S | James 3：4 |
|  |  | ¢̌入 $\lambda \alpha \tau \tau 0 \vee$ | $\begin{aligned} & \text { APMNN- } \\ & \mathrm{S} \\ & \hline \end{aligned}$ | Не．7：7 | $\dot{\varepsilon} \lambda \alpha \alpha \chi 1 \sigma \tau 0 \tau \varepsilon ์ \rho \varphi$ | $\begin{aligned} & \text { APMDM- } \\ & \text { S } \\ & \hline \end{aligned}$ | Eph．3：8 |
|  |  | $\dot{\varepsilon} \lambda \alpha \chi \chi 1 \sigma \tau 0 \tau \varepsilon ́ \rho \omega^{63}$ | APMDM- S | Eph．3：8 |  | A－SDN－S | Luke 16：10 Luke 16：10 Luke 19：17 |
|  |  |  |  |  | ċ入 $\alpha \chi \chi 1 \sigma \tau 0 \vee$ | A－SAN－S | Luke 12：26 1 Co．4：3 |
|  |  |  |  |  |  | A－SGM－P | Mat．25：40 Mat．25：45 |
|  |  |  |  |  | غ̇入 $\chi^{\chi}$ ¢́́ $\sigma \tau \omega v$ | A－SGF－P | Mat．5：19 |
|  |  |  |  |  | غ̇入 $\chi^{\chi}$ ¢́́ $\sigma \tau \omega \nu$ | A－SGN－P | 1 Co．6：2 |
| ＂most excellent＂ | $\kappa \rho \alpha ́ \tau 1 \sigma \tau 0 \varsigma^{*}$ |  |  |  | $\kappa \rho \alpha \tau i ́ \sigma \tau \omega$ | A－SDM－S | Acts 23：26 |
|  |  |  |  |  | $\kappa \rho \alpha ́ \tau 1 \sigma \tau \varepsilon$ | A－SVM－S | Luke 1：3 Acts 24：3 Acts 26：25 |
| ＂high＂ | $\dot{v} \psi \eta \lambda$ ó $\varsigma^{(S)}$ | ט์ | A－MNM－S | He．7：26 | บ゚భíб儿O1S | APSDN－P | Mat．21：9，Mark 11：10 Luke 2：14 Luke 19：38 |
|  |  |  |  |  | ט̇భíб价 | APSGM－S | Luke 1：32 Luke 1：35 Luke 1：76 Luke 6：35 |
|  |  |  |  |  | ט̋ษlб | APSNM－S | Acts 7：48 |
|  |  |  |  |  | ט̇భíб亢Ov | A－SGM－S | Mark 5：7 Luke 8：28 Acts 16：17 He． 7：1 |

### 3.1.4.The Article

Masc. Fem. Neut.
Nom. $\dot{\mathrm{o}} \quad \dot{\eta} \quad \tau$ ́ Sg. Gen. $\tau \circ$ ṽ $\tau \tilde{\varrho} \varsigma ~ \tau 0$ ṽ

Acc. đóv đク́v đó
Nom. $\theta \dot{\theta} \quad \alpha \dot{t} \quad \tau \dot{\theta}$

Pl. Gen. $\tau \tilde{v} v \tau \tilde{\omega} \nu \tau \tilde{\omega} v$ Dat. тoĩs т人ĩs тoĩs Acc. тov́s tós $\tau \dot{\theta}$

The four forms which do not begin with $\tau$ are proclitics (i.e., they have no accent of their own, and are phonologically attached to the following word).

Moulton says that the article has no vocative. In a strictly grammatical sense he is right, since, for example, the word $\pi \dot{\epsilon} \tau \varepsilon \rho$ (Matt. 6:9), which is a uniquely vocative form, never has the article. However, if the article needs to be added to this word, the nominative form $\dot{o} \pi \notin \tau \eta \dot{\rho} \rho$ is used instead (Matt. 11:26). There are numerous examples of this use of the nominative with article in place of a vocative: Luke 8:54, Matt. 11:26, Mark 15:34, Acts 13:41, Eph. 5:25, 6:4-5, Rom. 15:11, etc.

## 3．2．Pronouns

## 3．2．1．Personal Pronouns

|  | First $\text { 581; } \mathrm{K}(\mathrm{a})$ | Second $581 ; \mathrm{K}(\mathrm{~b})$ | 3rd M． <br> 581；J（a） | 3rd $F$ ． <br> 581；J（a） | $\begin{aligned} & 3 \text { rd } \boldsymbol{N} . \\ & 581 ; \mathrm{J}(\mathrm{a}) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sg．Nom． | ．$\dot{\varepsilon} \gamma \dot{\omega}^{++}$ | $\sigma v^{++}$ | $\alpha$ ט̇tós ${ }^{++}$ | $\alpha$ v̇t ${ }^{++}$ | $\alpha$ ט̇tó ${ }^{++}$ |
| Gen． | $\dot{\varepsilon} \mu \mathrm{ov}{ }^{+}(\mu \mathrm{ov})$ | $\sigma 0 \tilde{v}^{+}(\sigma 0 v)$ | גט่าวข̃ | $\alpha$ ט่าทัऽ | 人ט่าชข̃ |
| Dat． | $\dot{\varepsilon} \mu \mathrm{o}^{+}(\mu \mathrm{o})$ | $\sigma 0 i^{+}(\sigma 01)$ | $\alpha$ ט่าธ̣ | $\alpha$ טֹ̉กั | $\alpha$ ఎํัธฺ |
| Acc． | $\dot{\varepsilon}^{\prime} \mu \varepsilon^{+}(\mu \varepsilon)$ | $\sigma \varepsilon^{+}(\sigma \varepsilon)$ | גט̉ธóv | ఎง̉兀ๆ์ข | ఎט̉兀ó |
| Pl．Nom． | $\dot{\eta} \mu \varepsilon \widetilde{c}^{++}$ | ט́ $\mu \varepsilon \tilde{c}^{+}$ | 人v̉兀өt |  | ＋ |
| Gen． | $\dot{\eta} \mu \tilde{\omega} v$ | ט์นฮ̃v | ఎข่าธ̃ท | 㐅ט่̉ธัง | ఎט̉兀ธ̃ |
| Dat． | $\dot{\eta} \mu \mathrm{i} v$ | ט์笠v | ఎข่า๐ัิร | av̉兀＜ĩ¢ | av̉兀oĩร |
| Acc． | $\dot{\eta} \mu \tilde{\alpha} \varsigma$ |  | av̉兀ov́s | av̉vás | av̉té |


Note that $\alpha v ̉ \tau o ́ s$ is declined just like $\dot{\alpha} \gamma \not \theta \theta$ ós，except that the neuter singular nominative and accusative lack the $-v$ ．As is the case for the article，the personal pronouns do not have a vocative form．Obviously，the only ones which could have a vocative form are the second person pronouns，and in fact in the English translation of a number of passages the second person pronoun is used in a clearly vocative sense，as in Mat．14：31，＂O you of lit－ tle faith．．．＂However，these all appear to be cases of the vocative adjectives ò $\lambda_{t \gamma}$ ó $\pi t \sigma \tau \varepsilon$＂little－faith＂and $\dot{0} \lambda_{t} \boldsymbol{\gamma}$ ó $\pi t \sigma \tau \theta t$＂little－faiths＂used pronominally，and in every case，the Greek original has no pronoun whatsoever． （In Spanish such a usage is not possible，and so the words hombre＂man＂or hombres＂men＂are inserted instead of a pronoun．）

The pronouns marked with ${ }^{++}$are inherently emphatic，and are only used when special emphasis is in－ tended．（In Spanish many pronouns are also inherently emphatic，specifically the subject pronouns，which are op－ tional unless needed for emphasis，as in＂Tú viniste，＂＂You came，＂in which the pronoun is only used for em－ phasis，instead of simply saying＂Viniste，＂＂You came，＂but English has no such distinction，since the pronoun is always required．）

The pronouns marked with ${ }^{+}$are emphatic only under certain circumstances（specifically，when not pre－ ceded by a preposition）．

## 3．2．2．Possessive Adjectives

| First | Second |
| :---: | :---: |
|  | Oós ${ }^{\text {＋}}$ |
| Pl．$\dot{\eta} \mu \dot{\mu} \tau \varepsilon \rho \circ \varsigma^{(s)++}$ |  |

The above are a means of expressing possession if the speaker wants to be emphatic．These are used just like any other adjective，and have all of the forms of an adjective．

### 3.3. Prepositions

The red statistics and glosses in the following table are from my preliminary contextual interlinear glosses of Mark and John. The others are simply New Testament counts. Most of these glosses are taken from Machen's text.

In Greek, the case of the noun which follows a preposition is always determined by the preposition used, and can be Genitive, Dative or Accusative, depending on the preposition. Most prepositions govern the Genitive case. Some prepositions can govern more than one case, and in these cases there is usually a difference in meaning.

| Preposition | Genitive |  |  | Dative |  | Accusative |  | Case unclear | Prefix | Adverb or Conjunction |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All three cases: |  |  |  |  |  |  |  |  |  |  |  |
| $\dot{\dot{\varepsilon} \pi \mathfrak{i}^{\prime} / \dot{\varepsilon} \pi^{\prime} / \dot{\varepsilon} \varphi^{\prime}}$ | 890 | on, over, at the tim | 220 | at, on the basis of | 187 | on, to, against | 483 |  |  |  |  |
| $\pi \alpha \rho \alpha ́ / \pi \alpha \rho$ | 194 | from, by | 82 | with, in the presence of | 53 | alongside of, rather than | 59 |  |  |  |  |
| $\pi \rho$ ós | 700 | for | 1 | near, at | 7 | to, at, with, etc. | 692 |  |  |  |  |
| $\dot{\varepsilon} \pi \dot{I}^{\prime} / \dot{\varepsilon} \pi{ }^{\prime} / \dot{\varepsilon} \varphi^{\prime}$ |  |  |  |  |  |  |  |  |  |  |  |
|  | 890 | $\begin{aligned} & \hline \text { on } \\ & \text { on } \\ & \text { in } \\ & \text { to } \\ & \text { at } \\ & \text { before } \\ & \text { over } \\ & \text { upon } \end{aligned}$ | $\begin{array}{r} 220 \\ 18 \\ 4 \\ 3 \\ 2 \\ 1 \\ 1 \\ 1 \\ \hline 545 \\ \hline \end{array}$ | on at in on about after against because of by | 187 8 5 4 2 1 1 1 1 447 | on(to) <br> on <br> to <br> upon <br> at <br> onto <br> before <br> for <br> over | 483 <br> 23 <br> 6 <br> 4 <br> 3 <br> 2 <br> 1 <br> 1 <br> 1 <br> 1746 |  |  |  |  |
| Genitive or Accusative: |  |  |  |  |  |  |  |  |  |  |  |
| $\delta \iota \alpha$ / $\delta \mathrm{l}$ ' | 667 | through | 387 |  |  | on account of | 280 |  |  |  |  |
| $\kappa \alpha \tau \dot{\alpha} / \kappa \alpha \tau^{\prime} / \kappa \alpha \theta^{\prime}$ | 473 | down, against, by, throughout | 74 |  |  | according to, throughout, in, during | 399 |  |  |  |  |
| $\mu \varepsilon \tau \alpha \dot{\sim} / \mu \varepsilon \tau ' / \mu \varepsilon \theta^{\prime}$ | 469 | with | 364 |  |  | after | 104 | (PA/PG) |  |  |  |
| $\pi \varepsilon \rho i ́$ | 333 | about, concerning | 294 |  |  | around, near | 39 |  |  |  |  |
| vं $\pi \varepsilon \rho$ | 149 | for, on behalf of | 130 |  |  | above, over, more than, beyond | 19 |  |  | more (2 Cor. 11:23) | 1 |
|  | 220 | by | 169 |  |  | under | 51 |  |  |  |  |


| Preposition |  | Genitive |  | Dative |  | Accusative | Case unclear |  | Prefix | Adve |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Genitive or Dative: |  |  |  |  |  |  |  |  |  |  |  |
| Ėүүv́s | 13 | near | 9 | near to | 2 |  | near (PD/PG) | 2 |  | near | 17 |



| Dative only: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ėv | 2752 | in, with | 2752 |  |  |  |  |
| Oóv | 128 | with | 128 |  |  |  |  |


| Genitive only: |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 22 | for, instead of | 22 |  |  |  |  |  |  |
| $\dot{\alpha} \pi \delta^{\prime} / \dot{\alpha} \pi^{\prime} / \dot{\alpha} \varphi{ }^{\prime}$ | 646 | from | 646 |  |  |  |  |  |  |
|  | 44 | until | 44 |  |  |  |  | until (sub. conj.) | 5 |
| غ̇к / ¢ ¢ ¢ | 914 | from, out of | 914 |  |  |  |  |  |  |
|  | 44 | before | 44 |  |  |  |  | before | 4 |
|  | 26 | on account of | 26 |  |  |  |  |  |  |
| غ̇vótiov | 94 | in the presence of | 94 |  |  |  |  |  |  |
|  | 19 | outside | 19 |  |  |  |  | outside | 44 |
| غ̇п<́vツ | 17 | above | 17 |  |  |  |  | above | 2 |
| ๕ัต¢ | 108 | until | 108 |  |  |  |  | until (sub. conj.) | 38 |
| $\mu \varepsilon ́ \chi \rho ı / \mu \varepsilon ́ \chi \rho l \varsigma$ | 16 | until | 16 |  |  |  |  | until (sub. conj.) | 1 |
| олті́ө | 26 | behind | 26 |  |  |  |  | behind | 9 |
| $\pi \varepsilon ́ \rho \alpha \nu$ | 13 | beyond | 13 |  |  |  |  | beyond | 10 |
| $\pi$ ¢ó | 47 | before | 47 |  |  |  |  |  |  |
| $\chi \omega$ ¢ís | 40 | without | 40 |  |  |  |  | separately | 1 |

[^22]New Testament Greek Charts for Global Learners 38 R. Aschmann - March 2, 2018

| Preposition |  | Genitive |  | Dative | Accusative | Case unclear | Prefix | Adverb or Conjunction |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Infrequent，all Genitive： |  |  |  |  |  |  |  |  |  |
| $\alpha{ }^{\prime} \mu \alpha$ | 2 | along with | 2 |  |  |  |  | at the same time | 8 |
| 人̀vó $\mu$ źбov | 5 | among，in | 5 |  |  |  |  | apiece | 8 |
| $\alpha \chi^{\alpha}$ |  |  |  |  |  |  |  |  |  |
| ävev | 3 | without | 3 |  |  |  |  |  |  |
| 人̋v七ıкрטऽ | 1 | opposite | 1 |  |  |  |  |  |  |
| $\dot{\alpha} v \tau ı \tau \varepsilon ์ \rho \alpha$ | 1 | opposite | 1 |  |  |  |  |  |  |
|  | 5 | opposite | 5 |  |  |  |  |  |  |
| $\alpha{ }^{\alpha} \tau \varepsilon \rho$ | 2 | without | 2 |  |  |  |  |  |  |
| غ̇кто́s | 4 | outside，without | 4 |  |  |  |  | outside，without | 4 |
| Ěvavelı | 2 | before | 2 |  |  |  |  |  |  |
| Ėvavtíov | 5 | before | 5 |  |  |  |  |  |  |
| èvtós | 1 | within | 1 |  |  |  |  | within | 1 |
| غ̇лє́кєıva | 1 | farther on | 1 |  |  |  |  |  |  |
| દ̌ठ $\omega$ | 1 | inside | 1 |  |  |  |  | inside | 8 |
|  | 1 | inner part of | 1 |  |  |  |  |  |  |
| ¢̋ $\xi \omega \theta \varepsilon \nu$ | 2 | outwardly | 2 |  |  |  |  | outwardly | 11 |
| $\kappa \alpha \tau \varepsilon ์ v \alpha \nu \tau \iota$ | 7 | opposite | 7 |  |  |  |  | opposite | 1 |
| катєvต́tıо้ | 3 | before | 3 |  |  |  |  |  |  |
| кок $\lambda$ о́ $\theta \varepsilon \nu$ | 2 | all around | 2 |  |  |  |  | all around | 1 |
| кט์к入¢ | 3 | around | 3 |  |  |  |  | around | 5 |
| $\mu \varepsilon ́ \sigma o v$ | 1 | in the midst of | 1 |  |  |  |  | in the middle | 2 |
| $\mu \varepsilon \tau \alpha \xi v$ vi | 7 | between | 7 |  |  |  |  | meanwhile，next | 2 |
| ő $\pi 1 \sigma \theta \varepsilon v$ | 2 | behind | 2 |  |  |  |  | （from）behind | 5 |
| ỏ $\downarrow$ ¢́ | 1 | after | 1 |  |  |  |  | late | 2 |
| $\pi \alpha \rho \varepsilon \kappa \tau$ о́s | 2 | except for | 2 |  |  |  |  | unmentioned／external | 1 |
| $\pi \lambda \eta{ }^{\prime}$ | 4 | except | 4 |  |  |  |  | but（conj．） | 27 |
| $\pi \lambda \eta \sigma$ íov | 1 | near | 1 |  |  |  |  | neighbor | 16 |
| ข่ $\pi \varepsilon \rho \alpha ์ \nu \omega$ | 3 | （far）above | 3 |  |  |  |  |  |  |
| ข่лєคє́кєıข | 1 | beyond | 1 |  |  |  |  |  |  |
| ข̇лока́т $\omega$ | 11 | underneath | 11 |  |  |  |  |  |  |
| $\chi$ о́pıv | 9 | on account of | 9 |  |  |  |  |  |  |

### 3.4. Verbs

Traditionally verbs are cited in Greek using the first person singular present indicative active as the citation form (e.g. $\left.\pi t \sigma \tau \varepsilon v ́ \omega, \kappa \notin \tau \epsilon \lambda \underline{\hat{v}} \omega^{(s)}, \lambda \underline{\underline{c}} \omega^{*}\right)$. However, I have chosen to cite the present active infinitive (e.g. $\pi t \sigma \tau \varepsilon v ́ \varepsilon ı v$, $\left.\kappa \Leftrightarrow \tau \notin \lambda \underline{\hat{v}} \varepsilon \iota v^{*}, \lambda \underline{\hat{v}} \varepsilon \iota v^{*}\right)$. I have done so for several reasons: 1) The infinitive is more than twice as frequent as the first person present form (specifically, it occurs for more than twice as many verbs, 303 as opposed to 126). 2) In contract verbs (verbs whose stems end in $\Theta, \varepsilon, 0$ ) it is not possible to tell what the stem vowel is in the contracted form of the first person present, whereas it is possible to tell with the infinitive. (Because of this, the uncontracted form of the first person present is traditionally cited; however, these uncontracted forms never occur, at least not in Kovv!!') 3) A few sources do cite the infinitive instead of the first person present as the citation form.

In the verb tables below, I have arranged the "tenses" in a nontraditional way. "Present" and "Imperfect" are related in that 1) they both specify the same type of action, which is a continuous (or habitual) as opposed to a single simple (or discrete) action, only differing as to the time of the action, and 2) in terms of grammatical form, the "Imperfect" is derived from the "Present" in all verbs, even the irregulars.
"Perfect" and "Pluperfect" are related in precisely the same way, the first representing a present tense and the second its past tense. But they both refer to the same kind of action, which Machen describes as "the present state resultant upon a past action" (page 187, T452), which can sometimes be like the English "Perfect" tense, though not necessarily, as Machen points out. (According to the Spanish translation of Machen, the Spanish "Perfect" tense corresponds quite closely, at least in its use in most Spanish-speaking areas, though in the highlands of Ecuador its use is unusual.)

The relationship between "Future" and "Aorist" is a bit less clear, but it seems likely that they are related in a similar way in referring to a discrete (or simple) action as opposed to a continuous one, though historically they seem to have separate derivations. ${ }^{66}$ In the other moods, there is no difference between present and past time, and in fact the "Aorist" in these moods has usually a present or even a future reference. This system only breaks down in Kovv́ in the participles and infinitives, in which both aorist and future can occur. (The latter are rare; there is only one future infinitive in the entire New Testament, which has no aorist, so the future is the only alternative! The future participles are slightly more common, though still extremely rare, only 13 forms occurring in the entire New Testament.)

Machen states that "The Greek verb is for the most part exceedingly regular in deriving the individual forms indicating voice, mood, person and number from the basal tense stems. But the formation of those basal stems from the stem of the verb (and still more from the present stem) is often exceedingly irregular. The basal tense stems, from which all the rest of the verb is formed, are six in number. These six, given with the personal ending for the first person singular indicative, are called the principal parts." (Page 76, $\mathbb{1} 159$, italics mine.) I follow the same system, except that I cite the present active infinitive instead of the first person singular present indicative, and the third person singular instead of the first person singular for all the other principal parts. Thus the six principal parts are: 1) Present \& Imperfect System, 2) Future Active \& Middle System, 3) Aorist Active \& Middle System, 4) Perfect Active System, 5) Perfect Middle/Passive System, and 6) Aorist \& Future Passive System. In the tables that follow I show which groups of verb forms are derived from each principal part, and I put the principal part in bold face.

As elsewhere, the forms marked with * do not occur for this verb, but do occur for other verbs. Forms marked with ${ }^{* *}$ do not occur at all in the New Testament for any verb, though the form is not in doubt for Greek in general. These are only included if the tense or mood in question is represented in at least some form in the New Testament. This table highlights form, not function. Thus deponent verbs are conjugated like middle or passive verbs.

Three forms of each participle are given, the nominative singular, the genitive singular and the dative plural, since many of them are third declension adjectives. The other forms are not listed, but are lumped together as "(other)".

[^23] European Sigmatic (-s-) Aorist, whereas the Future is derived from the Indo-European Desiderative, which also had an -s-.

Machen states that "Verbs have recessive accent," meaning that "the accent goes back as far as the general rules of accent will permit" (page 15, $\mathbb{T} 13$ ). This rule is generally true for "regular" verbs. However, it does not apply to the participles or infinitives. It also does not apply to contract verbs (although it probably did before they were contracted).

Note that in the optative the endings $\underline{\alpha l}$ and $\underline{o l}$ are long, whereas in the infinitives they are short (in a few cases like the perfect active infinitive the length cannot be directly determined, though I have found no case where the $\alpha_{l}$ is definitely long). See the footnote in $\S 2.1$.2.4 on page $\mathbf{8}$ for more on this.

### 3.4.1."Regular" Verb in -v́єıv.

The verbs in this group are completely "regular" verbs, in that the stem (e.g. $\pi t \sigma \tau \varepsilon v-$ or $\lambda \underline{v}-$ ) never changes in any form. (In the tables I will mark this unchanging stem in orange.) The only "regular" verbs, by this definition, are verbs which end in $v$ or $l^{67}$. All other stems undergo at least some changes to the stem. The changes which occur are dependent on the final letter (or letters) of the stem, and the first letter (or letters) of the suffix. Later on I will list other "semi-regular" verbs whose stems end in various other letters.

The first verb I have selected to show here, $\pi t \sigma \tau \varepsilon \cup ́ \varepsilon i v$ "to believe", has more forms than any other "regular" verb I have been able to find. However, it has one drawback, and that is that the final syllable of the stem has a long diphthong, which makes it impossible to see the length changes which occur in a short vowel. For this reason, in the next table I list the verb $\kappa \not t \tau \lambda \lambda \underline{v} \varepsilon v^{*}$ " "to dissolve", along with its more basic form $\lambda \underline{v} \varepsilon v^{*} v^{*}$ "to loosen" when this is germane to the length and accent question. Another advantage of showing this verb is that it also demonstrates how to conjugate a verb with a prefix. This verb is significantly less frequent than $\pi t \sigma \tau \varepsilon \cup \varepsilon \varepsilon v$, but with its many derivatives it comes close.

[^24]The chart below is a list of those forms which occur in more than 100 verbs, arranged in order of frequency. (I have also included a few less frequent ones for comparison.) Note that the traditional citation form is number 18 on the list, whereas the present active infinitive is number 4 ! Note also that numbers 7 and 9 are not even listed on the chart, since only three participles are listed for each group. Numbers 4, 15, 1 and 10 are four of the forms I am citing as principal parts.

1. aorist indicative active, third person singular
(e.g. $\dot{\text { È } \pi \dot{t} \sigma \tau \varepsilon v \sigma \varepsilon v) ~-457 ~}$
aorist infinitive active (e.g. $\pi t \sigma \tau \varepsilon v ̃ \sigma \notin) ~-363$
aorist indicative active, third person plural (e.g. $\dot{\varepsilon} \pi t \in \tau \varepsilon v \sigma \nLeftarrow)-304$
present infinitive active
present indicative active, third person singular present participle active nom. masculine singular aorist participle active nom. masculine plural present participle active nom. masculine plural aorist participle active nom. masculine plural
2. aorist indicative passive, third person singular
3. 
4. 
5. 
6. present indicative passive, third person singular present indicative active, third person plural imperfect indicative active, third person plural aorist subjunctive active, third person singular future indicative active, third person singular imperfect indicative active, third person singular present infinitive passive
present indicative active, first person singular
(e.g. $\pi$ tб $\tau \varepsilon$ v́cเv) - 303
(e.g. $\pi$ tб $\frac{1}{}$ - 291
(e.g. $\pi t \sigma \tau \varepsilon ט ́ \omega v) \quad-262$
(e.g. $\pi \nleftarrow \sigma \tau \varepsilon$ ט́ $\underline{\alpha} \varsigma$ ) -245

(e.g. $\pi t \sigma \tau \varepsilon ט ́ \sigma \not v \tau \varepsilon \varsigma) ~-~ 187 ~$
(e.g. $\dot{\varepsilon} \pi t \sigma \tau \varepsilon v ์ \theta \eta) \quad-177$
(e.g. $\pi t \sigma \tau \varepsilon v ์ \varepsilon \tau \notin) \quad-172$ (56)
(e.g. $\pi \nmid \sigma \tau \varepsilon ט ́ \sigma 0 \cup \sigma \mathfrak{t} v)-163$
(e.g. $\dot{\varepsilon} \pi \dot{t} \sigma \tau \varepsilon v o v) \quad-162$
(e.g. $\left.\pi t \sigma \tau \varepsilon v ์ \sigma \eta^{(s)}\right) \quad-161$
(e.g. $\pi t \sigma \tau \varepsilon v ์ \sigma \varepsilon \mathbf{t}) \quad-160$
(e.g. غ̇̃t́б $\tau \varepsilon \cup \varepsilon v) \quad-146$
(e.g. $\pi t \sigma \tau \varepsilon ט ́ \varepsilon \sigma \theta \not \mathrm{et}^{*}$ ) - 139
(e.g. $\pi t \sigma \tau \varepsilon \dot{v} \omega$ ) - 126
aorist indicative active, first person singular

aorist imperative active, second person singular present indicative active, second person plural aorist imperative active, second person plural present mid. /pass. participle nom. masc. singular present imperative active, second person plural aorist indicative passive, third person plural future indicative active, first person singular
perfect indicative active, third person singular perfect indicative mid./pass., third person sg. aorist indicative passive, first person singular
7. perfect indicative active, first person singular (e.g. غ́ $\pi \hat{\sigma} \sigma \tau \varepsilon v \sigma \varepsilon v)-33$
(e.g. лtotevoov) - 117
(e.g. $\pi \nmid \sigma \tau \varepsilon \cup ́ \varepsilon \tau \varepsilon) \quad-116$
(e.g. $\pi t \sigma \tau \varepsilon v ́ \sigma \notin \tau \varepsilon^{(s)}$ ) - 113
(e.g. $\left.\pi t \sigma \tau \varepsilon \cup o ́ \mu \varepsilon v o \varsigma^{*}\right)-110$
(e.g. $\pi t \sigma \tau \varepsilon ט ́ \varepsilon \tau \varepsilon) \quad-108$
(e.g. غ̇ $\pi+\sigma \tau \varepsilon v ́ \theta \eta \sigma \Theta v)-105$
(e.g. $\pi t \sigma \tau \varepsilon v ́ \sigma \varepsilon l) \quad-92$
(e.g. $\pi \varepsilon \pi$ t́б $\tau \varepsilon \cup \kappa \varepsilon v) ~-65$

(e.g. $\varepsilon$ ह́ $\pi t \sigma \tau \varepsilon \dot{v} \theta \eta$ ) - 26 (7)
8. perfect indicative mid./pass., first person sg. (e.g. غ̇ $\pi \dot{t} \sigma \tau \varepsilon v \sigma \varepsilon v)-10$

For $\pi t \sigma \tau \varepsilon u ́ \varepsilon I v$ I include statistical counts for each form. The number beside the form is a count of how many distinct verbs this form occurs for in the New Testament. This information was compiled from a word list generated from the computer text of the New Testament. Deponent verbs are not counted under the active forms, but rather under the middle or passive form which is actually used. Next to the count for middle and passive forms is included in parentheses the count which corresponds to the number which are deponent.

### 3.4.1.1.Пษбтєv́عıv "to believe"

This verb is completely "regular". Because the stem ends in a diphthong, the stem ending is always long. Compare this with the verb in the next section, $\kappa \notin \tau \notin \lambda \underline{\underline{v}} \varepsilon v^{*}$.

** Forms that do not occur in the New Testament for any verb

* Forms that do not occur in the New Testament for this verb (it has no derivatives)

Bold:
Forms I am using for "Principal parts"
Gray background:_Categories not occurring for this verb and many others

## 3．4．1．2．Kधtє $\lambda \underline{v} \varepsilon \iota \imath^{*}$＂to destroy＂and Other Derivatives of $\lambda \underline{\underline{v} \varepsilon \iota v^{*}}$＂to untie＂

Continuous（1）
（＂Present＂\＆＂Imperfect＂）
active

Perfect
（＂Perfect＂\＆＂Pluperfect＂）
tive

Discrete
（＂Future＂\＆＂Aorist＂）

|  | active | （middle）／passive | active | （middle）／passive | ctive |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Indic－ <br> ative <br> mood <br> Pres－ <br> ent <br> time | （1）＂Present＂ | （1） | （4）＂Perfect＂ | （5） | （2） |
|  | көt＊$\lambda \underline{\underline{u} \omega^{(s)}}$ |  |  |  |  |
|  | көтө入ַ́z15 |  | көтө入غ́入Әкөら |  |  |
|  |  |  |  |  |  |
|  |  |  |  | $\kappa ө \tau \not \lambda \lambda \varepsilon \lambda \chi^{\prime \prime} \mu \varepsilon \theta \underbrace{(S)}$ |  |
|  | көтө入 | $\kappa \nLeftarrow \tau \propto \lambda \underline{\chi} \varepsilon \sigma \theta \varepsilon^{*}$ |  | $\kappa ө \tau \tau \lambda \lambda \varepsilon ่ \lambda \ni \sigma \theta \varepsilon^{*}$ | т $\downarrow \lambda \underline{\sim}$ |
|  |  |  |  | $\kappa \Leftrightarrow \tau \not \lambda \lambda \dot{\varepsilon} \lambda \exists \forall \tau \notin *^{*}$ | к世tөれ |
| Indic－ <br> ative <br> mood <br> Past <br> time | （1）＂Imperfect＂ | （1） | （4）＂Pluperfect＂ | （5） | （3） |
|  |  | $\kappa ө \tau \varepsilon \lambda \cup \underline{o} \mu \boldsymbol{\eta} \nu^{(S)}$ | көтө入と入и์кยı＊＊ | $\kappa ө \tau ө \lambda \varepsilon \lambda \chi^{\prime} \mu \eta \nu^{*}$ | т |
|  | $\kappa \Perp \tau \varepsilon ́ \lambda \underline{\underline{\prime}} \varepsilon \varsigma^{*}$ | көte入íov＊ | к๕тө入होध́кย1ऽ＊ |  |  |
|  |  |  | $\kappa ө \tau \in \lambda \varepsilon \lambda \lambda \notin \kappa \varepsilon 1^{*}$ |  | $\kappa ө \tau \varepsilon \dot{\lambda} \chi \underline{v} \boldsymbol{\sigma}$（v） |
|  |  | $\kappa ө \tau \varepsilon \lambda \underline{\chi} \boldsymbol{\mu} \mu \varepsilon \theta$ a $^{*}$ | $\kappa ө \tau \not \lambda \lambda \varepsilon \lambda \emptyset ́ \kappa \varepsilon ¢ \mu \varepsilon v^{* *}$ |  |  |
|  | көt\＆入ט́ $\varepsilon \tau \varepsilon^{*}$ | $\kappa ө \tau \varepsilon \lambda \underline{\chi} \varepsilon \sigma \theta \varepsilon^{*}$ |  | $\kappa ө \tau \not \lambda \lambda \dot{\varepsilon} \lambda \ni \sigma \theta \varepsilon^{* *}$ | $\kappa \notin \tau \varepsilon \lambda \underline{\sim} \sigma \theta \tau$ |
|  |  | көtє入и́ovio |  |  | $\kappa \approx \tau \varepsilon ́ \lambda \cup \sigma \varkappa v$ |
|  | （1）＂Present＂ көтє入и́ $\omega^{*}$ | Subjunctive（1） көт $\downarrow \lambda \underline{0} \omega \mu \not{ }^{*}$ | $\begin{aligned} & \text { (4)"Perfect" } \\ & \kappa \notin \tau \star \lambda \varepsilon \lambda ध ́ \kappa \omega * \end{aligned}$ | Subjunctive（5） | $\begin{gathered} (3)^{\prime} \\ \alpha \tau \star \lambda \underline{v o} \sigma \omega \end{gathered}$ |

（middle）passive


ктє $\lambda \underline{\sigma} \sigma \varepsilon \sigma \theta \varepsilon^{*} \kappa є \tau \theta \lambda \underline{1} \eta \dot{\eta} \sigma \varepsilon \sigma \theta \varepsilon$

$\tau \boldsymbol{\varepsilon} \lambda \bar{v} \sigma \varepsilon(v)$


|  <br>  |
| :---: |
| （3）＂Aorist＂ |

к甘тє入へ́ ${ }^{\circ} \omega^{*}$
$\kappa \star \tau \varepsilon \lambda \underline{\underline{́} \sigma \Theta \tau o^{(s)}}$
$\kappa \star \tau \varepsilon \lambda \overline{\underline{\nu}} \sigma \dot{\alpha} \mu \varepsilon \theta \theta^{*}$




| көтө入入ַ́om | $\kappa ө \tau \epsilon \lambda \underline{\sigma} \sigma \omega \mu \not$＊$^{*}$ |
| :---: | :---: |
|  |  |
|  |  |
| $\kappa \nless \tau \epsilon \lambda \underline{\underline{u}} \sigma \omega \mu \varepsilon \nu^{*}$ | $\kappa ө \tau \alpha \lambda \nu \sigma \dot{\rho} \mu \varepsilon \theta \alpha^{*}$ |
|  |  |
| $\kappa ө \tau \theta \lambda \underline{\underline{\sigma}} \sigma \omega \sigma \mathrm{tv}$ |  |
| （3）＂Aor | Imperative（3） |



$\kappa \not \tau \tau \lambda \underline{́} \sigma \eta \sigma \theta \varepsilon^{*} \kappa \kappa \tau \theta \lambda \underline{1} \theta \tilde{\eta} \tau \varepsilon$
к甘т $\lambda \lambda \underline{\underline{u}} \sigma \omega v \tau \notin t^{*}$

|  |  | көte入 $\underline{\underline{0}} \boldsymbol{\eta} \tau \tau \mathrm{t}^{*}$ |
| :---: | :---: | :---: |
|  |  | көтө入릅́ $\tau \omega^{*}$ |
| $\kappa \approx \tau \theta \lambda \underline{\chi} \sigma \theta \tau \varepsilon$ көтө $\lambda \cup \sigma \dot{́} \tau \omega \sigma \not \nu^{*}$ | к甘тө $\lambda \underline{\underline{0} \sigma \epsilon \sigma \theta \varepsilon^{*}}$ <br> көтө入ンのச́ $\theta \theta \omega \sigma \not v^{*}$ | $\kappa ө \tau \notin \lambda \underline{́} \theta \eta \tau \varepsilon *$ <br>  |




| к๕tel | тo＊ | $\eta^{*}$ |
| :---: | :---: | :---: |
|  |  |  |
| к๕tø入ט́б人ıธを＊＊ | көтө入へ́б人ıธ er＊＊$^{*}$ |  |


|  | көтө入へ́б人1هӨを |  |
| :---: | :---: | :---: |
|  | көтө入入́б人ıvтo＊＊ | кete $\theta$ sín |

K


| （4）＂P |  |
| :---: | :---: |
| көтө入غ ${ }^{\text {d }}$ | $\kappa ө \tau ष \lambda \varepsilon \lambda \ni \mu$ ¢́vos |
|  |  |
|  |  |



| көtө入 <br> көтө入へ́бఱvтos＊ <br> к๕тє $\lambda \underline{\sigma} \sigma \underline{\alpha} \sigma v^{*}$ |
| :---: |
|  |  |
|  |  |


|  |  |
| :---: | :---: |


|  | $\kappa ө \tau ө \lambda \varepsilon \lambda \forall \vartheta \mu \varepsilon ́ v \eta \varsigma^{*}$ |
| :---: | :---: |
|  | $\kappa ө \pi \epsilon \lambda \varepsilon \lambda \lambda \exists \mu \varepsilon ́ v \alpha 1 \varsigma^{*}$ |


|  к๕тย <br>  （other）＊ |
| :---: |


көтє入へ́бөvтos＊

|  |
| :---: | （other）＊

（2）＂Future＂P

## $\kappa \notin \tau \alpha \lambda \underline{u} \sigma \omega v^{*}$


（other）＊

к世tধ1）

көta
（other）＊＊＊
кєtє入ũбоv＊＊（other）＊＊
көтג入ท́ซovтоऽ＊＊

| $\begin{array}{l}\text { кat } \lambda \lambda \overline{0} \sigma o u \sigma t v^{* *} \\ \text {（other）＊}\end{array}$ |
| :--- |

（other）＊

[^25]Forms I am using for＂Principal parts＂
Forms that serve to show the inherent length of the final stem vowel，
or to show that certain classes of verb suffixes change the length of this vowel．
Gray background：＿Categories not occurring for this verb and many others
 $\delta 1 \notin \lambda \underline{\underline{v}} \varepsilon \iota^{*}, \varepsilon \kappa \lambda \underline{\underline{v}} \varepsilon \sigma \theta \notin t^{(\mathrm{s})}$, and $\kappa \notin \tau \notin \lambda \underline{\underline{v}} \varepsilon i v$. If a particular form in the chart above occurs for any of these derivatives, I list it as occurring for $\kappa \notin \tau \notin \lambda \underline{\underline{v} \varepsilon ו v . ~}$

### 3.4.1.3.Vowel Length Comparison for Verb Stems Ending in a Simple Vowel



Key to colors: |  | Uncontracted stem-ending vowel is short. |
| :--- | :--- | Uncontracted stem-ending vowel is long.

This verb $\lambda \underline{\underline{v}} \varepsilon \underline{v}^{*}$ and most other verbs whose stem ends in $v$ are completely "regular". However, the final stem vowel $v$ appears to have variable length: It is evidently short in the Perfect forms, as is evidenced by the accent of the first word in the above chart, but is clearly long in the Discrete and Continuous forms, as is evidenced by the accents of the other words in the first column. Machen confirms the vowel length of these items. ${ }^{68}$

I find this situation surprising, since it does not occur with verbs whose stems end in any other simple vowel!

In stems ending in $\mathfrak{1}$, like $\chi \underline{\underline{1}} \boldsymbol{i} \varepsilon v^{(s)}$ "anoint", the vowel is always long, as can be seen in the chart of "Regular" Greek Verbs Ending in Nearly Every Letter of Greek Alphabet below, and in the second column of the chart above. No examples of four of the words in the second column above occur in the New Testament or the Septuagint, but good examples occur in other literature. An example of the first one, to show that it is different from $\dot{\alpha} \pi 0 \lambda \varepsilon \lambda \dot{\sigma} \sigma \theta \notin t$, is found at http://heml.mta.ca/lace/sidebysideview2/1900048.

In the "contract" verbs, whose stems also end in vowels, the final vowel is either always long or always short before suffixes beginning with a consonant, though the short vowels may lengthen when contracted with a following vowel, as can be seen in the chart of "Regular" Greek Verbs Ending in Nearly Every Letter of Greek Alphabet below, and in the remaining columns above.
(In the last three rows, only one-syllable stems allow us to determine the length of the vowel in the case of $\alpha, 1$, and $v$, which makes it hard to find enough good examples.)

### 3.4.2.Other Derivable Verbs

Verbs in Greek show a progression from completely regular (i.e., just like $\pi \not t \sigma \tau \varepsilon v \varepsilon \varepsilon v$ in the sense that they take the same endings and are completely derivable from one root) to completely irregular (i.e. having forms which must all be specified individually, e.g. $\varepsilon$ ĩvet "to be", 1SPI $\varepsilon i \mu \mathrm{t}$. By "Derivable", I mean a verb which takes essentially the same endings as $\pi t \sigma \tau \varepsilon v \in \varepsilon v$, and whose forms can all be derived from the six principal parts (with due allowance being made for standard phonological changes).

[^26]
### 3.4.2.1.Verbs Which Are Completely Regular Except for Standard Phonological Changes

Because Greek has a large number of obligatory phonological change rules, all verbs with stems which do not end in $v$ or 1 undergo at least some of these rules. In other words, we could almost say that even the regular verbs in Greek are irregular, except for those whose stems end in $v$ or 1 ! Thus, we can make a chart showing verbs ending with each letter of the Greek alphabet, and we will see that in every case other than $\mathbf{v}$ or $\mathbf{t}$ there are some "regular irregularities" in its conjugation!

Such a chart is included below. The "regular irregularities" are marked in red in each case. (If it really is just a question of spelling, with completely regular pronunciation, this will be marked in pink.) The six forms with plain numbers in each case are the principal parts according to my system. The remaining forms are ones which are sometimes irregular. Rows with a pale yellow background show verbs that end in diphthongs or in consonant clusters; the rest end in either simple vowels or simple consonants. Cells with a sky blue background are verbs which are not completely regular, and in most cases no truly regular form can be found for this verb ending.

Those verbs ending in the non-high vowels ( $(\boldsymbol{\epsilon}, \underline{\alpha}, \varepsilon, \eta, \rho, \omega$ ) are called Contract verbs, because the stem vowel and the suffix vowel contract together. The way the contraction takes place is not very intuitive (although it makes more sense if we look at the actual pronunciation of the vowels in Classical Greek; most of these contractions apparently took place between Pre-Classical and Classical, at the same time that the diphthongs $\varepsilon 1$ and ou became simple long vowels). The following chart ${ }^{69}$ summarizes the vowel contraction rules. (The Classical pronunciation of each vowel is given in square brackets. For several of the vowels and "diphthongs" this is different from the Kovvŋ pronunciation.)

Suffix (connecting vowel + personal ending) begins with...
final vowel $\quad \theta[a], \underline{\alpha}[a:]$
in stem $\quad \varepsilon[\mathrm{e}], \eta[\varepsilon:]$
o [ o , $\omega$ [ J ]

| $\begin{gathered} \varepsilon \\ {[\mathrm{e}]} \end{gathered}$ | $\begin{gathered} \varepsilon 1 \\ {[\mathrm{e}:]} \end{gathered}$ | $\begin{gathered} \eta \\ \lceil\varepsilon:\rceil \end{gathered}$ | $\eta_{[\varepsilon: i]}$ | $\begin{gathered} \mathrm{o} \\ {[\mathrm{o}]} \end{gathered}$ | $\begin{gathered} \text { ov } \\ {[\mathrm{o}:]} \end{gathered}$ | $\begin{gathered} \text { ot } \\ {[\mathrm{oi}]} \end{gathered}$ | $\begin{gathered} \omega \\ {[\mathrm{x}]} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\alpha}$ | $\alpha$ | $\underline{\alpha}$ | $\alpha$ | $\omega$ | $\omega$ | $\omega$ | $\omega$ |
| عl | $\varepsilon 1$ | $\eta$ | $\eta$ | ov | ov | Ot | $\omega$ |
| ov | Ot | $\omega$ | Ot | ov | ov | Ot | $\omega$ |

(Note: The infinitive ending - $\varepsilon 1 v$ follows the $\varepsilon$ column rather than the $\varepsilon 1$ column.)
The consonant combination rules are somewhat more intuitive.
In the rightmost column are given additional verbs that are also completely regular in the same way. In many cases you may be surprised that I have not included some of the most common Greek verbs, such as $\dot{\alpha}$ кov́cıv "hear" in the row for ov, but in each such case this is because these verbs have an irregularity in one or more forms; e.g. d́ $\kappa 0$ viciv is irregular in the perfect system. Any verb listed in parentheses () in the rightmost column is one which is probably regular, but it is impossible to know for sure, since certain key forms do not occur in the New Testament. Any verb listed in square brackets [ ] is irregular, but is regular in at least one principal part, and provides missing examples.

In a few cases it is not clear which of two rival conjugations is the most "regular", in which cases I have included both, as in the multiple rows for $\sigma \kappa, \lambda \lambda$ and $\rho$.

The Greek consonant $\varsigma$ never ends verb stems except in the combination $\varsigma \varsigma$.
The Greek consonant $\tau$ never ends verb stems except in combinations like $\pi \tau$ or $\kappa \tau$ (except for one highly defective verb $\pi \varepsilon ́ \tau \varepsilon \sigma \theta \theta t *$; see the footnote in the row for $\tau$ in the chart).

The Greek letters $\xi$ and $\psi$, which are really just spellings of the consonant combinations $\kappa \sigma$ and $\pi \sigma$, never end stems.

Surprisingly, the vowel o never ends stems, except for the highly irregular and not very frequent verb
 Septuagint. The reduplicated verb $\delta \boldsymbol{t} \delta$ óvet "give", 1 SPI $\delta \dot{t} \delta \omega \mu \mathrm{t}$ is a confusing case, since the forms with $\delta \mathbf{o}$ - and

[^27]the forms with $\delta \omega$ - are about evenly split, and are in any case unusual and do not fit very well the regular pattern of Contract verbs.

The diphthongs Ol and vi never end stems.

# "Regular" Greek Verbs Ending in Nearly Every Letter of Greek Alphabet 


${ }^{70}$ There is also a Perfect Middle/Passive form with $\sigma$, the second-person form, but this is extremely rare and shows no unique features
${ }^{71}$ This is the form that has traditionally been given as the citation form of Greek verbs. I prefer to use the Present Active In finitive as the citation form (column 1).
 completely regular verb, since it has no prefix and starts with a consonant, so that the "augmented" forms are completely straightforward.

 both of which $\varepsilon \tau$
 fect systems) the stem vowels are for the most part unchanged, except that stem-final $\alpha$ becomes $\eta$. In the Aorist Passive forms that end in short vowels a $\sigma$ is usually added after the stem (column $\sigma$ ).

 difference in the resulting forms.


 cording to the American Heritage Dictionary, Third Edition.) The only exception to this rule that - $\sigma \sigma$ - verbs have underlying $\gamma$ stems is $\pi \lambda \alpha \alpha_{\sigma \sigma \varepsilon ı v^{*}}$, as seen in the chart.
 the Septuagint is listed, but is clearly irregular.
 tional cases, but none which shed additional light on the irregular forms, the perfect active system.


| * | Form does not occur in the New Testament for this verb (or its derivatives with various prefixes) | $\bigcirc$ | Form does not occur, but another form in same Principal Part does occur for this verb or its derivatives. | ?? ?** Form does not occur, |
| :---: | :---: | :---: | :---: | :---: |
| ** | Form does not occur in the New Testament for any verb with this stem ending | $\stackrel{* 0}{*}$ | Form does not occur, but another form in same Principal Part does occur for another verb with this stem ending. | and I am not certain |
| **() | Form does not occur in the New Testament for any verb with this stem ending, but does in Septuagint, at least in some form of this Principal Part |  | Examples only available for deponent verbs (Only has middle or passive forms, even if the meaning is active.) | what its form would be |
| ted | "regeglar irregularities" | pink | orthographic conventions without any actual pronunciation difference | for this stem ending. |
|  | Verbs whose Stem Ending is a diphthong or a consonant cluster |  | Irregular forms in an otherwise regular verb; no more regular verb available |  |

[^28]
## 3．4．2．2．－$\mu_{\mathrm{t}}$ Verbs and Reduplicated Verbs

An important group of verbs in Greek have the ending $-\mu \mathrm{t}$ in the First Person Singular Present Indicative instead of the ending $-\omega$ ．These are the $-\mu \mathrm{t}$ Verbs．

Another important group，which often overlaps with the $-\mu \mathfrak{t}$ Verbs，is the Reduplicated Verbs．These have the oddity that in the present system the stem has an additional syllable tacked on to the front，containing the first stem consonant repeated，followed by the vowel $\mathfrak{t}$ ．The simple stem can best be seen in the future or aorist．

The following chart shows a（hopefully）exhaustive list of both groups（not including cĩvet＂to be＂，1SPI $\varepsilon i \mu \mathrm{t}$ ，and its derivatives），with the number of occurrences of each in the New Testament：

| ent Infinitive 1SPI ${ }^{-\mu \mathrm{t} \text { Verbs }}$ |  |  | Pres．Infin． |  | Reduplicated Verbs |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1SPI |  |  |
| àplévetr | $\dot{\alpha} \varphi \underline{\eta} \eta \mu^{\text {t }}$ | ＂leave，let，forgive＂ |  |  | 143 | $\pi$ ¢itcev＊＊ | $\pi \dot{\pi} \boldsymbol{\pi} \boldsymbol{\omega}{ }^{*}$ | ＂fall＂ | 90 |
| Ouvićvar | бvvíqu＊ | ＂understand＂ | 26 |  | $\mu \nsim \nu$ 亿́бкоиө＊${ }^{\text {＊}}$ | ＂remember＂ | 23 |
| àvećven＊ | $\dot{\alpha} v i ́ \eta \mu t^{*}$ | ＂loose＂ |  |  | $\pi \uparrow \pi \rho \dot{\sigma} \sigma \kappa \omega^{*}$ | ＂sell＂ |  |
| к 0 日电v＊ı＊ | кхө＇́n $\mu$＊${ }^{*}$ | ＂let down＂ |  |  | $\beta$ в阝ро́бк ${ }^{*}$ | ＂eat＂ |  |
|  | $\pi \alpha \rho^{\prime} \eta \mu_{\text {＊}}{ }^{\text {＊}}$ | ＂neglect＂ | 2 |  |  |  |  |
| （í̌vert | १ึ $\uparrow \mathrm{t}^{*}$ | ＂release，send＂ | 0） |  | Both $-\mu \mathrm{t}$ and | Reduplicated |  |
| ¢́áver＊ | $\varphi \eta \mu i^{*}$ | ＂say＂ | 66 | Pres．Infin． | 1SPI |  |  |
|  | $\dot{\alpha} \pi \dot{\prime} \lambda \lambda \nu \mu \tau^{*}$ | ＂destroy＂ | 90 | ¢tóvert | ¢tíout | ＂give＂ | 415 |
| ঠєıкชט์ยı | $\delta \varepsilon$ íkv $\mu^{\prime}$ t | ＂point out＂ |  | $3 \pi \alpha \rho \alpha \delta+\delta o ́ v \not t$ | $\pi \alpha \rho \alpha \delta \dot{\delta} \delta \omega \mu \tau^{*}$ | ＂deliver up＂ | 19 |
| غ̇vర¢וкvט́عıv＊ |  | ＂show，demonstrate＂ |  | ג̀лоঠtסóvet |  | ＂pay＂ | 48 |
| غ̇пıঠєıкขธ́zıv＊ |  | ＂show＂ |  | غ̇̇tittóvet＊ |  | ＂give＂ |  |
| ө่тобєкки์ $\frac{1 v^{*}}{}$ | в่тобкіккй ${ }^{*}$ | ＂（fore）warn＂ |  |  |  | ＂give back＂ |  |
| ёлобєıкขи́ยı＊＊ |  | ＂demonstrate＂ |  | 4 ítóvat |  | ＂stet | 154 |
|  |  | ＂indicate，choose＂ |  | 2 àvtotávet＊ |  | ＂raise／rise＂ | 108 |
| ¢́ク́ббєı＊＊ |  | ＂tear＂ |  |  | $\pi \alpha \rho \dot{t} \sigma \tau \eta \mu t^{*}$ | ＂stand by＂ | 41 |
| ठıар¢ŋ́боєıv＊ |  | ＂tear＂ |  | $5 \dot{\varepsilon} \varphi$ ¢бtóveı＊ |  | ＂stand near＂ | 21 |
|  |  | ＂tear off＂ |  |  |  | ＂appoint＂ | 1 |
| ¢cuyvóver＊ |  | ＂join together＂ |  | 2 ėstotóveı＊ |  | ＂be amazed＂ | 17 |
| катаүvóvat＊ |  | ＂break＂ |  | 4 бuvtatóveıv ${ }^{92}$ | боvíotn ${ }^{\text {t }}$ | ＂put together＂ | 16 |
| $\mu \gamma v$ ¢́vet＊ | $\mu \boldsymbol{\gamma} \gamma \underline{\sim} \underline{\mu} \mathrm{t}^{*}$ | ＂mingle together＂ |  |  |  | ＂resist＂ | 14 |
| бuvavaurүvóver＊ |  | ＂associate with＂ |  |  | $\pi \rho$ ӧ̈бтпин＊ | ＂lead＂ |  |
| $\pi \eta \gamma v \mathrm{voce}{ }^{*}$ | $\pi \dot{\gamma} \gamma v \underline{v} \mu t^{*}$ | ＂pitch（tent）＂ |  |  |  | ＂depart＂ | 14 |
| $\pi \rho о \sigma \pi \eta \gamma v$ ́va＊ | $\pi \rho о \sigma \pi \eta \gamma \gamma v \underline{\mu}{ }^{*}$ | ＂crucify＂ |  | 1 Ėvtotávea＊ |  | ＂be present＂ |  |
|  |  | ＂hang＂ |  | кххре́var＊ | к＇х$\chi \rho \eta \mu \mathrm{t}^{*}$ | ＂lend＂ |  |
| غ̇ккрєцаขvóvөt＊ |  | ＂hang on（words）＂ |  | 1 Tt日Évet | $\tau \boldsymbol{\tau} \theta \eta \mu \mathrm{t}$ | ＂put＂ | 00 |
| кعраvvóvet＊ |  | ＂mix（drink）＂ |  |  | غ̇лtтînu＊＊ | ＂lay on＂ | 39 |
| боүкєраขvóvat＊ | боүкє¢о́vvıн＊ | ＂unite＂ |  | $2 \pi \alpha \rho \alpha \tau t \in \varepsilon ́ v a r t$ | $\pi \alpha \rho \alpha \tau^{\prime} \theta \eta \mu \mathrm{t}^{*}$ | ＂place before＂ | 19 |
| غ̇клєтаvvóvet＊ |  | ＂stretch out＂ |  | $1 \pi \rho 0 \sigma \tau t \theta$ ćvet＊ | $\pi р о б \tau і Ө \eta \mu$＊ | ＂add＂ | 18 |
| à $\mu \varphi$ ¢عvvóver＊ |  | ＂clothe，dress＂ |  | 3 வ่лотө日 $\mathbf{v a t}$ | $\dot{\alpha} \pi$ отіө $\dagger \mu \mathrm{t}^{*}$ | ＂put off＂ |  |
| корєvvóvat＊ | кор $¢$ Vvout ${ }^{\text {＊}}$ | ＂satiate＂ |  | $1 \pi \varepsilon \rho \tau \tau \theta \varepsilon ́ v \otimes *^{*}$ | $\pi \varepsilon \rho \tau \tau^{\prime} \theta \eta \mu \iota^{*}$ | ＂put around＂ |  |
| $\sigma \beta \varepsilon v v o ́ v e u^{*}$ | $\sigma \beta \dot{\varepsilon} v \mathrm{v} \underline{\underline{u}} \mathrm{t}^{*}$ | ＂extinguish＂ |  | 6 ¢tattéxva＊ | $\delta$ tati $\dagger \eta \mu \mathrm{t}^{*}$ | ＂make covenan |  |
| $\zeta$ ¢vvóvet＊ | $\zeta \dot{\omega} v \mathrm{v} \underline{\mu} \mathrm{t}^{*}$ | ＂gird＂ |  | $3 \mu \varepsilon \tau \alpha \tau \dagger \theta \dot{\varepsilon} v e{ }^{*}$ | $\mu \varepsilon \tau \alpha \tau$ ¢ $\theta \eta \mu \mathrm{t}^{*}$ | ＂transfer＂ |  |
| $\pi \varepsilon \rho!$ ¢ $\omega$ vvóvat＊ |  | ＂gird about＂ |  |  | $\pi^{\prime} \mu \pi \lambda \eta \mu *^{*}$ | ＂fill＂（only aor．） | 24 |
| $\delta 1 \alpha \zeta$ ¢vvóver＊ | $\delta 1 \alpha \zeta \bar{\omega} v \underline{\nu} \mu \tau^{*}$ | ＂tie around＂ |  | $3 \dot{\varepsilon} \mu \pi \pi \mu \pi \lambda \varepsilon ́ v e *^{*}$ | $\dot{\varepsilon} \mu \pi \dot{\tau} \pi \lambda \eta \mu \tau^{*}$ | ＂satisfy＂ |  |
| àvaら¢vvóvet＊ |  | ＂prepare＂ |  |  | （＊＊＊Continue |  |  |
|  | ט́ло弓Ф́vvр $\mathrm{t}^{*}$ | ＂undergird＂ | 1 |  | from this | one＊＊＊） |  |
| катабтр vvvóvet＊$^{*}$ |  | ＂spread（kill）＂ | 1 |  |  |  |  |

A good example of both of these groups is the verb $\delta \mathbf{t} \delta$ óvet＂to give＂， 1 SPI $\delta \dot{t} \delta \omega \mu \mathrm{t}$ ，presented below．

[^29]
## 3．4．2．2．1． tóóvet＂to give＂（415 distinct forms in New Testament）

|  | $\begin{aligned} & \text { Continuous (1) } \\ & \text { ("Present" \& "Imperfect") } \\ & \text { active } \quad \text { middle/passive } \end{aligned}$ |  | $\begin{array}{r} \text { Perfe } \\ \text { ("Perfect" \& " } \end{array}$ | fect <br> ＂Pluperfect＂） <br> middle／passive | active | Discrete <br> （＂Future＂\＆＂A middle | orist＂） passive |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indic <br> ative <br> mood <br> Pres－ <br> ent <br> time | （1）＂Present＂ | （1） | （4）＂Perfect＂ | （5） | （2） | ＂Future＂（2） | （6） |
|  | $\delta \dot{\delta} \delta \omega \mu$ | ¢t́douat＊ |  |  | $\delta \dot{\sigma} \sigma \omega$ | $\delta$ ¢́бои\％＊＊ | боөף́бонж＊＊ |
|  | $\delta \hat{\delta} \delta \omega \varsigma^{*}$ | ס́fooma＊ |  | ठદ́סобแt＊ | б由́б\＆ıక | ¢ต́¢ที＊ | סoөף́ণn＊ |
|  | ¢́tomov | ¢́ṫot¢t |  | б反́ботөt |  | $\delta$ ¢́б¢төt |  |
|  | ¢t́dousv＊ | $\delta+\delta$ ¢́ $\mu \varepsilon \theta$ a $^{*}$ | бєठбккөиєv＊ | $\delta \varepsilon \delta$ о́ $\mu$ ¢ $\theta$＊＊ | $\delta \omega$ ¢оия | $\delta \omega \sigma o ́ \mu \varepsilon \theta \epsilon^{*}$ | боөךбо́ $\mu \varepsilon \theta \epsilon^{*}$ |
|  | ¢́fore＊ | $\delta$ ́t $\delta 0 \sigma \theta \varepsilon^{*}$ | бєठб́көtع＊ | $\delta \varepsilon ́ \delta o \sigma \theta \varepsilon^{*}$ | $\delta \omega \sigma \varepsilon \tau \varepsilon^{*}$ | $\delta \omega \sigma \varepsilon \sigma \theta \varepsilon^{*}$ | ठоөض́ $\sigma \varepsilon \sigma \theta \varepsilon^{*}$ |
|  | St $\delta$ ó $\alpha \sigma$ v | ¢t́dovtet＊ | $\delta \varepsilon \delta \omega ́ \kappa \alpha \sigma \mathfrak{*} v^{*}$ | ठと́סovtat＊ | $\delta$ ¢́бovøı | $\delta \omega ́ \sigma o v \tau \epsilon t^{*}$ |  |
| Indic－ <br> ative <br> mood <br> Past <br> time | （1）＂Imperfect＂ | （1） | （4）＂Pluperfect＂ | （5） | （3） | ＂Aorist＂（3） | （6） |
|  | 文 $\delta$ ́touv＊ | غ̇ठ\＆$\delta$ ó $\mu \eta \nu^{*}$ | $\delta \varepsilon \delta ¢ ¢ \kappa \varepsilon เ v^{*}$ | $\delta \varepsilon \delta$ о́ $\dagger$ ¢＊＊ | と̌ठ $\omega \kappa \alpha$ | غ̇ठ $\omega \sigma \dot{\mu} \mu \eta \nu^{*}$ | غ̇ठóO $\eta \nu^{*}$ |
|  | غ̇́t́dous＊ | غ̇ס́t́oooo＊ |  | ¢と́סoбo＊＊ |  | غ̇ठஸ́б ${ }^{*}$ | غ̇ठóO $\eta \varsigma^{*}$ |
|  | غ̇סt́oov | غ̇́＇íóo七o＊ | бєठбккєь | ¢غ́סoтo＊＊ | غ̌ठ $\omega \kappa \varepsilon \nu$ | $\dot{\varepsilon} \delta \omega \sigma$ ¢ ${ }^{*}$ | $\dot{\varepsilon} \delta \delta o ́ \theta \eta$ |
|  | غ̇ठ́tóousv＊ | غ́ $\delta+\delta$ о́ $\mu \varepsilon \theta \alpha^{*}$ | бєठف́кє $\mu \varepsilon \nu^{* *}$ | $\delta \varepsilon \delta$ ó $\mu \varepsilon \theta \epsilon^{* *}$ |  | $\dot{\varepsilon} \delta \omega \sigma \hat{\mu} \mu \varepsilon \theta \alpha^{*}$ | غ̇ठóO $\dagger \mu \varepsilon v^{*}$ |
|  | غ́ठ́tóote＊ |  |  | ¢ ¢́ooo $0 \varepsilon^{* *}$ | غ́ठढ́к $\alpha \tau \varepsilon$ | غ̇ठढ́бөбӨ̨＊ | غ̇ठó $\dagger \eta \tau \varepsilon^{*}$ |
|  | $\dot{\varepsilon} \delta \dot{t} \delta o \sigma \alpha v / \varepsilon$ ¢́d́toouv | غ̇ס́fóovto＊ | $\delta \varepsilon \delta \omega ் \kappa \varepsilon เ \sigma \alpha \nu$ | ¢と́¢ovto＊ | ह̌ $\delta \omega \kappa \alpha v$ |  | $\dot{\varepsilon} \delta \dot{0} \theta \eta \sigma \alpha \nu$ |
| Sub－ junc－ tive mood | （1）＂Present＂ | Subjunctive（1） | （4）＂Perfect＂ | Subjunctive（5） | （3）＂Aorist＂ | Subjunctive（3） | （6） |
|  | $\delta$ ¢ $\delta$ ¢ ${ }^{\text {a }}$ | $\delta t \delta \tilde{\omega} \mu \not \iota^{*}$ | ठ $\delta \delta \dot{\kappa} \kappa \omega^{*}$ |  | $\delta \omega ் \sigma \omega^{*}$ | $\delta \omega ் \sigma \omega \mu \nLeftarrow *$ | סoө $\tilde{\omega}^{*}$ |
|  | $\delta \mathrm{t}$ oĩs＊ | $\delta$ ¢ $\delta$ oĩ＊ | ঠвठб́кпз＊ |  | סั̃s |  | Söñs＊ |
|  | סtסoĩ＊ | $\delta t \delta \tilde{\omega} \tau \notin t *$ | ठєठ¢́кп＊＊ |  |  | $\delta \omega ́ \sigma \eta \tau \notin$＊$^{*}$ | ठоөп̃ |
|  | $\delta \star \delta \tilde{\omega} \mu \varepsilon \nu^{*}$ | $\delta \star \delta \omega \dot{\mu} \boldsymbol{\varepsilon} \theta$ e $^{*}$ | ठ $\delta \delta \dot{\kappa} \kappa \omega \mu \varepsilon \nu^{*}$ |  | $\delta \tilde{\omega} \mu \varepsilon v / \delta \omega ் \sigma \omega \mu \varepsilon v$ | $\delta \omega \sigma \omega \mu \varepsilon \theta \alpha^{*}$ | ठоөп̃ $\mu \varepsilon^{*}$ |
|  | $\delta \downarrow \delta \omega ั \tau \varepsilon^{*}$ | $\delta t \delta \check{\sigma} \sigma \theta \varepsilon^{*}$ | $\delta \varepsilon \delta \omega ́ \kappa \eta \tau \varepsilon^{*}$ |  | $\delta \tilde{\sim} \tau \varepsilon$ | $\delta \omega \dot{\square} \sigma \theta \varepsilon^{*}$ |  |
|  | $\delta \mathrm{t} \delta \tilde{\omega} \sigma \mathrm{v} \mathrm{v}^{*}$ | $\delta \mathrm{t} \delta \tilde{\omega} v \tau \not \mathrm{t}^{*}$ | $\delta \varepsilon \delta \omega ́ \kappa \omega \sigma t v^{* *}$ |  | ठต̃бル | $\delta \omega ́ \sigma \omega v \tau \notin t^{*}$ |  |
| Im－ pera－ tive mood | （1）＂Present＂ | Imperative（1） | （4）＂Perfect＂ | Imperative（5） | （3）＂Aorist＂ | Imperative（3） | （6） |
|  | ¢́too | ¢́́óoбo＊ | ठ $\delta$ ¢ $\omega \kappa \kappa \varepsilon^{* *}$ | бобо＊ |  | бои̃＊／סóбо＊ | ¢ó $\eta \eta \tau t^{*}$ |
|  | $\delta$ ¢ $\delta$ ov́ $\tau \omega^{*}$ | $\delta t \delta o ́ \sigma \theta \omega^{*}$ | $\delta \varepsilon \delta \omega \kappa \varepsilon ́ \tau \omega * *$ | $\delta \varepsilon \delta$ ó $\theta$ ¢ ${ }^{* *}$ | бо́т $\omega$ | ठó $\theta$ Ө ${ }^{*}$ | סоөض́т $\omega^{*}$ |
|  | ठ＇́¢отє | ¢＇́¢oofr＊ | $\delta \varepsilon \delta \omega ́ \kappa \varepsilon \tau \varepsilon * *$ |  | סót $\varepsilon$ | ठóб $\theta \varepsilon^{*}$ | $\delta o ́ \theta \eta \tau \varepsilon^{*}$ |
|  |  | $\delta \star \delta$ ó $\theta \omega \omega \sigma \not v^{*}$ | $\delta \varepsilon \delta \omega \kappa \varepsilon ์ \tau \omega \sigma \nLeftarrow v^{* *}$ | $\delta \varepsilon \delta$ ó $\theta \omega \sigma$＊＊＊＊ | סót¢б๕v＊ | ठóбӨ $\omega \sigma$ \％ | ठо日ŋ́ $\tau \omega \sigma \not v^{*}$ |
| Opta－ tive mood | （1）＂P | Optative（1） | （4）＂Perfect＂ | Optative（5） | （3）＂Aorist＂ | Optative（3） | （6） |
|  | ¢t́doı $\mathrm{t}^{* *}$ | $\delta$ t $\delta$ oí $\mu \eta \nu^{*}$ |  |  | $\delta \omega ́ \sigma \alpha \mu \mathrm{t}^{* *}$ | $\delta \dot{\sigma} \sigma \alpha \dot{\mu} \eta^{*}$ | So日cíq $\nu^{* *}$ |
|  | סídots＊＊ | ¢́foro＊＊ |  |  | бف́б人1s＊＊ | $\delta \omega ́ \sigma \alpha 1 o^{* *}$ | סo日cíns＊＊ |
|  |  | ¢́̂oııo＊＊ |  |  | $\delta \varrho ¢ \eta$ | бо́б人ıı0＊ | סoөsín＊ |
|  | ס́́סou $\mu$ v＊＊ | $\delta+\delta o i ́ \mu \varepsilon \theta \alpha^{*}$ |  |  | $\delta \omega ́ \sigma \alpha \mu \varepsilon v^{* *}$ | $\delta \omega \sigma \alpha i ́ \mu \varepsilon \theta \alpha^{* *}$ | סоөсı́n $\mu \varepsilon v^{* *}$ |
|  |  | $\delta$ ¢́ $\delta$ olo $\theta \varepsilon^{* *}$ |  |  | $\delta \omega ́ \sigma \alpha ı \tau \varepsilon^{* *}$ | $\delta \omega ́ \sigma \alpha 1 \sigma \theta \varepsilon^{* *}$ | סoөcín $\tau \varepsilon^{* *}$ |
|  | Śtootev＊ | $\delta$ ¢́douvto＊ |  |  | $\delta \omega ́ \sigma \alpha ı \varepsilon^{*}$ |  | סoөsíq $\sigma \not \nu^{* *}$ |
| Infini tive | Otoóvet | Infinitive（1） $\delta \dot{t} \delta \varepsilon \sigma \theta \alpha t^{*}$ | （4）＂Perfect＂ | Infinitive（5） | （3）＂Aorist＂ | Infinitive（3） | （6） |
|  |  |  | $\delta \varepsilon \delta \omega \kappa \varepsilon ́ v a t *$ | ठと́סooӨथt＊ | סoũvat | $\delta \omega ́ \sigma \notin \sigma \theta \not t^{*}$ | ठoөñver |
|  |  |  |  |  | （2）＂Future | Infinitive＂（2） |  |
|  |  |  |  |  | $\delta \omega ́ \sigma \varepsilon \iota^{* *}$ | $\delta \omega ́ \sigma \varepsilon \sigma \theta \Leftrightarrow t^{*}$ | סоөŋ̃ $\sigma \varepsilon \sigma \theta$ ¢t＊＊ |
| Masc． | （1）＂Present Participle＂（1） |  | （4）＂Perfect | Participle＂（5） | （3）＂Aorist＂ | Participle（3） | （6） |
|  | $\delta$ ¢ $\delta$ ov́s |  | $\delta \varepsilon \delta \omega \kappa \omega \varsigma^{*}$ | $\delta \varepsilon \delta$ о $\mu$ и́vos＊ | סov́s | $\delta \omega \sigma$ ¢́ $\mu \mathrm{Evos}{ }^{*}$ | סöcis＊ |
|  | סtoóvtos | סtסoućvov＊ | бєठ $\omega$ ко́то丂＊ | $\delta \varepsilon \delta о \mu \varepsilon ́ v o v^{*}$ | סóveos | $\delta \omega \sigma \not \mu \varepsilon v^{\prime} v^{*}$ | סoӨ́́vtos＊ |
|  | $\delta$ ¢ $\delta$ oṽ ${ }^{\text {ctv＊}}$ |  | $\delta \varepsilon \delta \omega \kappa$ ¢́бtv＊ |  | סoṽбtv＊ | $\delta \omega \sigma \not \mu \underline{\text { cois＊}}$ |  |
|  | （other） | （other）＊ | （other）＊ | （other）＊ | （other） | （other）＊ | （other）＊ |
| Fem． | ס̀סoṽбA＊ | $\delta+\delta$ ¢ $\mu$ ćv ${ }^{\text {＊}}$ | $\delta \varepsilon \delta \omega к и \bar{\epsilon} \epsilon^{*}$ |  | סои̃бө＊ | $\delta \omega \sigma \not \mu \varepsilon ́ v \eta *$ | ठо日 $\frac{1}{}$ |
|  | סtסov́бทs＊ | $\delta+\delta о \mu \varepsilon ́ v \eta \varsigma^{*}$ | бєठокиі́ๆร＊ |  | סov́rŋs＊ | $\delta \omega \sigma \not \mu \varepsilon ́ v \eta s^{*}$ | סoӨcíøns |
|  | סtסov́б人1s＊ | ¢ ¢ $\delta$ ouévaıs＊ | бг $\delta \omega \kappa$ кі́ $\alpha \varsigma^{* *}$ | סєठoนévaıs＊ | Sov́б人1s＊ |  | סо日cíб人15＊＊ |
|  | （other）＊ | （other）＊ | （other）＊ | （other） | （other）＊ | （other）＊ | （other） |
| Neut． | ¢tooúv＊ | $\delta$ ¢ $\delta$ ó $\mu \varepsilon v 0$ v |  | $\delta \varepsilon \delta$ оبє́vov | Sov́v＊ | $\delta \omega \sigma \dot{\mu} \mu \varepsilon v^{*}{ }^{*}$ | סöćv＊ |
|  | Stoóvios＊ | סtסoućvov＊ |  | бعбоиء́vou＊ | Sóvtos＊ | $\delta \omega \sigma \nLeftarrow \underline{v}$ оv＊ | סöと́vtos |
|  | $\delta_{t \delta o u ̃ \sigma t v *}$ | ¢t¢ouévoıs＊ | $\delta \varepsilon \delta \omega \kappa$ ќбt＊＊＊ | бعठоце́vois＊ | ¢oṽสtv＊ | $\delta \omega \sigma \not \mu \underline{\text { cois＊}}$ | ¢oөzĩtv＊ |
|  | （other） | （other）＊ | （other）＊ | （other）＊ | （other）＊ | （other）＊ | （other）＊ |

＊＊Forms that do not occur in the New Testament for any verb Bold Forms I am using for＂Principal parts＂
Forms that do not occur in the New Testament for this verb （or its derivatives）

Red Forms that serve to show the inherent length of the final stem vowel or to show that certain classes of verb suffixes lengthen this vowel．
Gray background：Categories not occurring for this verb and many others

### 3.4.3.Nouns Derived from Verbs

There are two series of adjectives (some of which are mainly or exclusively used as nouns) which are derived from verbs by the addition of a suffix, which could almost be considered a special kind of verb participle, except that they cannot be formed freely for all verbs, and show a good bit of irregularity.

### 3.4.3.1.With Suffix -tóg

The suffix -tós has a meaning that can vary from "(one) that is/was/has been $\qquad$ ed" or simply " $\qquad$ ed (one)", to "(one) that can be $\qquad$ ed" or even "(one) that should be $\qquad$ _ed", the verb from which it is derived filling in the blank. (When the verb is intransitive the meaning is "(one) that $\qquad$ $s^{\prime \prime}$. Sometimes even with transitive verbs this is the meaning. These cases will be marked in pink.) Tense and aspect seem to be fairly neutral in its meaning. The various passive participles have a similar meaning, but they are used somewhat differently, and in their case tense (really aspect) does matter. In terms of the form of words with this suffix, they seem to always follow either the Discrete (aorist/future) passive or Perfect passive stem (without the reduplication) when these differ from the Continuous (present) stem: in the chart below I have tried to track down which stem it is, and have marked with a + either an aorist or a perfect form that matches. (They seem to be about evenly split.) (When I cannot find a passive form, I have listed an active or middle form enclosed in brackets [].)

When prefixes are added to any of these forms, like $\dot{\alpha}-$ "not", or $\varepsilon v$ - "good", the accent shifts to the earli-
 forms like $\varepsilon i \delta \omega \lambda$ ó $\theta v \tau o \varsigma^{*}$. However, if the prefix is already part of the original verb, then the accent does not shift, as in $\varepsilon u ̉ \lambda o \gamma \eta \tau o ́ s ~ f r o m ~ \varepsilon u ̉ \lambda o \gamma \varepsilon i ̃ v . ~$

| Derived <br> Adjective | Meaning |  | Verb <br> (Present <br> Infinitive) | Meaning | 1. Aorist/Future Passive Form <br> 2. Perfect Passive Form [Active or Middle] |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | "beloved" | Mat. 12:18 | $\dot{\alpha} \gamma \alpha \pi \tilde{\alpha} \nu$ | "love" |  |  |
| $\begin{aligned} & \begin{array}{l} \dot{\alpha} v \varepsilon \kappa \tau o ́ \varsigma^{*} \\ (\dot{\alpha} v \varepsilon \kappa \tau o ́ \tau \varepsilon \rho \circ \vee) \end{array} \end{aligned}$ | "bearable" ("that can be borne") | Mat. 10:15 | $\dot{\alpha} v \varepsilon$ ¢́ $\chi \varepsilon \sigma \theta \not \underbrace{\text { (s) }}$ | "endure, bear with" | [ $\alpha, v \varepsilon \sigma \chi$ о́ $\mu \eta \nu$ ] <br> [(̌̌б $\chi \eta \kappa \varepsilon v)]$ | $\begin{aligned} & \text { Acts 18:14 } \\ & 2 \text { Cor. 7:5 } \end{aligned}$ |
| д̀ $\rho \varepsilon \sigma \tau$ о́s* ( $\dot{\alpha} \rho \varepsilon \sigma \tau o ́ v)$ єv̉áp\&бтоऽ | "pleasing, right" "well-pleasing" | Acts 6:2 <br> Rom. <br> 14:18 | ¢ $\rho$ ¢́бкєıV | "please" | [ג் $\rho \varepsilon ́ \sigma \notin t] ~$ | Rom. 8:8 |
| வ̀ркєтós | "sufficient" | 1Pe4:3 | ג̇ркєı̃** | "be enough" | $\dot{\alpha} \rho \kappa \varepsilon \sigma \theta \eta \sigma o ́ \mu \varepsilon \theta \neq$ | 1 Tim. 6:8 |
| $\beta \delta \varepsilon \lambda \cup \kappa \tau<\varsigma^{(s)}$ ( $\beta \delta \varepsilon \lambda \cup \kappa \tau ө \mathfrak{q})$ | "detestable" ("that should be detested") | Tit. 1:16 | $\beta \delta \varepsilon \lambda u ́ \sigma \sigma \varepsilon \sigma \theta$ ett | "detest" | $\dot{\varepsilon} \beta \delta \varepsilon \lambda \nu \gamma \mu \varepsilon ́ v o l \varsigma$ | Rev. 21:8 |
| үعvvๆтós ${ }^{(\text {S })}$ ( $\gamma \varepsilon \vee v \eta \tau$ оі̃ॅ) | "born" | Mat. 11:11 | $\gamma \varepsilon v v \tilde{\alpha} v^{*}$ | "beget", "bear (child)" | $\gamma \varepsilon v v \eta \theta \tilde{\eta} v \nLeftarrow t$ $\gamma \varepsilon \gamma \varepsilon ́ v v \eta \tau \notin t$ | John 3:4 <br> Gal. 4:23 |
| $\gamma \nu \omega \sigma \tau \ll$ | "known" | John 18:15 | үıvต́бкยıレ | "know" | غ̇ $\gamma v ต ́ \sigma \theta \eta$ है $\gamma v \omega \sigma \tau \notin t$ | $\begin{aligned} & \text { Luke 24:35 } \\ & 1 \text { Cor. 8:3 } \end{aligned}$ |
| ү $\alpha$ алто́s* <br> ( $\gamma \rho \alpha \pi \tau$ о́v) | "written" | Rom. 2:15 | $\gamma \rho \alpha ́ \varphi \varepsilon$ ¢v | "write" | غ̀ $\gamma \rho \alpha ́ \varphi \eta$ $\gamma \varepsilon ́ \gamma \rho \alpha \pi \tau \notin t$ | Rom. 4:23 <br> Mat. 2:5 |
| ঠєкто́s <br> (סєктóv) <br>  | "acceptable" ("that should be accepted") "acceptable" | Luke 4:19 $2 \text { Cor. 6:2 }$ |  | "receive" |  бと́ $\delta \varepsilon \kappa \tau \notin t$ | Mat. 11:14 <br> Acts 8:14 |


|  | ＂taught＂ | 1 Cor．2：13 |  | ＂teach＂ | $\delta t \delta \alpha ́ \xi \notin t$ | Acts 11：26 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| סuvatós ג́ $\delta$ v́vatos | ＂powerful＂ ＂impossible＂ | Luke 1：49 Acts 14：8 | రv́vaбӨөt | ＂be able＂ | $\eta \dot{\eta} \delta v v^{\prime} \theta \eta$ | Mk7：24 |
| $\dot{\varepsilon ̇ \kappa \lambda \varepsilon \kappa \tau о ́ s ~}$ боvєк入єкто́s＊ （бטvعклєктŋ́） | ＂chosen＂ ＂chosen together with＂ | $\begin{aligned} & \text { Luke 23:35 } \\ & \text { 1Pe5:13 } \end{aligned}$ | $\dot{\varepsilon} \kappa \lambda \varepsilon ́ \gamma \varepsilon \sigma \sigma \theta \not t^{(8)}$ | ＂choose out＂ | ［ $\dot{\varepsilon} \xi \varepsilon \lambda \varepsilon ́ \xi \alpha \sigma \tau 0]$ $\dot{\varepsilon} \kappa \lambda \varepsilon \lambda \varepsilon \gamma \mu \varepsilon ́ v \circ \varsigma$ | Mark 13：20 <br> Luke 9：35 |
| عủ入oүๆтós | ＂blessed＂ | Luke 1：68 | عv̇入o $\chi^{\text {civ }}$ | ＂bless＂ | ［ $\varepsilon v ̉ \lambda o ́ \gamma \eta \sigma \varepsilon v]$ <br>  | Mat．14：19 <br> Mat．21：9 |
| 弓¢бтós | $\begin{aligned} & \text { "hot" } \\ & \text { ("boiled") } \end{aligned}$ | Rev．3：15 | ちع⿺ัง＊ | ＂boil（be fervent）＂ | Only pres．： కと́ $\omega v$ | 1 Tim．6：13 |
| $\theta \alpha v \mu \alpha \sigma \tau o ́ s^{(s)}$ （ $\theta \alpha 0 \mu \alpha \sigma \tau o ́ v)$ | ＂wonderful＂ <br> （＂that is wondered at＂） | John 9：30 | $\theta \alpha v \mu \alpha ́ \zeta \varepsilon ı v$ | ＂wonder＂ | $\theta \alpha v \mu \alpha \sigma \theta \tilde{\eta} v \notin t$ <br> － | 2Th1：10 |
| $\theta v \eta \tau$ ós ${ }^{(s)}$ <br> （ $\theta$ vŋтóv） | ＂mortal＂ | $\begin{aligned} & \text { 1 Cor. } \\ & \text { 15:54 } \end{aligned}$ | $\dot{\alpha} \pi 0 \theta v \grave{\mid ㇒} \sigma \kappa \varepsilon ı$ <br> （ $\theta v$ ทุ́ $\left.\sigma \kappa \varepsilon ı v^{*}\right)$ | ＂die＂ | $\begin{aligned} & {\left[\begin{array}{l} \alpha \dot{\alpha} \theta \alpha v \varepsilon v] \\ +[\tau \varepsilon \theta v \eta \kappa \varepsilon ́ v e k] \end{array}\right.} \end{aligned}$ | Mat．9：24 <br> Acts 14：19 |
|  （ $\varepsilon i \delta \omega \lambda o ́ \theta v \tau o v)$ | ＂sacrificed to an idol＂ | Acts 21：25 | Өv́cıv | ＂sacrifice＂ | غ̇tv́ $\eta \eta$ $\tau \varepsilon \theta \cup \mu \varepsilon ́ v a$ | $\begin{aligned} & \hline \text { 1 Cor. 5:7 } \\ & \text { Mat. 22:4 } \end{aligned}$ |
| к入ךтós | ＂called＂ | Rom．1：1 | ка入єіั | ＂call＂ | $\dot{\varepsilon} \kappa \lambda \dot{\eta} \theta \eta$ кє́к $\lambda \eta \tau \notin$ | Mat．27：8 <br> 1 Cor．7：18 |
|  | ＂unclean＂ | Ep5：5 |  | ＂make clean＂ | ［غ̇кк $\alpha$ Ó́ $\rho \alpha \tau \varepsilon$ ］ | $\begin{aligned} & 1 \text { Cor. 5:7 } \\ & \text { He10:2 } \\ & \hline \end{aligned}$ |
| колєто́s ${ }^{(\text {S })}$ （колєtóv） | ＂mourning＂ | Acts 8：2 | ко́л $\tau \varepsilon 1 v^{(S)}$ | ＂cut＂， middle＂mourn＂ | $\dot{\varepsilon} \xi \varepsilon \kappa o ́ \pi \eta \zeta$ | $\begin{aligned} & \text { Rom. } \\ & \text { 11:24 } \end{aligned}$ |
| крилтós | ＂hidden＂ | 1 Pe．3：4 | кри́лtєıv＊ | ＂hide＂ | غ̇к $\rho \dot{\beta} \beta \eta$ <br> $+\kappa$ ќкрилтধt | Luke 19：42 Col．3：3 |
| ӧ $\mu \varepsilon \mu \pi \tau о \varsigma$ | ＂blameless＂ | Ph3：6 | $\mu \varepsilon ́ \mu \varphi \varepsilon \sigma \theta \not \chi^{*}$ | ＂blame＂ | $\mu \varepsilon ́ \mu \psi \varepsilon \tau \notin t^{* *(s)}$ <br> － | Sir．41：7 |
| $\mu \iota \sigma \theta \omega \tau$ ¢́s | ＂hired＂ | Jn10：12 | $\mu 1 \sigma \theta \dot{\sigma} \sigma \alpha \sigma \theta$ ¢t | ＂hire，engage＂ | ［ $\mu 1 \sigma \theta \omega ́ \sigma \alpha \sigma \theta \notin t]$ <br> － | Mat．20：1 |
|  <br>  | ＂foolish＂（＂that doesn＇t perceive＂） | Ti3：3 | vo¢iv＊ | ＂perceive＂ | voŋ̃бধt | Ep3：4 |
| ópatós＊ （ópo $\alpha \dot{\alpha})$ | ＂visible＂（＂that is seen＂） | Col．1：16 | $\underline{\mathrm{o}} \mathrm{\rho} \tilde{\alpha}^{(\mathrm{s})}$ | ＂see＂ | $\check{\omega} \varphi \theta \eta$ <br> + ［غ́ó $\alpha \kappa \varepsilon v]$ | Mat．17：3 <br> Col．2：18 |
| $\pi \alpha \theta \eta$ тós | ＂that must suffer＂ | Acts 26：23 | $\pi \alpha$ ¢́б $\chi \varepsilon 1 v$ | ＂suffer＂ | $+[\pi \alpha \theta \varepsilon \tau v]$ <br> ［ $\pi \varepsilon ́ \pi \sigma \nu \theta \varepsilon v]$ | Mat．16：21 <br> Heb．2：18 |
| $\pi \lambda \alpha \sigma \tau$ ós＊ <br> （ $\pi \lambda \alpha \sigma \tau \circ \stackrel{1}{ }$ ） | ＂false＂（＂shaped （to deceive）＂） | 2 Pe．2：3 | $\pi \lambda \alpha \dot{\alpha} \sigma \varepsilon v^{*}$ | ＂form，shape＂ | $\dot{\varepsilon} \pi \lambda \alpha \dot{\alpha} \theta \eta$ $\pi \varepsilon \pi \lambda \alpha \sigma \mu \varepsilon ́ v o v^{* *}{ }^{(S)}$ | $\begin{aligned} & 1 \text { Tim. 2:13 } \\ & \text { Jer. 19:1 } \\ & \hline \end{aligned}$ |
|  | ＂faithful， believing＂ | Luke 16：10 | $\pi \varepsilon^{\prime} \theta \varepsilon ı v^{* 93}$ | ＂persuade＂ | غ̇л $\varepsilon \dot{\sigma} \sigma \theta \eta \sigma \alpha \nu$ $\pi \varepsilon ́ \pi \varepsilon \iota \sigma \mu \nLeftarrow t$ | $\begin{aligned} & \text { Acts 5:39 } \\ & \text { Rom } 8 \cdot 38 \end{aligned}$ |
| $\alpha ̈ \pi ı \sigma \tau \bigcirc \varsigma$ | ＂unbelieving＂ | 1 Cor．7：14 | not 1 ıбтoṽv＊ | ＂be faithful＂ | غ̇лıбтஸ́Oŋร | 2 Tim．3：14 |
|  |  |  | not $\pi 1 \sigma \tau \varepsilon$ v́cıv | ＂believe＂ | غ̇ $\pi \iota \sigma \tau \varepsilon v ́ \theta \eta \nu$ $\pi \varepsilon \pi і ́ \sigma \tau \varepsilon v \mu \nLeftarrow$ | $\begin{aligned} & 1 \text { Tim. 1:11 } \\ & 1 \text { Cor. 9:17 } \end{aligned}$ |
| $\pi$ тıкто́s＊ <br> （ $\pi \nu$ ィктóv） | ＂choked＂ | Acts 21：25 | $\pi v i \gamma \varepsilon u^{*}$ | ＂choke＂ | ［ $\check{\pi} \pi v \imath \xi \alpha v]$ | Mat．13：7 |

[^30]| хєьротоі́ $т о \varsigma^{*}$ <br> ( $\chi \varepsilon \uparrow \rho о \pi о$ т́ $\tau \circ v$ ) | "made with hands" | Mk14:58 |  | "make" |  $\pi \varepsilon \pi о \not ŋ \mu \varepsilon ́ v \omega v$ | 1Pe3:18 <br> He12:27 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\pi \nu \rho \varepsilon$ тós | "fever" | Mat. 8:15 | $\pi \cup \rho \varepsilon ́ \sigma \sigma \varepsilon ı v^{*}$ | "have a fever" | only pres.: $\pi \nu \rho \varepsilon ́ \sigma \sigma o v \sigma \theta$ | Mk1:30 |
|  |  |  |  | "burn" | only pres. | 1 Cor. 7:9 |
|  |  |  | not $\pi \cup \rho \rho \alpha \zeta^{\prime} \varepsilon v^{*}$ | "be (fiery) red (sky)" | only pres.: $\pi \nu \rho \rho \alpha ́ \zeta \varepsilon \iota$ | Mat. 16:2 |
| $\Sigma \varepsilon \beta \alpha \sigma \tau$ о́s* <br> ( $\Sigma \varepsilon \beta \alpha \sigma \tau$ óv) | "Imperial" ("who is worshipped") | Acts 25:25 | $\sigma \varepsilon \beta \alpha ́ \zeta \varepsilon \sigma \theta \not t *$ | "worship" | غ̇бع $\beta \alpha \dot{\sigma} \theta \eta \sigma \alpha v$ <br> $\square$ | Rom. 1:25 |
| бтvүๆтós* <br> ( $\tau$ тטүๆтоí) | "hated" | Ti3:3 | бтvүعĩ*** | "hate" |  | - |
| бuvetós ${ }^{(\text {S })}$ (бטvยะ币̃) | "prudent" | Acts 13:7 | Ouvićvet | "understand" | [Ao.Imp. $\sigma ט ́ v \varepsilon \tau \varepsilon]$ | Acts 7:25 |
| $\begin{aligned} & \hline \tau \alpha \kappa \tau o ́ \varsigma^{*} \\ & (\tau \alpha \kappa \tau \tilde{\eta}) \\ & \hline \end{aligned}$ | "appointed, fixed" | Acts 12:21 | то́ббєıv* | "appoint" | [है $\tau \alpha \xi \alpha v$ ] <br> $\tau \varepsilon ́ \tau \alpha \kappa \tau \not t$ | $\begin{aligned} & \hline \text { Acts 15:2 } \\ & \text { Acts 22:10 } \\ & \hline \end{aligned}$ |
| v̇єtós (v̊etóv) | "rain" | Acts 28:2 | v̋ $\varepsilon 1 v^{*}$ | "make come down like rain" | Only pres. v̋ ${ }^{(\mathrm{s})}$ | Ex. 9:18 |
| àvoло́крıтоऽ | "without hypocrisy" | Rom. 12:9 | v̇локрív\&бӨеt* | "pretend" | (غ̇крíӨŋ) <br> (кє́крєтөt) | $\begin{aligned} & \text { Acts 27:1 } \\ & \text { Jn3:18 } \\ & \hline \end{aligned}$ |
| v̇pavtós | "woven" | Jn19:23 | vopaiveıv**(s) | "weave" | $\begin{aligned} & +\sigma v v ט \varphi \alpha ́ v \theta \eta^{* *(s)} \\ & \dot{v} \varphi \alpha \sigma \mu \varepsilon ́ v o v^{* *(s)} \end{aligned}$ | Exo. 36:17 <br> Lev. 19:19 |
| $\chi \rho \eta \sigma \tau$ ós | "good, kind, useful" ("that can be used") | Mat. 11:30 | $\chi \rho \tilde{\alpha} \sigma \theta \mathrm{tt}^{(\mathrm{s})}$ | "use" | [ $\dot{\chi} \rho \eta \sigma \dot{\alpha} \mu \eta \nu$ ] кદ́ $\chi \rho \eta \mu \nLeftarrow$ | $\begin{aligned} & 2 \text { Co. 1:17 } \\ & 1 \text { Cor. 9:15 } \end{aligned}$ |
| Xpıттós òvtíxpıotos | $\begin{aligned} & \text { "anointed (one)" } \\ & =" \text { Christ" } \\ & \text { "antichrist" } \end{aligned}$ | Mat. 1:16 <br> 1Jo2:18 | $\chi \rho \dot{\text { ćev }}{ }^{(s)}$ | "anoint" | $\begin{aligned} & \dot{\varepsilon} \chi \rho \dot{\prime} \sigma \theta \eta^{* *(s)} \\ & \kappa \varepsilon ́ \chi \rho \rho \tau \notin t^{*}(s) \end{aligned}$ | $\begin{aligned} & 2 \text { Ki. 1:21 } \\ & 2 \text { Ki. 5:17 } \end{aligned}$ |
| $\varphi \theta \alpha \rho \tau{ }^{\prime}{ }^{(\text {S })}$ <br> ( $\varphi \theta \alpha \tau$ гóv) <br> व̈ $\varphi \theta \alpha \rho \tau о \varsigma^{*}$ <br> ( $\alpha, \varphi \theta \rho \tau \tau \vartheta)$ | "corruptible" <br> "that can be <br> corrupted") <br> "incorruptible", <br> "immortal" | $\begin{aligned} & 1 \text { Cor. 9:25 } \\ & 1 \text { Cor. } \\ & 15: 52 \end{aligned}$ | $\varphi \theta \varepsilon i ́ \rho \varepsilon ı{ }^{*}$ | "corrupt" | $\varphi \theta \alpha \rho \tilde{1}$ | 2 Cor. 11:3 |

The following form is not actually an example of this, though it looks like somehow it should be, because both the meaning and the accent are wrong:

| Derived <br> Noun | Meaning |  | Verb <br> (Present <br> Infinitive) |  | 1. Aorist/Fut Passive Form <br> 2. Perfect <br> Passive Form [Active or Middle] |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Өávatos | "death" | Rom. 5:12 |  <br> ( $\theta v$ ทุ́ $\left.\sigma \kappa \varepsilon v^{*}\right)$ | "die" | $+[\dot{\alpha} \pi \varepsilon ́ \theta \alpha v \varepsilon v]$ <br> [ $\tau \varepsilon \theta \vee \eta \kappa \varepsilon ́ v \notin t]$ | Mat. 9:24 <br> Acts 14:19 |

### 3.4.3.2.With Suffix - $\tau \mathfrak{\eta} \varsigma$

$$
* * *
$$

| Derived Noun | Meaning |  | Verb | Meaning |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mu \alpha \theta \eta \tau \eta \prime$ | "disciple" | Mat. 10:24 | $\mu \alpha \theta \eta \tau \varepsilon \varepsilon ์ \varepsilon ı v^{*}$ | "teach, have as disciple, make into disciple" | $\begin{aligned} & \text { Mat. 28:19, } \\ & \text { Acts 14:21 } \end{aligned}$ |
| $\mu \alpha \theta \dot{\tau} \tau$ ¢ta | "disciple (female)" | Acts 9:36 | $\mu \alpha \theta \eta \tau \varepsilon \varepsilon ์ \varepsilon ı v^{*}$ | "teach, have as disciple, make into disciple" | Mat. 28:19, <br> Acts 14:21 |
| *** |  |  |  |  |  |
|  |  |  |  |  |  |

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Liddell and Scott. 1871. Greek - English lexicon, abridged. Oxford: Clarendon Press.
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This is available online in several places:
www.sounddoctrine.net/Classic Sermons/new/New Testament Greek 193.pdf
This is a rather rough scanned version, and is not editable or searchable.
http://www.churchlivinglord.com/NT Greek Grammar by J Gresham Machen 1.pdf
This is a much cleaner scanned version, but is still not editable or searchable. The first seven chapters are available in an editable and searchable text version at
http://www.churchlivinglord.com/machen ntgreek.html, but require installation of a special font.
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[^0]:    ${ }^{1}$ Usually pronounced koinā in English.
    ${ }^{2}$ Moulton states (page ii) that "...it does not appear that any instance of [dual] occurs in the New Testament." He is apparently not conscious of the fact that this entire grammatical structure was eliminated from Koviń. This is true of many other grammatical structures which he cites as well.

[^1]:    ${ }^{3}$ However, sometimes I select a less frequent example if it provides greater clarity, e.g. a form with a long vowel to show the different accents instead of a more frequent example with a short vowel.
    ${ }^{4}$ An excellent online resource for looking up Greek words in both the New Testament and the Septuagint is lexicon.katabiblon.com. Any word can be input, and all forms of that word will be displayed. The disadvantage is that, rather than telling you the exact grammatical usage of a particular grammatically ambiguous word in a particular passage, it simply tells you all the possible usages. Even so, it is helpful. The text of the Septuagint in a very readable font on the Internet is at: hsaugsburg.de/~harsch/graeca/Chronologia/S ante03/VT/vte pd00.html, though no helps are provided. However, probably the most helpful resource is an interlinear translation of the Septuagint at studybible.info/interlinear/, which follows the versification of English Bibles rather than that of the Septuagint; unfortunately, it does not mark the rough and smooth breathingss, nor does it include the apocryphal / "deuterocanonical" books, only the canonical ones. Unfortunately, none of these sites provides all of the flexibility and options I would like.
    *** Anywhere in this text where these three asterisks occur, it means that I still have more work to do, and that something is incomplete!

[^2]:    ${ }^{5}$ In addition to the other sources mentioned above, much of the information presented in this section was adapted from en.wikipedia.org/wiki/Koine Greek phonology, en.wikipedia.org/wiki/Koine Greek, and en.wikipedia.org/wiki/Ancient Greek phonology. The first and third are better referenced and more detailed, but the second has a better summary of the New Testament stage of Kovvŋ́ as such.
    ${ }^{6}$ See $\$ 2.1 .2 .3$ on page 7.
    ${ }^{7}$ See $\S 2.1 .2 .1$ on page $\mathbf{6}$.
    ${ }^{8}$ This was not a genuine diphthong in Pre-Classical and Classical Greek like the others, since it only occurred either followed by a vowel as in viós "son" or ỏpyvió "fathom", or preceded by a vowel as in $\Delta \alpha v i ́ \delta$ "David" or $\Lambda \varepsilon v i ́$ "Levi" (the latter only in Hebrew names), so that in every case one of the two parts was acting as a semivowel, and there was always a syllable break between the $v t$ and the other vowel. The Modern Greek pronunciation (and sometimes the spelling) demonstrates this well for a preceding vowel, as in $\underline{\Delta \alpha \beta i ́ \delta}$ [ðavíð] and $\Lambda \varepsilon v i ́[l e v i ́]$. (With a following vowel the vi was reduced to a simple [y] vowel in Kowń, the usual outcome as shown in the chart, and in Modern Greek to a simple [i] vowel or even a consonant like [j], so the situation of a semivowel between vowels was lost. Thus viós has now become riós [jós] in Modern Greek, and ojpyutó has become ópyló, apparently pronounced [orjá].)

    As you can see from the chart, the opposite case, w, does not occur at all in the New Testament, though all other combinations of a short vowel plus $v$ do occur!
     only occurs because of the prefix $\delta \mathbf{l}(\alpha)$ being added to $\dot{\cup} \varphi \alpha i v \varepsilon v^{*(S)}$ "weave".)
    ${ }^{9}$ This Greek letter is called Digamma, and represented [w]. This sound was lost in most dialects by Classical times, eliminating the need for the letter. This letter does not occur in the New Testament at all, except that in some manuscripts it is used to write the last digit of the number 666 in Revelation 13:18. (In other manuscripts the number is spelled out.)

[^3]:    ${ }^{10}$ Changes from Pre-Classical to Classical Greek are marked in red in both of the first two charts. The precise pronunciation of $\zeta$ in Pre-Classical is uncertain: I believe that it was [dz], as does Machen, but some have theorized that it was pronounced [zd].
    ${ }^{11}$ Changes from Classical Greek to Kowv Greek are marked in red in the Kotví chart. In general, all length and tone contrasts were eliminated, all of the accents came to be pronounced the same, and some diphthongs were simplified to simple vowels. The voiced stops may also have begun the process of being converted to fricatives, but to what degree is not known. Otherwise the consonant system remained unchanged.
    ${ }^{12}$ All of the Classical Greek diphthongs that ended with t had been reduced to simple vowels by the 1 st century AD, but those that ended with $v$ remained basically unchanged, and the simple vowel system also remained unchanged except for the loss of length, which in the spelling system only merged $\mathbf{o}$ and $\omega$. However, the full effect of the iotacism process seen in Modern Greek had not yet taken place. The evidence for all of this is not entirely certain, being based largely on misspellings in manuscripts, but is fairly certain. Certainly the vowels $\mathbf{v}$ and $\eta$ must still have been distinguished in New Testament times, as is evidenced by the first and second person plural pronouns $\dot{\eta} \mu \varepsilon i \check{\varsigma}$ and $\underline{\underline{~}} \mu \varepsilon i \check{\varsigma}$, which were still clearly distinguished (pronounced as [he'mis] and [hy'mis]), as can be seen by their use in the New Testament. (In Modern Greek these
     original form.)
    ${ }^{13}$ According to en.wikipedia.org/wiki/Koine Greek phonology, the pronunciation of $\varepsilon 1$ varied in Kotví: before a vowel it was pronounced like $\eta$, elsewhere like 1 . However, it also suggests that in the popular pronunciation they were both like t .

[^4]:    ${ }^{14}$ All changes from Pre-Classical Greek to Modern Greek are marked in red, including all the changes in the preceding charts. I will not give a detailed analysis of Modern Greek here, since that is not the focus of this study. If you are interested, try Wikipedia or other resources on the Internet.
    ${ }^{15}$ The process that changed all of these vowels and (written) diphthongs so that they came to be pronounced the same as $\mathbf{t}$ in Modern Greek is called iotacism. Its first stage was the diphthong reduction process discussed above, and the second was the merger of $v$ and $\eta$ with t .
    ${ }^{16}$ There were certainly other identifiable stages before Pre-Classical, but these were never written with the Greek Alphabet as we know it, which was first developed for Pre-Classical Greek. Two of these stages are Proto-Greek (approximately 3000-1600 B.C.) and Mycenaean Greek (approximately $1600-1100$ B.C.). Proto-Greek was never written. Interestingly, Mycenaean Greek was actually written, but the writing system used for it, Linear B, was totally unrelated to the later Greek Alphabet, and was lost and totally forgotten during the Greek Dark Ages, and only rediscovered in the late 1800's and deciphered as being Greek in 1952.
    ${ }^{17}$ This happened because the $/ \mathrm{h} /$ sound was lost in the East Ionian dialect, whose spelling system became the standard spelling system for all dialects, even those like Attic and Kolví which retained the /h/sound. See en.wikipedia.org/wiki/Eta\#History.

[^5]:    ${ }^{18}$ In the entire New Testament the only exception is the word $\mu \varepsilon v o v ̃ \gamma \varepsilon \varepsilon$ "instead", which is really a contraction of three words $\mu \varepsilon v$ oṽ $\gamma \varepsilon$, and in some editions of the Greek text is always written $\mu \varepsilon v o \tilde{v} \gamma \varepsilon$.
    ${ }^{19}$ We know this because 1) at the time that the Roman alphabet was invented, which was adapted from the Greek alphabet through the Etruscan, this is the sound to which this letter was assigned; and 2) this sound in Greek clearly derives from Proto-Indo-European [u].

[^6]:    ${ }^{20}$ In some cases the evidence for vowel length can be taken directly from the word itself as it is used in the New Testament in its various forms, often based on the accents used, especially the length information on suffixes. However, in other cases the information on the length of vowels in stems comes only from information known about the vowel length of particular words in Classical Greek. Length can frequently be determined from poetry in Classical Greek, in which the meter often depends on vowel length (I obtained most of this from Liddell and Scott). In some cases I have settled on the length of the vowel by consulting its Proto-Indo-European derivation, and occasionally I have based my decision on the Hebrew origin of a name. In the case of this indirect evidence, the relevant vowels are sometimes colored blue to show that the length information is not derived strictly from New Testament evidence.
    ${ }^{21}$ The Classical system is the same except for the addition of two more long vowels from the former diphthongs $\varepsilon 1$ and $o v$.
    ${ }^{22}$ The only thing that distinguishes indicative verbs from subjunctive verbs is the distinction between $\varepsilon$ and $\eta$ or between $o$ and $\omega$, throughout the verb conjugation system. The fact that many of the resulting distinctions were later eliminated (e.g. the contrast between 0 and $\omega$ or the contrast between $\varepsilon 1$ and $\eta$ ) does not take away from the importance of this fact at the time the writing system was developed.
    ${ }^{23}$ The following minimal pairs for length on $\alpha, 1, v$ occur: two different forms of "what?", $\pi 0 \pi ̃ \theta$ (accusative neuter plural) and $\pi$ oí $\underline{\alpha}$ (nominative feminine singular), where the only real difference is the length of the $\alpha$; the different accents are entirely dependent on the vowel length of the final syllable. Minimal pairs for $\mathbf{l}$ and $v$ can be deduced from a careful study of the verb system: крt́v $\omega$ (first person singular present indicative/subjunctive) and крív $\omega$ (first person singular aorist subjunctive), two different forms of a verb meaning "judge"; and the same forms of a verb meaning "delay", $\beta \rho \alpha \delta \dot{\vartheta} v \omega_{-}^{*}$ and $\beta \rho \alpha \delta \underline{v} v \omega$, the former of which does not occur in the New Testament, and the latter only as subjunctive, and of course the non-occurring indicative is the citation form. In the examples with $\mathbf{v}$ and $v$ the accents apparently cannot ever show the difference overtly.

[^7]:    ${ }^{24}$ In the different Unicode Greek fonts available on the Internet, these are always spelled $\alpha, \eta, \varphi$ when lowercase, but when uppercase some fonts show them as A, $\underset{Q}{ }$, $\Omega$, including the main Windows fonts such as Times New Roman and Arial, whereas many others show them as $\mathrm{At}, \mathrm{Ht}, \Omega \mathrm{l}$ (e.g. Palatino Linotype). The former are more appropriate for writing Kovv́ Greek, where the $\mathbf{l}$ was no longer pronounced nor written in original texts, whereas the latter are more appropriate for Classical Greek, where the $\mathbf{1}$ was both pronounced and written in the original texts.
    ${ }^{25}$ The one exception is apparently $\underline{\alpha} v$, which was reduced to a simple $\underline{\alpha}$ according to en.wikipedia.org/wiki/Koine Greek phonology\#Diphthongs. This former diphthong is simply written as $\alpha$ in the New Testament, with no indication of its original form.
    ${ }^{26}$ Machen states that "...final $\alpha \mathrm{l}$ and ol... are considered short so far as accent is concerned" (page 13). Now, this rule is not strictly true, but it is at least true for all nouns and for most other parts of speech as well. However, there are certain verb forms for which it is not true, and in fact there are minimal pairs to prove that there is a contrast for length for these two diphthongs in word final position. For example, we have the minimal pair $\pi \varepsilon \rho \iota \sigma \sigma \varepsilon v ̃ \sigma \notin t$ (aorist active infinitive) and $\pi \varepsilon \rho \iota \sigma \sigma \varepsilon v \sigma^{\alpha} \underline{\imath}$ (third person singular aorist optative active) of the verb $\pi \varepsilon \rho \iota \sigma \sigma \varepsilon v \varepsilon \varepsilon v^{\prime}$ "abound", for both of which the accent is a clear indication of the length of the last syllable; the forms $\kappa \alpha \tau \varepsilon v \theta \underline{v} v \notin t$ (aorist active infinitive) and $\kappa \alpha \tau \varepsilon v \theta \underline{\underline{v}} \underline{\alpha}$ (third person singular aorist optative active) from the verb $\kappa \alpha \tau \varepsilon v \theta \underline{\underline{v}} v \omega$ "guide, direct" are comparable. Not quite as good a minimal pair, both because the stress is not on the same syllable, and also because one is a noun and one a verb, are díkalet "righteous" (nominative masculine plu-
    R. Aschmann - March 2, 2018

[^8]:    ral) and $\delta$ ıк人ıô "he acts righteously" (though as evidence for the length contrast they are quite adequate). From this it can be seen that there is a clear length contrast on final $\alpha \mathrm{l}$ and ot.
    ${ }^{27}$ Alternatively, you could say that the $\omega$ is considered short, but this would make even less sense.
    ${ }^{28}$ Historically most circumflexes were produced in this way.

[^9]:    ${ }^{29}$ My friend and Greek scholar John Werner suggested that I add this paragraph, since it makes it clearer for English speakers. Thanks, John!

[^10]:    ${ }^{30}$ One inconsistency of this hybrid pronunciation is that although the Pre-Classical diphthongs $\varepsilon 1$ and 00 had exactly parallel development throughout Greek history this pronunciation system does not show this. To be consistent these should either be pronounced [i:] and [u:] or else [ei] and [ou]. I actually prefer the former, since in Kovv times it is clear that $\varepsilon 1$ was pronounced the same as 1 , quite differently from $\eta$, whereas if $\varepsilon 1$ is pronounced [ei] then English speakers will tend to pronounce it the same as $\eta$.
    ${ }^{31}$ This IPA symbol represents the vowel spelled $u$ in German. The sound of the English letter " y " is [j] in IPA.
    ${ }^{32}$ Pre-Classical Greek also had an additional consonant, the digamma F, which was pronounced as [w], and was completely lost by Kovv́ times, because this sound simply stopped being pronounced. I have not tried to reconstruct any of these for this text, although there almost certainly would be some, since it was a common letter.

[^11]:    ${ }^{33}$ This is not true Modern Greek．See the clarification in the last paragraph before the chart．

[^12]:    ${ }^{34}$ For a guide to this system, see http://www.ahdictionary.com/application/resources/misc/pronkey.pdf, which is the pronunciation guide for the American Heritage Dictionary. The only thing I do differently is that I mark the stressed syllable by underlining it, instead of using an apostrophe after it.
    ${ }^{35}$ This is the pronunciation when this letter is by itself. It can have other sounds when combined, as shown later in the chart.
    ${ }^{36}$ This letter is written $\varsigma$ at the end of a word, $\sigma$ elsewhere.
    ${ }^{37}$ In Pre-Classical Greek this was probably pronounced [dz], but by New Testament times it was apparently a simple [z] sound, and this is more practical!
    ${ }^{38}$ This sound is like the ch in German machen, and is sort of halfway in between the " k " in "kit" and the "h" in "hit". It is not like the $/ \mathrm{ch} /$ sound in English! You may pronounce it like a $/ \mathrm{k} /$ if you like, though it had a distinct pronunciation from the letter K .
    ${ }^{39}$ This is neither the Classical Greek pronunciation nor the Kovv' pronunciation, but it is the Modern Greek pronunciation, and it is the only practical option available in English.

[^13]:    ${ }^{40}$ In places where the ${ }^{\text {e }}$ sound would be too hard to pronounce，you may use the ā sound instead．
    ${ }^{41}$ Actually，for practical purposes you can always use $\bar{e}$ instead of $\overline{\mathrm{i}}$ ．Whichever one is easiest can be used in any particular word．
    ${ }^{42}$ If you are one of those English speakers who pronounce the＂aw＂in＂saw＂the same as the ä in＂fäther＂（and there are millions of you，mainly in the western U．S． and Canada，see aschmann．net／AmEng），then the best thing to do is to pronounce this vowel like $\bar{o}$ in＂nō＂，because o definitely needs to be pronounced differently from $\alpha$ ．This means o and $\omega$ will be pronounced the same，but then，they were in New Testament times anyway！Britishers could pronounce the Greek o vowel like the ŏ in ＂hǒt＂，which for most Britishers is distinct from both the＂aw＂in＂saw＂and the ä in＂fäther＂，and is a phonetically short vowel like Greek o；however，in Greek this vowel often occurs at the end of a word，where ŏ can never occur，so even for Britishers I suggest using the＂aw＂pronunciation．
    ${ }^{43}$ This is the closest English sound；the actual sound was like the／ü／in German güte．This sound should not be pronounced like $\overline{\mathrm{oo}}$ in＂boot＂；this would confuse it with ov ，and these two sounds have always been pronounced quite differently in Greek！
    ${ }^{44}$ Many sources（e．g．Machen）say that $\varepsilon \boldsymbol{\varepsilon}$ should be pronounced the same as $\eta$ ，like $\overline{\mathrm{a}}$ in＂bāke＂，but it is quite certain that in Kotv $\eta$ times $\varepsilon \boldsymbol{\varepsilon}$ was pronounced the same as $\mathbf{l}$ ，but was pronounced quite differently from $\eta$ ．This is a major change from previous editions of this work，where I had followed Machen＇s idea．
    ${ }^{45}$ This is neither the Classical Greek pronunciation nor the Koıv $\eta$ pronunciation，but it is the Modern Greek pronunciation，and it is the closest thing available in Eng－ lish．In English borrowed Greek words containing these diphthongs are usually pronounced yōo，as in＂eulogy＂（yо̄о̄ləjē），but this diphthong has never been pronounced yoo at any point in the history of Greek，nor in borrowed Greek words in any language other than modern English！Of course，there are also some borrowed Greek words in English that do reflect the Modern Greek pronunciation，like＂evangelize＂．
    ${ }^{46}$ Actually the two＂diphthongs＂$\varepsilon 1$ and ov had already become simple long vowels also by the Classical Greek period，so Classical Greek actually had seven long vow－ els，but this is irrelevant to my point，which is a discussion of the five simple written vowels．If you are really interested，read $\S 2.1$ on page $\mathbf{3}$ and $\S 2.1 .2 .4$ on page 8 ．

[^14]:    ${ }^{47}$ In some cases the evidence for vowel length can be taken directly from the word itself, in its various forms, as used in the New Testament, often based on the accents used, especially the length information on suffixes. However, in other cases the information on the length of vowels in stems comes only from information known about the vowel length of particular words in Classical Greek. Length can frequently be determined from poetry in Classical Greek, in which the meter often depends on vowel length (I obtained most of this from Liddell and Scott). In some cases I have settled on the length of the vowel by consulting its Proto-Indo-European derivation, and occasionally I have based my decision on the Hebrew origin of a name. In the case of this indirect evidence, the relevant vowels are colored blue to show that the length information is not derived strictly from New Testament evidence.

[^15]:    ${ }^{49}$ The declension of the $\boldsymbol{F F X}^{1}$ and $\mathbf{1 F \boldsymbol { y } ^ { 1 }}$ adjectives in the feminine is very confusing: in the New Testament the genitive and dative singular forms clearly have $\tilde{\alpha}$ rather than $\tilde{\eta}$ in the five cases that occur, accusative $\chi \rho \underline{v} \sigma \tilde{\alpha} v$ in Rev. 1:13, accusative $\sigma t \delta \eta \rho \tilde{\alpha} v$ in Acts 12:10, and dative $\sigma t \delta \eta \rho \tilde{\alpha}$ in Rev. 2:27, 12:5, and 19:15, so this is clearly the pattern in New Testament times. On the other hand, the nominative and genitive forms just as clearly have $\tilde{\eta}$ in the New Testament, as shown by $\chi \rho \underline{\jmath} \tilde{\eta}$, $\sigma \iota \delta \eta \rho \tilde{\eta} \varsigma$, and $\delta t \pi \lambda \tilde{\eta} \varsigma$. However, in the Septuagint all the singular forms of $\chi \rho \underline{v} \sigma \tilde{\eta}$ have an $\tilde{\eta}$, and this is the standard declension according to ucbclassics.dreamhosters.com/ancgreek/paradigmsU/paradigmtables2BOM.html. But clearly in the New Testament it is not! Even more confusing, in the Septuagint $\sigma \iota \delta \eta \rho \tilde{\alpha}^{(s)}$ is declined like $\mathbf{1 F z}$ !
    ${ }^{50}$ This is according to Moulton. I would have assumed $\chi \rho \underline{\underline{v} \sigma \varepsilon ́ \alpha}$, by analogy with the others.

[^16]:    ${ }^{51}$ This adjective was originally $\chi \rho \underline{\underline{v}} \sigma \varepsilon \sigma \varsigma, \chi \underline{\underline{v} \sigma \varepsilon ́ \eta, ~ \chi \rho \underline{́} \sigma \varepsilon \sigma v \text { before it was contracted. See also footnote } 50 . . . . . . ~}$
    ${ }^{52}$ The feminine forms almost always follow this declension along with masculine ones: only two feminine occurrences are First Declension, both $\alpha i \omega v i ́ \alpha v$, in 2 Th. 2:16 and Heb. 9:12.
    ${ }^{53}$ I had initially thought that it did belong to this declension, and even that it set the pattern for it in the singular, because it matched the forms occurring in the New Testament. However, the Septuagint forms demonstrate that it does not.

[^17]:    ${ }^{54}$ These three cases are some of the very few third declension nouns that show a difference between the nominative and the vocative，and none of these vocatives actually occurs in the New Testament or the Septuagint．（Other than $\mu \dot{\varepsilon} \lambda \alpha v$, I have found no third declension adjectives at all that have a distinct vocative．）Apparently the only other cases are the irregular declensions in the chart below，and in many contracted third declensions．

[^18]:    ${ }^{55}$ Friberg treats these forms as adverbs rather than as neuter nominative singular forms，but since the neuter nominative singular is frequently used adverbially，I have

[^19]:    ${ }^{56}$ Or once M $\omega \ddot{\forall} \sigma \tilde{\eta}$ ，in Acts 7：44．However，in the Septuagint，M $\omega \ddot{\forall} \sigma \varepsilon \tilde{\imath}$ only occurs a few times，whereas M $\omega \ddot{\forall} \sigma \tilde{\eta}$ occurs in the vast majority of cases．
    ${ }^{57}$ Or once M $\omega \ddot{\forall} \sigma \varepsilon ́ ध$ ，in Luke 16：29．This never occurs in the Septuagint．

[^20]:    ${ }^{58}$ This form $\dot{\eta} \mu i ́ \sigma \eta$ does not occur in the United Bible Societies text（Aland，et al），but does occur in the Textus Receptus and some others．See bibleapps．com／study／luke／19－8．htm．
    ${ }^{59}$ It might seem odd that a word meaning＂female＂can occur in masculine or neuter gender，but it can．In the New Testament it occurs several times in the neuter，in Mat．19：4，Mark 10：6 and Gal．3：28，in each case contrasted with $\ddot{\alpha} \rho \sigma \varepsilon v$＂male＂，also in the neuter．The Septuagint has many similar examples，e．g．Gen．1：27．In Lev．4：32 it is neuter because it modifies $\pi \rho$ ó $\beta \alpha \tau o v$＂lamb＂，which is neuter．For the same reason，in the apocryphal book of 2 Maccabees 7：21 it is masculine because it modifies a mas－ culine noun：$\theta \tilde{\eta} \lambda \nu v \lambda o \gamma \iota \sigma \mu o ̀ v$＂womanly emotion＂（Good News Translation）．（The same occurs in other languages with gender systems，like Spanish，in which the adjective femenino can be either feminine or masculine，depending on what it is modifying．

[^21]:     Second Declensions．
    ${ }^{61}$ No regular participles have inherently penultimate accent except for the Aorist Passive，but many irregular ones do．

[^22]:     curs twice in the Septuagint, in Gen. 42:15, 16.

[^23]:    ${ }^{66}$ Though they both have a $-\sigma$ - in the suffix in the regular verbs, according to en.wikipedia.org/wiki/Proto-Indo-European verbs the Aorist is derived from the Indo-

[^24]:    

[^25]:    （or its derivatives）

[^26]:    ${ }^{68}$ Moulton ( $(\mathbb{X I I})$ says that the vowel is short in the Continuous forms, and in earlier versions of this article I had assumed that he was right, but he clearly is not.

[^27]:    ${ }^{69}$ Adapted from www.ntgreek.net/lesson27.htm.

[^28]:    86 All of the "liquid" verbs are odd, especially as regards the changes that occur to the stem vowel, which is why so many conjugations are given.
     aorist and future examples for ò $\varphi \rho i \lambda \omega$.) The same is true of several others, including $\mu$ and the various forms of $\dot{\varepsilon} \gamma \varepsilon \dot{p} \rho \varepsilon i v$.

    The examples for $\lambda \lambda$ are especially interesting since in them the $\lambda \lambda$ is reduced to $\lambda$ in the aorist and perfect systems.
    
    ${ }^{88}$ This verb and its derivatives do not occur in the New Testament, only in the Septuagint, but are fairly common there, and con firm some of the forms for paiveiv*, which they seem to match for all forms except Aorist Passive.
    ${ }_{8}^{89}$ I do not understand why this aorist infinitive is not $\alpha \dot{v} \xi \tilde{\xi} \tilde{\eta} \neq t^{(s)}$, but all of the sources for the Septuagint show it this way. The perfect passive infinitive also shows this irregularity in at least one source.
    ${ }^{90}$ The $\eta$ in these forms is not really an irregularity, but is simply the augment or reduplication of $\alpha$ or or $\alpha$. Forms like $\dot{\varepsilon} \pi \tilde{\alpha}$ ofet show that this is the case.

[^29]:    ${ }^{91}$ It may not seem like this verb y its derivatives are reduplicated，but the initial $\sigma[\mathrm{s}$ ］was changed to ［ h ］by a general sound change affecting nearly all initial $\sigma$＇s．
    ${ }^{92}$ Occasional forms of this verb group are not constructed like $-\mu \mathrm{t}$ Verbs．

[^30]:    ${ }^{93}$ This is a bit surprising，since $\pi \iota \sigma \tau$ ós doesn’t look at all like $\pi \varepsilon i \theta \varepsilon \iota v^{*}$ ，but instead looks like it should be derived from $\pi \iota \sigma \tau 0 \tilde{v^{*}}$ or $\pi \iota \sigma \tau \varepsilon v ́ \varepsilon ı v$ ．However，the reality is that all of these forms derive from $\pi \varepsilon i \theta \varepsilon \iota \nu^{*}$ ，which makes it a bit more logical．

