

DECLENSION

D0. THE GREEK DECLENSION SYSTEM

D0.1 THE NATURE OF DECLENSION

D0.11 There are two types of inflection in Greek: the addition to the stem of (a) suffixes with person and number – the *pronoun suffixes* of the verb (which are dealt with in Appendix C); and (b) suffixes with number and case, the *numbercase suffixes*. Each numbercase suffix is a single morph which cannot be further subdivided and which simultaneously indicates both the number and the case of the word.

D0.12 The words which take numbercase suffixes are: nouns, adjectives, pronouns, participles, and the article. The *number* aspect of the suffix indicates either singular or plural. The *case* aspect of the suffix indicates the relationship of the word to the rest of the sentence (see #2.2ff. and #8.1ff.).

D0.13 To set out the range of numbercase forms for a word is to *decline* it. A group of words which all follow the same basic pattern of declining their forms comprise a *declension*. There are three declensions in Greek (which for convenience can be designated D1, D2, and D3). A set of the forms for a word, with the different numbercase suffixes, is called a *flexion*. Where a particular flexion provides a pattern for the way in which the numbercase suffixes are added to a particular stem phoneme, this is called a *paradigm*. Usually a particular paradigm will be followed by a number of words, but in some instances it can happen (especially with the Third Declension) that in the New Testament only a small number of words – perhaps only a single word – will occur which ends in a particular phoneme or phoneme group. Thus paradigms occur which are followed by a very few New Testament words, perhaps by only one.

D0.14 There are two different orders which are used by grammarians for setting out the forms of a flexion. Some grammar books use the order: nominative, vocative, accusative, genitive, dative; others prefer: nominative, genitive, dative, accusative, vocative. The preponderance of reasons favours the first of these alternatives, as the footnote explains.³⁶ This therefore is the order in which the forms of a flexion are given in this book. It is suggested that students will find it advantageous to use *this order for learning them*.

D0.2 THE FORMATION OF DECLENSION FLEXIONS

D0.21 There are two ways in which Greek adds the numbercase suffixes to produce the forms of the Declension flexions: either (a) directly to the noun root, or word-base; or (b) with a “linking” vowel.

D0.22 This *linking vowel* or *link vowel* may be either *-α-* or *-ο-*. Thus for words which use a linking vowel, the *stem* consists of the *root* plus the *linking vowel*, which may therefore also be described as the *stem vowel*. In contrast, when the root itself ends in a vowel, this vowel can be referred to as the *root vowel*. (The link vowel has no meaning and therefore is not itself a morph – see #E3.36.)

D0.23 A number of nouns take *-α-* as their stem vowel and these together comprise the First Declension. All those which take *-ο-* as their stem vowel comprise the Second Declension. Those

which have no stem vowel, adding the numbercase suffixes directly to their root, comprise the Third Declension.

D0.24 The stem vowel undergoes some modification as follows:

(a) The $-\alpha$ - stem vowel lengthens to $-\eta$ - in the *singular* of all words except those with the root ending in $-\rho$, $-t$, $-\varepsilon$, a sibilant, or some specific words;

(b) The $-o$ - stem vowel shortens further to $-\varepsilon$ - in the vocative.

D0.25 It is interesting to compare these delineating features of the three Declensions with the form of the aspect morph which is added in the formation of the aorist active and middle of the three verb Conjugations:

| Declension/Conjugation: | First | Second | Third |
|--|-------------------|---------------------------|-------|
| Nouns: stem vowel added to noun root: | $-\alpha$ - | $-o$ -($-\varepsilon$ -) | none |
| Aorist of verbs: aspect morph added to verb root: | $-\sigma\alpha$ - | $-o/\varepsilon$ - | none |

D0.26 The numbercase suffixes added to the noun stem to give its forms are:

| SUFFIX | VARIANTS FOR MASC. & FEM. WORDS | VARIANTS FOR NEUTER WORDS |
|--|--|---|
| S N ζ V $\emptyset\ddagger$ A v | But $\emptyset\ddagger$ in D1 feminine. Last vowel shortens if possible Consonant stems (D3) take $-\alpha$. | In place of ζ , take v or $\emptyset\ddagger$. Identical with nominative. Identical with nominative. |
| G ζ or o or $o\zeta$ D i | D1 takes $-\zeta$, D2 takes $-o$, and D3 takes $-o\zeta$. D1 & D2: Stem v . lengthens; $-i$ subscript; D3: Root v . stays as is. | |
| P NV i or $\varepsilon\zeta$ A $\alpha\zeta$ | D1 & D2 take $-i$, D3 takes $-\varepsilon\zeta$. But $-\varepsilon\zeta$ after a vowel. | Always adds $-\alpha$ to root. Identical with nominative. |
| G ωv D $i\zeta$ or σi | Stem vowel (but not usually root vowel) contracts with $-\omega v$. D1 and D2 take $i\zeta$, but D3 takes σi . | |

Note: v . in this Table is an abbreviation for "vowel".

$\ddagger\emptyset$ indicates zero, the absence of any phoneme, where this absence of a phoneme is itself of significance and thus is a morph. (This is known as a *zero morph*.³⁷)

D0.27 Contraction of vowels will take place when the numbercase suffix as above is added to a stem or root vowel. Thus:

| | |
|-------------------|--|
| S G | $\kappa\rho\iota\omega + o \rightarrow \kappa\rho\acute{\iota}\omega$; $\gamma\epsilon\nu\epsilon(\sigma) + o\zeta \rightarrow \gamma\acute{\epsilon}\nu\omega\zeta$; but $\pi\omicron\lambda\epsilon + o\zeta \rightarrow \pi\acute{o}\lambda\epsilon\omega\zeta$ |
| D | $\kappa\alpha\rho\delta\iota\alpha + i \rightarrow \kappa\alpha\rho\delta\acute{\iota}\alpha$; $\kappa\rho\upsilon\iota\omega + i \rightarrow \kappa\rho\acute{\upsilon}\iota\omega$; $\pi\omicron\lambda\epsilon + i \rightarrow \pi\acute{o}\lambda\epsilon\iota$ |
| P N | $\phi\omega\nu\alpha + i \rightarrow \phi\omega\nu\acute{\alpha}\iota$; $\kappa\rho\upsilon\iota\omega + i \rightarrow \kappa\acute{\upsilon}\rho\iota\omega\iota$; $\pi\omicron\lambda\epsilon + \varepsilon\zeta \rightarrow \pi\acute{o}\lambda\epsilon\iota\zeta$ |
| A | $\kappa\alpha\rho\delta\iota\alpha + \varepsilon\zeta \rightarrow \kappa\alpha\rho\delta\acute{\iota}\alpha\zeta$; $\kappa\rho\upsilon\iota\omega + \varepsilon\zeta \rightarrow \kappa\rho\acute{\upsilon}\iota\omega\zeta$; $\beta\alpha\sigma\iota\lambda\epsilon + \varepsilon\zeta \rightarrow \beta\alpha\sigma\iota\lambda\acute{\epsilon}\iota\zeta$ |
| G | $\phi\omega\nu\acute{\alpha} + \omega\nu \rightarrow \phi\omega\nu\acute{\omega}\nu$; $\kappa\rho\upsilon\iota\omega + \omega\nu \rightarrow \kappa\rho\acute{\upsilon}\iota\omega\nu$; but $\beta\alpha\sigma\iota\lambda\epsilon + \omega\nu \rightarrow \beta\alpha\sigma\iota\lambda\acute{\epsilon}\omega\nu$ |

Only limited contraction occurs when vowels are brought together by the disappearance of digamma (as for example in regard to $\beta\alpha\sigma\iota\lambda\acute{\epsilon}\omega\nu$; see #D3.4).

D0.28 The genitive singular of D1 masculine words takes the D2 ending (stem vowel $-o$ - plus numbercase suffix $-o$, $\rightarrow \omega$), as in $\mu\alpha\theta\eta\tau\omega$), thus differentiating this form from the nominative singular ($\mu\alpha\theta\eta\tau\acute{\eta}\zeta$) with which it would be identical if it were to have taken the usual D1 genitive singular ending.

D0.29 These factors give rise to the various paradigms within each of the three Declensions.

D1. THE FIRST DECLENSION

There are five paradigms of the First Declension:

| | | FEMININE NOUNS | | | MASCULINE NOUNS | |
|-------|----------|-------------------|-----------------|-----------------|------------------------|-----------------------|
| | | D1.1 ριε root | D1.2 c. root | D1.3 σ root | D1.4 ριε root | D1.5 c. root |
| | | ἡ καρδία heart | ἡ φωνή voice | ἡ δόξα glory | ὁ νεανίας young man | ὁ μαθητής disciple |
| STEM: | | καρδι+α | φων+α | δόξ+α | νεανι+α | μαθητ+α |
| S | N | καρδία | φωνή | δόξα | νεανίας | μαθητής |
| | V | — | — | — | νεανία | μαθητά |
| | A | καρδίαν | φωνήν | δόξαν | νεανίαν | μαθητήν |
| | G | καρδίας | φωνῆς | δόξης | νεανίου | μαθητοῦ |
| P | D | καρδία | φωνῆ | δόξη | νεανία | μαθητῆ |
| | N | καρδίαι | φωναί | δόξαι | νεανίαι | μαθηταί |
| | A | καρδίας | φωνάς | δόξας | νεανίας | μαθητάς |
| | G | καρδιῶν | φωνῶν | δοξῶν | νεανιῶν | μαθητῶν |
| D | καρδίαις | φωναῖς | δόξαις | νεανίαις | μαθηταῖς | |

D1.6 NOTES ON THE FIRST DECLENSION

D1.61 First Declension nouns have the characteristic that they all add the *linking vowel* *-α-* to the noun *root* to form their *stem*, before taking their numbercase suffixes. But (as explained below) some words lengthen this vowel to *-η-* throughout the singular, and a few lengthen the *-α-* to *-η-* in the genitive and dative singular only. There are also some differences between masculine and feminine forms. These factors produce the five paradigms of the singular – there is only one pattern for the plural of the First Declension.

| | | |
|-------------------------------|-------------------------------|-------------------------------|
| root ending φων-η-∅ | root ending καρδι-α-ν | root ending μαθητ-α-ις |
| stem numbercase suffix | stem numbercase suffix | stem numbercase suffix |

D1.62 The numbercase suffix for the nominative singular of the feminine paradigms is ∅, the zero morph. That is, it is the fact that *there is nothing added to the stem* which indicates that the form is nominative singular. There is no separate feminine form of the vocative, and the nominative form is used for vocative when required. The numbercase suffix for the dative singular is *-ι*, which in the First Declension is always written subscript. In the genitive plural the linking vowel *-α-* plus the numbercase suffix *-ων* have contracted into *-ῶν*, and thus in this Declension the *-ῶν* always carries the circumflex accent. It is at times useful to note that a genitive plural in *-ων* (that is, without the circumflex) therefore cannot be First Declension and must be either Second or Third Declension (or in fact not actually a genitive plural at all), while a genitive plural in *-ῶν* could be First, Second, or Third Declension.

D1.63 When the root of a First Declension feminine noun ends in *-ρ*, *-ι* or *-ε*, then the linking vowel is *-α-* throughout, as for *καρδία*, D1.1. (*-α* following *-ρ*, *-ι* or *-ε* is often referred to by grammarians as “*-α* pure”.) The nouns with roots ending in *-ρ*, *-ι* or *-ε* can be collectively categorized as “*ριε* nouns”, and their paradigm, D1.1, called the “*ριε* paradigm”.) There are 310 New Testament words which follow this paradigm (including one word, *στοά*, which is irregular in that it takes *-α-* after a root letter that is not *-ρ*, *-ι*, or *-ε*³⁸).

D1.64 When the root of a First Declension feminine noun ends in a consonant or a vowel other than *-ρ*, *-ι* or *-ε*, then (unless it follows the *-σ* paradigm D1.3) the linking vowel *-α-* lengthens to *-η-* in all forms of the singular. This paradigm (D1.2, consonant root, abbreviated to *c.* root) is followed by 191 New Testament words, 185 of them with a consonant root, four ending in *-ση* (*ἀκοή* and its compounds; *ἀλόη*, *βοή*, and *πνοή*), one in *-ωη* (*ζωή*), and one in *-ευή* (*παρασκευή*). It is therefore referred to as the “feminine Consonant Stem Paradigm”.

D1.65 When the root of a First Declension feminine noun ends in a sibilant (*-ζ*, *-σ*, or a double letter containing *σ*), then the linking vowel *-α-* is retained in the nominative and accusative singular, but lengthens to *-η-* in the genitive and dative singular, as for *δόξα*. This paradigm (D1.3) is therefore referred to as the “Sigma Stem Paradigm” or “Sibilant Paradigm”. There are also four nouns in *-ρα* (see below) which are irregular in that instead of following *καρδία* (the *ριε* Paradigm) they decline like *δόξα*. Further, there are ten nouns in the New Testament which are irregular in taking *-α-* as their linking vowel in their lexical form (the nominative singular) when they have a root ending in a consonant; all of these nouns follow *δόξα*. There are in the New Testament a total of 22 nouns which follow *δόξα*:

| SIBILANT ROOT (8 nouns) | ριε ROOT (4 nouns) | CONSONANT ROOT (10 nouns) |
|----------------------------|---------------------------|-----------------------------------|
| <i>βασίλισσα</i> (4) queen | <i>μάχαιρα</i> (29) sword | <i>ἀκανθα</i> (14) thornplant |
| <i>γάζα</i> (1) treasury | <i>πλήμμυρα</i> (1) flood | <i>γάγγραινα</i> (1) gangrene |
| <i>γλῶσσα</i> (50) tongue | <i>πρόρα</i> (2) prow | <i>γέεννα</i> (12) gehenna |
| <i>δόξα</i> (165) glory | <i>σπεῖρα</i> (7) cohort | <i>ἐχίδνα</i> (5) snake |
| <i>θάλασσα</i> (91) sea | | <i>θύελλα</i> (1) whirlwind |
| <i>ρίζα</i> (16) root | | <i>μεμβράνα</i> (1) parchment |
| <i>τράπεζα</i> (15) table | | <i>μέριμνα</i> (6) concern |
| <i>χάλαζα</i> (4) hail | | <i>πρύμνα</i> (3) stern (of boat) |
| | | <i>πτέρνα</i> (1) heel |
| | | <i>σύρνα</i> (2) myrrh |

(The number after each word indicates the number of times it occurs in the New Testament.)

D1.66 When a First Declension noun is masculine, then (like the feminine) it also takes *-α-* as its linking vowel after *ριε* roots, and lengthens this to *-η-* after other roots. It has four masculine distinctive characteristics: (a) There is no equivalent to the *δόξα* Paradigm; (b) It adds the characteristic masculine *-ς* in the nominative singular; (c) It takes *-ου* as its genitive singular ending (stem vowel *-ο-* contracted with numbercase suffix *-ο*); (d) It has a separate vocative singular form, in *-α* (occasionally, in *-η* for some masculine names in *-ης*). (Note that in features (b) and (c) the First Declension masculines parallel the Second Declension.) Apart from these features, D1 masculine nouns follow the same pattern of declension as the feminines.

D1.67 Some proper names have forms that differ slightly from those given in the above five paradigms. These differences usually affect only one letter in a single numbercase form and are thus not likely to prevent recognition of the word, and forms containing these differences occur very rarely in the New Testament, so it is not considered necessary to list them all here.

D1.68 Of the 635 First Declension nouns in the New Testament (excluding names), 82% (523) are feminine, and 18% (112) are masculine. There are no neuters of the First Declension in Greek.

D2. THE SECOND DECLENSION

There are two commonly-occurring paradigms of the Second Declension found in the New Testament, together with the special flexion for *Ἰησοῦς*, “Jesus”. For convenience of understanding and learning, they are given here with the article, and meanings.

| D2.1 MASCULINE NOUNS | | | | D2.2 NEUTER NOUNS | | | | D2.3 |
|----------------------|---|------|--------|----------------------|------|--------|---------------------|-----------------|
| ὁ λόγος the word | | | | τὸ ἔργον the work | | | | Ἰησοῦς Jesus |
| STEM: λογ+ο | | | | ἐργ+ο | | | | Ἰησο+ο |
| S | N | ὁ | λόγος | the word (subject) | τὸ | ἔργον | the work (subject) | Ἰησοῦς |
| | V | | λόγε | O word! | | ἔργον | O work! | Ἰησοῦ |
| | A | τὸν | λόγον | the word (object) | τὸ | ἔργον | the work (object) | Ἰησοῦν |
| | G | τοῦ | λόγου | of the word | τοῦ | ἔργου | of the work | Ἰησοῦ |
| | D | τῷ | λόγῳ | to/for the word | τῷ | ἔργῳ | to/for the work | Ἰησοῦ |
| P | N | οἱ | λόγοι | the words (subject) | τὰ | ἔργα | the works (subject) | |
| | A | τούς | λόγους | the words (object) | τὰ | ἔργα | the works (object) | |
| | G | τῶν | λόγων | of the words | τῶν | ἔργων | of the works | |
| | D | τοῖς | λόγοις | to/for the words | τοῖς | ἔργοις | to/for the works | |

D2.4 NOTES ON THE SECOND DECLENSION

D2.41 The New Testament also contains a very small number of forms from other Second Declension paradigms: the contracted neuter noun ὄστον, “bone” (nominative and accusative plural, ὀστέα), and Ἀπολλῶς, “Apollos”, with lengthened stem vowel, and a negligible number of other words. A Greek commentary will comment on these words when they are encountered.

D2.42 Second Declension nouns have the characteristic that they all add the *linking vowel -o-* to the noun *root* to form their *stem* before taking their numbercase suffixes. In the vocative singular the *linking* or *stem vowel* shortens further to *-ε*, and in the dative singular and genitive plural it lengthens to *-ω*. Where the word’s accent falls on the final syllable the genitive plural will carry the circumflex, *-ῶν*, and where the accent falls on an earlier syllable the genitive plural will have an acute on the syllable before last, *-ων*.

D2.43 Counting simplex and compound forms of a noun as one noun, and omitting names, there are 595 Second Declension nouns in the New Testament, 58% (347) of which are masculine in *-ος*, and 33% (196) of which are neuter in *-ον*. In addition there are 5% (28) which are feminine, 2% (11) which can be either masculine or feminine and indicate a sex difference for the word (as for example, ὁ θυρωρός, “male doorkeeper”; ἡ θυρωρός, “female doorkeeper”), and 2% (11) which may be either masculine or feminine without indicating any difference of meaning of any kind; all these 50 words which either *are* or *can be* feminine end in *-ος* and follow the paradigm of λόγος exactly but, being feminine (or, when feminine) take the feminine, not masculine, article.

D2.44 These 28 feminine nouns (and the times each of them occurs) are:

| | | | | | |
|------------|----------------|-------------|----------------------|-----------|-------------------|
| ἄβυσσος | (9) the abyss | καλλιέλαιος | (1) cultivated olive | παράλιος | (1) seacoast |
| ἀγριέλαιος | (2) wild olive | κάμινος | (4) furnace | ῥάβδος | (12) rod, staff |
| ἀμέθυστος | (1) amethyst | κιβωτός | (6) box, ark | Ῥόδος | (1) Rhodes |
| ἄμμος | (5) sand | νάρδος | (2) oil of nard | σάπφειρος | (1) sapphire |
| ἄμπελος | (9) vine | νῆσος | (9) island | σορός | (1) coffin |
| βάσανος | (3) torment | νόσος | (11) illness | σποδός | (3) ashes |
| βίβλος | (10) book | ὁδός | (101) way, road | στάμνος | (1) a jar |
| βύσσος | (1) fine linen | διέξοδος | (1) thoroughfare | συκάμινος | (1) mulberry tree |
| διάλεκτος | (6) a language | εἴσοδος | (5) entrance | τρίβος | (3) beaten path |
| δοκός | (6) log, beam | ἔξοδος | (3) departure | τροφός | (1) a nurse |
| ἐρημος | (34) a desert | πάραδος | (1) passage | ψῆφος | (3) pebble, vote |

(This list includes *Πόδος*, a name, and four compounds of *ὄδος*; these are not included in the tally of 28 feminine Second Declension nouns.) In addition, *περίχωρος*, -ον, “neighbouring”, a compound two-termination adjective (#5.62, #D4.03) occurring 9 times in the New Testament, is used with the feminine article (*ἡ περίχωρος*, with *γῆ* understood) for “the surrounding region”, thus functioning as if a Second Declension feminine noun.

D2.45 The 22 nouns which can vary in gender (and the times they occur) are:

Can Be Either Masculine or Feminine Indicating Sex of the Person/Animal

| | |
|---------------|--------------------------|
| ἄρκος | (1) bear |
| διάκονος | (29) servant, deacon |
| ἔριφος | (2) kid, goat |
| θεός‡ | (1314) god, goddess |
| θυρωρός | (4) doorkeeper |
| κάμηλος | (6) camel |
| κληρονόμος | (15) heir |
| συγκληρονόμος | (4) fellowheir |
| μόσχος | (6) calf, young bull, ox |
| νεωκόρος | (1) templekeeper |
| ὄνος | (6) donkey, ass |
| παρθένος | (15) virgin |

συγκληρονόμος is a compound of *κληρονόμος*.

† These three words can also be Second Declension neuter, with a neuter article (again, without there being any difference in their meaning).

‡ In the N.T., *θεός* is feminine only once (in Acts 19:37). But the feminine form *θεά* also occurs once (in Acts 19:27).

Can Be Either Masculine or Feminine With No Difference in Word Meaning

| | |
|----------------|----------------------|
| † ἀλάβαστρος | (4) alabaster flask |
| ἄψινθος | (2) wormwood |
| βάτος | (5) thornbush |
| βήρυλλος | (1) beryl |
| ληνός | (5) winepress |
| λίβανος | (2) frankincense |
| λιμός | (12) hunger, famine |
| μάρμαρος | (1) marble |
| σμάραγδος | (1) emerald |
| † ὕσσωπος | (2) hyssop |
| † χαλκολίβανος | (2) burnished bronze |

D3. THE THIRD DECLENSION

D3.0 GENERAL RULES FOR THIRD DECLENSION WORDS

D3.01 The Third Declension consists of those words for which the numbercase suffixes are added directly to the word root, without any linking vowel. Their noun root thus also becomes their stem. The flexion patterns of these words are determined by two main factors: their gender, and their stem phonemes. Gender makes a difference to the numbercase suffixes. Also, the words fall into different categories according to whether the stem ends in a vowel or a consonant (and are further subdivided into paradigms by the nature of the last phoneme of the stem – there are different paradigms for labials, palatals, dentals, liquids, and so on). Accordingly the behaviour of these words can be described by means of rules relating to their gender and their stem phonemes. Most of the paradigms of Third Declension words are regular, that is to say, all the forms of their flexions can be predicted from their nominative and genitive singular forms on the basis of these descriptive rules (given below); in a small number of words, alternative ways are used for handling the conjunction of stem and suffix. Some stems originally ended in digamma, and when this dropped out of Greek (# 1.21) this left some complications for the digamma words. In addition, there are several words which have unexpected ways of forming their nominative singular form from their stem and are therefore to be classed as irregular; and there are a few which are irregular in other forms.

D3.02 Some Third Declension adjectives do not have separate masculine and feminine forms, but have a flexion which is common to both masculine and feminine. Such a flexion can be said to be *common gender*, or (more informatively), *personal gender*, in contradistinction from the neuter gender.

D3.03 The stem of a word is obtained by removing the genitive singular suffix (usually $-ος$, but in a small number of paradigms it has lengthened to $-ως$); but account must also be taken of some words which use *two* stems in deriving the full range of forms for their flexion, and of other words which have lost the final digamma or sigma of their stems and then contracted.

D3.04 The masculine nominative singular (or the personal nominative singular, where there is no separate feminine gender), and the feminine nominative singular of some nouns, is formed by adding the numbercase suffix $-ς$ to the stem. This suffix is *never* added by the *neuter* nominative singular, but there are some neuter words which have their *stem* ending in $-ς$, and for this reason these will have their nominative singular form ending in $-ς$.

D3.05 To form the Third Declension masculine or feminine accusative singular, words with a vowel stem add $-ν$, and words with a consonant stem add $-α$. For all other flexion forms, both vowel- and consonant-stem words take the same numbercase suffixes.

D3.06 As is universally the case in Greek declension, Third Declension neuter nominative, vocative and accusative forms are the same as each other, within both the singular and the plural; and in the plural the form for these three cases always adds $-α$ to its stem as its numbercase suffix.

D3.07 As a Greek word can only end (#1.64) in a vowel or in $-ν$, $-ρ$ or $-ς$ (including $-ψ$ and $-ξ$), then whenever the form of a word ends in one of the other consonants this consonant will drop off. This situation will occur in particular when a stem ends in a “not-permitted-as-final” phoneme and the word form consists of the stem only (for example, numbers of Third Declension vocatives, and the neuter nominative-vocative-accusative singular of many Third Declension words).

D3.08 In general, the phonemic modification rules which apply to verbs operate for nouns also: a labial plus $-σ$ becomes $-ψ$, a palatal plus $-σ$ becomes $-ξ$, a dental drops out before $-σ$, and $-σ$ drops off when added to a liquid. $-σ$ is *usually* incompatible with an oral liquid, though some rare instances exist where $-λς$ and $-ρσ$ occur together. In most words where $-ν$ and $-ς$ are brought together, the $-ς$ simply slides off the nasal liquid; in a few forms the $-ς$ forces the $-ν$ out of the word; at no time can $-ν$ and $-ς$ coexist together in the sequence $-νσ$ - or $-νς$ in a word (except in some words of foreign origin).

D3.09 In Third Declension consonant-stem words, a short vowel can stand as the last vowel of the nominative singular form only (a) when followed by a double consonant (e.g., $φλόξ$, “flame”); or (b) when the word is neuter (e.g., $ἓν$, “one thing”); but not otherwise. In a word from which no stem consonant has been lost, or which had two consonants at the end of its stem and has lost one but retained one, then the last vowel if $-ε$ - will lengthen to $-η$ -, and if $-ο$ - will lengthen to $-ω$ - (e.g., $ἄστερ$ - to $ἀστήρ$; $ἡγεμον$ - to $ἡγεμών$; $ἄρχοντ$ - to $ἄρχων$; $αἰδοσ$ - to $αἰδώς$). Where a stem consonant has been lost through the addition of a suffix, then *compensatory lengthening* occurs: $-ε$ - to $-ει$ - and $-ο$ - to $-ου$ - (e.g. $ποδ$ - takes the $-ς$ suffix of the nominative singular and becomes “ $ποδς$ ” and thence (when the $-δ$ drops out in front of the $-ς$) $πούς$; $ἓν$ takes the $-ς$ suffix and becomes $ἕνς$, the $-ν$ - drops out and the form becomes $εἶς$). In the dative plural the rule is slightly different: As the last vowel of the stem is always followed by a full syllable, $-σι(ν)$, it can always remain short, and will do so even if one stem consonant is lost (e.g., $ἡγεμον$ - $σιν$ becomes $ἡγεμόσιν$; $ποιμεν$ - $σιν$ becomes $ποιμέσιν$). However, when *two* stem consonants have been lost, then compensatory lengthening occurs ($ἄρχοντ$ - $σιν$ loses first $-τ$ - and then $-ν$ - and becomes $ἄρχουσιν$; $λυθεντ$ - $σιν$ loses $-τ$ - and $-ν$ - and becomes $λυθεῖσιν$). Thus also $ὀδούς$, $ὀδόντος$ in the nominative singular.

NOTE: The widest range of paradigms for different stem phonemes is found for nouns, and these are now given: the regular paradigms first (D3.1–D3.20), followed by the irregular nouns in each of these categories (D3.21–D3.40).

D3.1–D3.5 VOWEL STEM NOUNS

| | | | STEMS IN <i>υ</i> AND <i>ι</i> | | STEMS IN A CONSONANT WHICH DROPS OUT | | |
|---------|---|--------|--------------------------------|-----------------|--------------------------------------|--------------------|------------------|
| | | | D3.1 | D3.2 | D3.3 | D3.4 | D3.5 |
| | | | ὁ ἰχθύς fish | ἡ πόλις city | ὁ βοῦς ox | ὁ βασιλεύς king | τὸ γένος race |
| STEM: | | | ἰχθυ- | πόλι-/ε- | βοϝ- | βασιλεϝ- | γενεσ- |
| ENDING: | | | | | | | |
| S | N | -ς | ἰχθύς | πόλις | βοῦς | βασιλεύς | γένος |
| | V | - | ἰχθύ | πόλι | βοῦ | βασιλεῦ | — |
| | A | -υ | ἰχθύν | πόλιν | βοῦν | βασιλέα | γένος |
| | G | -ος | ἰχθύος | πόλεως | βοός | βασιλέως | γένους |
| | D | -ι | ἰχθύι | πόλει | βοί | βασιλεῖ | γένει |
| P | N | -ες | ἰχθύες | πόλεις | βόες | βασιλεῖς | γένη |
| | A | -ας | ἰχθύας | πόλεις | βόας | βασιλεῖς | γένη |
| | G | -ων | ἰχθύων | πόλεων | βοῶν | βασιλέων | γενῶν |
| | D | -σι(υ) | ἰχθύσι(υ) | πόλεσι(υ) | βουσί(υ) | βασιλεῦσι(υ) | γένεσι(υ) |

D3.1 ἰχθύς (stem in *-υ*) adds the numbercase suffixes to its stem in completely regular fashion throughout. There is one neuter word that is found in the New Testament which has its stem in *-υ*: δάκρυ, “a tear”, dative plural δάκρυσιν (note that the neuter does not add the suffix *-ς* in the nominative singular – #D3.04): but most of the few occurrences of this word in the New Testament overlap with forms from the Second Declension neuter noun with identical meaning, δάκρυον. There are nine nouns of Paradigm D3.1 in the New Testament.

D3.2 πόλις has two stems, πολι- in the nominative, vocative and accusative singular, and πολε- in all its other forms. The usual *-ος* genitive singular suffix has lengthened to *-ως* after the short *-ε* of the stem (as happens also in D3.4, βασιλεύς): it can be noted that the suffix *-ος* always lengthens to *-ως* after *-ε*, and *only* after *-ε*, not after any other phoneme. In the nominative plural πολε- has contracted with *-ες* into πόλεις, and this form is also used for the accusative plural. In the New Testament there are 191 nouns of Paradigm D3.2 (including names and compounds with prepositions): 189 of them feminine, one of them masculine (ὄφις, ὄφεως, “snake”), and one of them neuter (σίναπι, σινάπεως, “mustard” – note that it does not add *-ς* in the nominative singular); together with πῆχυς, πήχεως, “cubit”, which has a *-υ* stem in the nominative-vocative-accusative singular, and in all other forms follows πόλις.

D3.3 The paradigm of βοῦς has derived from the original form of the word with a digamma stem, but it becomes a vowel-stem noun with the loss of digamma (#1.21). Wherever the digamma occurred before a consonant suffix or in form final position (the vocative), it has been replaced by upsilon; and wherever it occurred before a vowel suffix it has simply dropped out. Paradigm D3.3 is followed in the New Testament by five words of rather infrequent occurrence: βοῦς, “ox” (8); νοῦς, “mind” (24); πλοῦς, “voyage” (3); χοῦς, “dust” (2); and ναῦς, “ship” (1) (but not other words in *-ους* which are from other paradigms). νοῦς, πλοῦς and χοῦς had been Second Declension contracted nouns in Classical Greek, and ναῦς had been variously declined in the different Greek dialects (#1.11), but in *koinē* Greek they had all come to conform to the paradigm of βοῦς.

D3.4 Similarly βασιλεύς was originally a consonantal-stem noun. It has come from βασιλεϝς, the digamma dropping out before vowels, and being replaced by upsilon before consonants and also when form final (the vocative). In this paradigm however the digamma has had the effect of a consonant stem in the accusative singular, in causing the word to take the consonant suffix *-α*, thus (after digamma was lost) giving the form βασιλέα (not “βασιλευν”) – contrast βοῦν. For both

βοῦς and βασιλεύς, the vowels brought together by the dropping of digamma only contracted in the following cases: ε+ε and ε+ι (to ει), ε+υ (to ευ) and ο+υ (to ου), i.e. not in the case of ε- or ο- followed by α, ο or ω, or ο- followed by ε or ι. Thus in regard to contraction the behaviour of digamma-stem nouns is identical with that of digamma verbs (see #C8.75). There are twenty-three New Testament words (all masculine) which follow Paradigm D3.4, including the names of seven towns and cities.

D3.5 The stem of γένος is γενεσ-, but when -σ- comes between two short vowels, *syncopation* occurs: the -σ- is squeezed out and the two short vowels then contract. In the genitive plural, also, the -σ- is syncopated and the ε-ων is usually contracted into -ῶν, but may at times be found written uncontracted as -έων. When a suffix commencing with σ- is added to a stem in -σ-, the two *simplify* into a single -σ-. Thus the dative plural γενεσ-σι(ν) is simplified to γένεσι(ν). The neuter nominative singular would usually be the stem form, i.e. γένες; but instead (for reasons that are not very clear) this has become γένος. There are 47 New Testament words which follow Paradigm D3.5, together with two rare neuters in -ας (γῆρας, “old age”: found in the New Testament only in Luke 1:36, in the dative singular, γῆρει; and κρέας, “meat”, in the New Testament only in Romans 14:21 and 1 Corinthians 8:13, both times in the nominative plural, κρέα, uncontracted), and one rare feminine in stem -ος, (αἰδώς, “modesty”, found only in 1 Timothy 2:9 in the genitive singular, αἰδοῦς).

**D3.6–D3.13 CONSONANT STEM NOUNS:
STOP CONSONANTS AND ORAL LIQUID CONSONANTS**

| | STOP CONSONANTS | | | ORAL LIQUID CONSONANTS | | |
|---------------------|-----------------|--------------------|------------------|------------------------|-----------------|-------------------|
| | D3.6 Palatal | D3.7 Labial | D3.8 Dental | D3.11 Long E | D3.12 Short E | D3.13 Short O |
| | ἡ σάρξ flesh | ὁ λιψ S.W. wind | ὁ ποῦς foot | ὁ σωτήρ saviour | ὁ ἀστήρ star | ὁ ἀλέκτωρ cock |
| STEM: | σαρκ- | λιβ- | ποδ- | σωτηρ- | ἀστερ- | ἀλεκτορ- |
| S N | σάρξ | λίψ | ποῦς | σωτήρ | ἀστήρ | ἀλέκτωρ |
| A | σάρκα | λίβα | πόδα | σωτήρα | ἀστέρα | ἀλέκτορα |
| G | σαρκός | λιβός | ποδός | σωτήρος | ἀστέρος | ἀλέκτορος |
| D | σαρκί | λιβί | ποδί | σωτήρι | ἀστέρι | ἀλέκτορι |
| P N | σάρκες | λίβες | πόδες | σωτήρες | ἀστέρες | ἀλέκτορες |
| A | σάρκας | λίβας | πόδας | σωτήρας | ἀστέρας | ἀλέκτορας |
| G | σαρκῶν | λιβῶν | ποδῶν | σωτήρων | ἀστέρων | ἀλεκτόρων |
| D | σαρξί(ν) | λιψί(ν) | ποσί(ν) | [σωτήρσι(ν)] | [ἀστράσι(ν)] | [ἀλεκτορσι(ν)] |
| NEUTER NOUNS | | | | | | |
| | τὸ γάλα milk | none | τὸ μέλι honey | τὸ πῦρ fire | none | τὸ ὕδωρ water |
| STEM: | γαλακτ- | | μελιτ- | πυρ- | | ὑδωρ-/ὑδατ- |
| S N | γάλα | | μέλι | πῦρ | | ὑδωρ |
| A | γάλα | | μέλι | πῦρ | | ὑδωρ |
| G | γάλακτος | | μέλιτος | πυρός | | ὑδατος |
| D | γάλακτι | | μέλιτι | πυρί | | ὑδατι |
| P N | γάλακτα | | not | not | | ὑδατα |
| A | γάλακτα | | found | found | | ὑδατα |
| G | γαλάκτων | | in the | in the | | ὑδάτων |
| D | γάλαξι(ν) | | plural | plural | | ὑδασι(ν) |

D3.6 A palatal stem consonant amalgamates with $-\sigma$ into $-\xi$. Paradigm D3.6 is followed by 24 New Testament nouns, 23 of personal (masculine or feminine) gender and one that is neuter. This neuter noun is $\gamma\acute{\alpha}\lambda\alpha$, $\gamma\acute{\alpha}\lambda\alpha\kappa\tau\omicron\varsigma$, “milk” (5 times in the New Testament; stem $\gamma\alpha\lambda\alpha\kappa\tau-$ – compare $\nu\acute{\upsilon}\xi$, $\nu\upsilon\kappa\tau\omicron\varsigma$, $\acute{\eta}$, “night”). The neuter does not add the suffix $-\varsigma$ of the nominative singular (#D3.04), so the nominative singular form of this word becomes $\gamma\alpha\lambda\alpha\kappa\tau$ and then progressively $\gamma\alpha\lambda\alpha\kappa$ and $\gamma\alpha\lambda\alpha$, because neither $-\tau$ nor $-\kappa$ can stand at the end of a word (#D3.07). In the dative plural the $-\tau$ drops out before the $-\sigma\iota(\nu)$ suffix, giving $\gamma\acute{\alpha}\lambda\alpha\xi\iota(\nu)$. Thus this word is completely regular in its forms, being predictable in accordance with the phonemic rules of Greek.

D3.7 A labial stem consonant amalgamates with $-\sigma$ into $-\psi$. Nouns with a labial stem are very rare in Greek, and there are only seven of them in the New Testament which between them only occur on a total of nine occasions. These nouns (and their frequency) are: $\text{A}\acute{\iota}\theta\acute{\iota}\omicron\psi$, $\text{A}\acute{\iota}\theta\acute{\iota}\omicron\psi\omicron\varsigma$, $\acute{\omicron}$, “Ethiopian” (1); $\text{A}\rho\alpha\psi$, $\text{A}\rho\alpha\beta\omicron\varsigma$, $\acute{\omicron}$, “Arabian” (1); $\kappa\acute{\omega}\nu\omega\psi$, $\kappa\acute{\omega}\nu\omega\psi\omicron\varsigma$, $\acute{\omicron}$, “gnat”, “mosquito” (1); $\lambda\acute{\alpha}\iota\lambda\alpha\psi$, $\lambda\acute{\alpha}\iota\lambda\alpha\psi\omicron\varsigma$, $\acute{\eta}$, “storm”, “squall” (3); $\lambda\acute{\iota}\psi$, $\lambda\acute{\iota}\beta\acute{\omicron}\varsigma$, $\acute{\omicron}$, “south-west wind”, “facing south-west” (1); $\mu\acute{\omega}\lambda\omega\psi$, $\mu\acute{\omega}\lambda\omega\psi\omicron\varsigma$, $\acute{\omicron}$, “wound” (1); $\sigma\acute{\kappa}\acute{\omicron}\lambda\omicron\psi$, $\sigma\acute{\kappa}\acute{\omicron}\lambda\omicron\psi\omicron\varsigma$, $\acute{\omicron}$, “splinter”, “thorn” (1). There are none that are neuter.

D3.8 A dental stem consonant drops out before a sigma suffix. This means that the nominative singular will end in a vowel plus $-\varsigma$; if that vowel is $-\epsilon$ or $-o$, it will take *compensatory lengthening*, $-\epsilon$ into $-\epsilon\iota$ and $-o$ into $-o\upsilon$, in “compensation” for the loss of the dental (see #D3.09). This compensatory lengthening in the nominative singular means that that form *always* contains a long vowel or diphthong when it ends in a single consonant. Thus the stem $\pi\omicron\delta-$ gives the nominative singular $\pi\omicron\varsigma$, which then lengthens to $\pi\omicron\upsilon\varsigma$ in accordance with this rule. In this paradigm there is no compensatory lengthening for the same loss of the dental in the dative plural, so that the dative plural is $\pi\omicron\sigma\acute{\iota}(\nu)$, unlengthened. Paradigm D3.8 is followed by 74 nouns in the New Testament: 34 of them (all feminine) in $-\theta\eta\varsigma$, $-\theta\eta\tau\omicron\varsigma$ (1) or $-\tau\eta\varsigma$, $-\tau\eta\tau\omicron\varsigma$ (33; this is an ending by which an abstract noun is made, such as “holiness”, “likeness”, “kindness”, “stubbornness”, “oldness”, “brightness” – the Greek equivalents of all of these being included in this group); 31 of them (all feminine) ending in $-\iota\varsigma$, $-\iota\delta\omicron\varsigma$ (25) or $-\alpha\varsigma$, $-\alpha\delta\omicron\varsigma$ (5) or $-\upsilon\varsigma$, $-\upsilon\delta\omicron\varsigma$ (1); one in $-\iota\varsigma$, $-\iota\theta\omicron\varsigma$, one in $-\ι\varsigma$, $-\iota\tau\omicron\varsigma$ (both feminine); five in $-\eta\varsigma$, $-\eta\tau\omicron\varsigma$ (2) or $-\omega\varsigma$, $-\omega\tau\omicron\varsigma$ (3) (all masculine); one in $-\alpha\iota\varsigma$ ($\pi\alpha\acute{\iota}\varsigma$, $\pi\alpha\acute{\iota}\delta\acute{\omicron}\varsigma$) which is both masculine and feminine, and one which is neuter ($\mu\acute{\epsilon}\lambda\iota$, $\mu\acute{\epsilon}\lambda\iota\tau\omicron\varsigma$). The neuter does not add the suffix $-\varsigma$ of the nominative singular (#D3.04), so this form becomes $\mu\epsilon\lambda\iota\tau$ and then $\mu\acute{\epsilon}\lambda\iota$, because $-\tau$ cannot stand at the end of a word (#D3.07). This word is thus completely regular in its forms, being fully predictable. It occurs only four times in the New Testament. There are two neuter paradigms which have dental stems and which are sub-paradigms of D3.8:

| | D3.9 | D3.10 |
|--------------|--|---|
| | $\tau\acute{\omicron}$ $\sigma\acute{\omega}\mu\alpha$ body | $\tau\acute{\omicron}$ $\kappa\acute{\epsilon}\rho\alpha\varsigma$ horn |
| STEM: | $\sigma\omega\mu\alpha\tau-$ | $\left\{ \begin{array}{l} \kappa\epsilon\rho\alpha\varsigma \\ \kappa\epsilon\rho\alpha\tau- \end{array} \right.$ |
| S | N $\sigma\acute{\omega}\mu\alpha$ | $\kappa\acute{\epsilon}\rho\alpha\varsigma$ |
| | A $\sigma\acute{\omega}\mu\alpha$ | $\kappa\acute{\epsilon}\rho\alpha\varsigma$ |
| | G $\sigma\acute{\omega}\mu\alpha\tau\omicron\varsigma$ | $\kappa\acute{\epsilon}\rho\alpha\tau\omicron\varsigma$ |
| | D $\sigma\acute{\omega}\mu\alpha\tau\iota$ | $\kappa\acute{\epsilon}\rho\alpha\tau\iota$ |
| P | N $\sigma\acute{\omega}\mu\alpha\tau\alpha$ | $\kappa\acute{\epsilon}\rho\alpha\tau\alpha$ |
| | A $\sigma\acute{\omega}\mu\alpha\tau\alpha$ | $\kappa\acute{\epsilon}\rho\alpha\tau\alpha$ |
| | G $\sigma\omega\mu\acute{\alpha}\tau\omega\upsilon\upsilon$ | $\kappa\epsilon\rho\acute{\alpha}\tau\omega\upsilon\upsilon$ |
| | D $\sigma\acute{\omega}\mu\alpha\sigma\iota(\nu)$ | $\kappa\acute{\epsilon}\rho\alpha\sigma\iota(\nu)$ |

D3.9 This paradigm is in fact identical with $\mu\acute{\epsilon}\lambda\iota$, $\mu\acute{\epsilon}\lambda\iota\tau\omicron\varsigma$, $\tau\acute{\omicron}$ (the neuter of D3.8), but has the distinctive feature that the stems of all the words of this paradigm end in $-\mu\alpha\tau$. It is completely regular in accordance with the rules. Paradigm D3.9 is the most common Third Declension neuter category, being followed by 140 New Testament nouns. (The one irregular noun of this paradigm is given at #D3.29.)

D3.10 This paradigm consists of neuter words which have two stems, $-\alpha\varsigma$ in the nominative-vocative-accusative singular, and $-\alpha\tau$ in all other forms. Paradigm D3.10 is followed by four New Testament nouns: $\acute{\alpha}\lambda\alpha\varsigma$, $\acute{\alpha}\lambda\alpha\tau\omicron\varsigma$, $\tau\acute{\omicron}$, “salt” (7); $\kappa\acute{\epsilon}\rho\alpha\varsigma$, $\kappa\acute{\epsilon}\rho\alpha\tau\omicron\varsigma$, $\tau\acute{\omicron}$, “horn” (11); $\pi\acute{\epsilon}\rho\alpha\varsigma$, $\pi\acute{\epsilon}\rho\alpha\tau\omicron\varsigma$, $\tau\acute{\omicron}$, “end” (4); and $\tau\acute{\epsilon}\rho\alpha\varsigma$, $\tau\acute{\epsilon}\rho\alpha\tau\omicron\varsigma$, $\tau\acute{\omicron}$, “wonder”,

“marvel” (16). Declined similarly are $\phi\acute{\omega}\varsigma$, $\phi\omega\tau\acute{\omicron}\varsigma$, $\tau\acute{\omicron}$, “light” (73), and perfect active participles in $-\omega\varsigma$, $-\omicron\tau\omicron\varsigma$ (#D5.13, #D5.33). (The one irregular noun of this paradigm is set out at #D3.30.)

D3.11 There are two oral liquid consonants: λ and ρ . Only one noun exists in Greek with stem in $-\lambda$, $\acute{\alpha}\lambda\varsigma$, $\acute{\alpha}\lambda\acute{\omicron}\varsigma$, $\acute{\omicron}$, “salt”, and this is found only once in the New Testament, in the accusative singular form $\acute{\alpha}\lambda\alpha$ in Mark 9:50 (and it occurs a second time in the preceding verse in some manuscripts in the dative singular form, $\acute{\alpha}\lambda\acute{\iota}$). There was a strong tendency in Greek to avoid having a liquid followed by ς as in $\acute{\alpha}\lambda\varsigma$, and in *koinē* Greek this word has virtually been replaced by a newer word, $\acute{\alpha}\lambda\alpha\varsigma$, $\acute{\alpha}\lambda\alpha\tau\omicron\varsigma$, $\tau\acute{\omicron}$, which follows Paradigm D3.10. All other oral liquid nouns have stems ending in $-\rho$. Paradigm D3.11 comprises those with stems ending in a long vowel and $-\rho$. The seven such nouns in the New Testament (and their frequency) are: five in $-\eta\rho$ (all masculine): $\nu\iota\pi\tau\acute{\eta}\rho$, $-\eta\rho\omicron\varsigma$, $\acute{\omicron}$, “washbasin” (1); $\sigma\tau\alpha\tau\acute{\eta}\rho$, $-\eta\rho\omicron\varsigma$, $\acute{\omicron}$, “stater” (a coin) (2); $\sigma\omega\tau\acute{\eta}\rho$, $-\eta\rho\omicron\varsigma$, $\acute{\omicron}$, “saviour” (24); $\phi\omega\sigma\tau\acute{\eta}\rho$, $-\eta\rho\omicron\varsigma$, $\acute{\omicron}$, “radiance” (2); $\chi\alpha\rho\alpha\kappa\tau\acute{\eta}\rho$, $\chi\alpha\rho\alpha\kappa\tau\acute{\eta}\rho\omicron\varsigma$, $\acute{\omicron}$, “exact likeness” (1); and one feminine: $\chi\epsilon\acute{\iota}\rho$, $\chi\epsilon\iota\rho\acute{\omicron}\varsigma$, η , “hand” (176; this flexion has one irregular form and will be discussed under Irregular Nouns, #D3.31); and one neuter: $\pi\acute{\upsilon}\rho$, $\pi\upsilon\rho\acute{\omicron}\varsigma$, $\tau\acute{\omicron}$, “fire” (71). The masculine nouns in $-\eta\rho$ are all completely regular; but it should be noted that because the nominative singular suffix $-\varsigma$ will not hold on a liquid but slides off, in consequence the nominative singular of these words ends in their stem phonemes, $-\eta\rho$, and the numbercase suffix is \emptyset (the zero morph). The neuter noun $\pi\acute{\upsilon}\rho$ is completely regular (it is not found in the plural). Further, it can be noted that there are no nouns with stems in $-\omega\rho$. The dative plural form in the paradigm, $\sigma\omega\tau\acute{\eta}\rho\sigma\iota(\nu)$, is given in brackets because it is somewhat uncertain. No instance of it occurs in the New Testament and it is rare in other *koinē* writing – unlike the nominative singular $-\varsigma$, the dative plural ending $-\sigma\iota(\nu)$ can succeed in holding its position on the oral liquid stem, but nonetheless there seems perhaps to be something of a tendency for writers of Greek to avoid the form.

D3.12 As with all other stems in $-\rho$, nouns with $-\epsilon\rho$ stems cannot hold the $-\varsigma$ of the nominative singular, but this $-\varsigma$ slides off the liquid. Unless neuter, a short vowel cannot stand in the nominative singular when followed only by a single consonant and therefore in that form the $-\epsilon\rho$ lengthens to $-\eta\rho$ in conformity with Rule #D3.09. The dative plural form in the paradigm, $\acute{\alpha}\sigma\tau\acute{\rho}\alpha\sigma\iota(\nu)$, is given in brackets because it is somewhat uncertain. This is the form from Attic Greek (Goodwin §275, p.57), and it can be seen that it avoids the undesired conjunction of $-\rho$ and σ - by dropping the $-\epsilon$ - before the $-\rho$ and separating the $-\rho$ - and $-\sigma$ - with an $-\alpha$. But no instance of this form occurs in the New Testament and it is not found at all in any other *koinē* writings or inscriptions. It is interesting that in the one place in the New Testament where a dative plural of $\acute{\alpha}\sigma\tau\acute{\eta}\rho$ could be used – Luke 21:25 – we find instead, $\acute{\alpha}\sigma\tau\rho\iota\omicron\varsigma$, from the parallel but much rarer Second Declension neuter noun $\acute{\alpha}\sigma\tau\rho\omicron\nu$, with the same meaning (used only four times in the New Testament, against the 24 occurrences of $\acute{\alpha}\sigma\tau\acute{\eta}\rho$). In all forms of this paradigm other than the nominative singular and dative plural, the $-\epsilon\rho$ of the stem remains unchanged. There are only two regular nouns of Paradigm D3.12: $\acute{\alpha}\sigma\tau\acute{\eta}\rho$, $\acute{\alpha}\sigma\tau\acute{\epsilon}\rho\omicron\varsigma$, $\acute{\omicron}$, “star” (24), and $\acute{\alpha}\eta\rho$, $\acute{\alpha}\acute{\epsilon}\rho\omicron\varsigma$, $\acute{\omicron}$, “air” (7), both masculine; there are no feminines or neuters. (The irregular nouns of this paradigm are given at #D3.32.)

D3.13 When a noun stem ends in $-\omega\rho$, it follows the same pattern as for Paradigm D3.12: the nominative singular suffix $-\varsigma$ slides off the liquid, and the requirement to have a long vowel in the nominative singular when followed by a single consonant (#D3.09) means that the $-\omega\rho$ of the stem lengthens to $-\omega\rho$. The dative plural form in the paradigm, $\acute{\alpha}\lambda\acute{\epsilon}\kappa\tau\omicron\rho\sigma\iota(\nu)$, is given in brackets because it is somewhat uncertain. No instance of it occurs in the New Testament and it is almost non-existent in other *koinē* writings. The eight nouns, all masculine, of Paradigm D3.13 which occur in the New Testament (and their frequency) are $\acute{\alpha}\lambda\acute{\epsilon}\kappa\tau\omega\rho$, $-\omicron\rho\omicron\varsigma$, $\acute{\omicron}$, “cock” (12); $\kappa\alpha\tau\acute{\eta}\gamma\omega\rho$, $-\omicron\rho\omicron\varsigma$, $\acute{\omicron}$, “accuser” (1); $\kappa\omicron\sigma\mu\omicron\kappa\rho\acute{\alpha}\tau\omega\rho$, $-\omicron\rho\omicron\varsigma$, $\acute{\omicron}$, “world ruler” (1); $\kappa\tau\acute{\eta}\tau\omega\rho$, $-\omicron\rho\omicron\varsigma$, $\acute{\omicron}$, “possessor” (1); $\pi\alpha\nu\tau\omicron\kappa\rho\acute{\alpha}\tau\omega\rho$, $-\omicron\rho\omicron\varsigma$, $\acute{\omicron}$, “the Almighty” (used of God) (10); $\pi\rho\acute{\alpha}\kappa\tau\omega\rho$, $-\omicron\rho\omicron\varsigma$, $\acute{\omicron}$, “court officer” (2); $\rho\acute{\eta}\tau\omega\rho$, $-\omicron\rho\omicron\varsigma$, $\acute{\omicron}$, “spokesman” (1); $\sigma\pi\epsilon\kappa\omicron\upsilon\lambda\acute{\alpha}\tau\omega\rho$, $-\omicron\rho\omicron\varsigma$, $\acute{\omicron}$, “executioner” (1). There are no feminines of this paradigm. There is one common neuter noun which can be classified with this paradigm but which has two stems: $\acute{\upsilon}\delta\omega\rho$, $\acute{\upsilon}\delta\alpha\tau\omicron\varsigma$, $\tau\acute{\omicron}$, “water” (76) has the stem $-\omega\rho$ in the nominative-vocative-accusative singular, and then (like $\acute{\rho}\acute{\omicron}\lambda\iota\varsigma$, D3.2) a different stem in the remaining forms, which are taken from $\acute{\upsilon}\delta\alpha\tau$ -. Like $\acute{\upsilon}\delta\omega\rho$, but with the first stem in

-αρ, are *φρέαρ*, *φρέατος*, *τό*, “well” (7); and *ὄναρ*, -, *τό*, “dream” (6 – but this word is defective and used only in the nominative and accusative).

D3.14–D3.20 CONSONANT STEM NOUNS: NASAL LIQUID CONSONANTS

NOTE: The phonemes *ν* and *ς* are incompatible in Greek, that is, they cannot occur together in the sequence *-νσ-* or *-νς* in a Greek word. Therefore, when a stem ends in *-ν* and a sigma suffix is added, either the *-ς* slides off the *-ν* and disappears, or the *-ς* dislodges the *-ν* (#D3.08). When a noun stem ends in a long vowel plus *-ν*, the nominative singular suffix *-ς* always slides off; when a noun stem ends in *-αν*, *-εν*, *-ον*, *-αντ*, *-εντ*, *-οντ* or *-οντ*, the *-ς* usually slides off the *-ν* but in certain words the *-ς* pushes the *-ν* out of the stem altogether. In the dative plural, the suffix *-σι(ν)* always dislodges the *-ν*.

| Vowel: | STEMS IN -ν | | | | STEMS IN -ντ | | | |
|----------|-------------|----------|----------|------------|--------------|------------|-----------|----------|
| | Unchanged | | Alters | | Alters | | Unchanged | |
| STEM: | D3.14 | D3.15 | D3.16 | D3.17 | D3.18 | D3.19 | D3.20 | |
| | ὁ αἰών | ὁ μήν | ὁ ἡγεμών | ὁ ποιμήν | ὁ ἄρχων | ὁ ὀδούς | ὁ ἱμάς | |
| | age | month | leader | shepherd | ruler | tooth | strap | |
| | αἰων- | μην- | ἡγεμον- | ποιμεν- | ἀρχοντ- | ὀδοντ- | ἱμαντ- | |
| S | N | αἰών | μήν | ἡγεμών | ποιμήν | ἄρχων | ὀδούς | ἱμάς |
| | A | αἰῶνα | μῆνα | ἡγεμόνα | ποιμένα | ἄρχοντα | ὀδόντα | ἱμάντα |
| | G | αἰῶνος | μηνός | ἡγεμόνος | ποιμένος | ἄρχοντος | ὀδόντος | ἱμάντος |
| | D | αἰῶνι | μηνί | ἡγεμόνι | ποιμένι | ἄρχοντι | ὀδόντι | ἱμάντι |
| P | N | αἰῶνες | μήνες | ἡγεμόνες | ποιμένες | ἄρχοντες | ὀδόντες | ἱμάντες |
| | A | αἰῶνας | μῆνας | ἡγεμόνας | ποιμένας | ἄρχοντας | ὀδόντας | ἱμάντας |
| | G | αἰῶνων | μηνῶν | ἡγεμόνων | ποιμένων | ἀρχόντων | ὀδόντων | ἱμάντων |
| | D | αἰῶσι(ν) | μησί(ν) | ἡγεμόσι(ν) | ποιμέσι(ν) | ἀρχουσι(ν) | ὀδοῦσι(ν) | ἱμάσι(ν) |

D3.14/D3.15 When a stem ends in a long vowel plus *-ν*, the nominative singular suffix *-ς* slides off the liquid. The dative plural suffix *-σι(ν)* dislodges *-ν*. Paradigm D3.14 is followed by 17 New Testament nouns (15 masculine, 2 feminine, none neuter). Paradigm D3.15 is followed by two New Testament nouns, *μήν*, *μηνός*, *ὁ*, “month” (18) and *Ἕλλην*, *Ἕλληνος*, *ὁ*, “Greek” (26); and also by one word each in *-ιν* and *-αν*: *ὠδίν*, *ὠδίνος*, *ἡ*, “birthpains” (4), and *μεγιστᾶν*, *μεγιστᾶνος*, *ὁ*, “person of high status” (3).

D3.16/D3.17 When a stem ends in *-ον* or *-εν*, the nominative singular suffix *-ς* slides off the liquid, and the short vowel, being followed by a single consonant, *-ν*, then lengthens (into *-ων* and *-ην* respectively – #D3.09). In the dative plural, the suffix *-σι(ν)* dislodges the *-ν* of the stem; but as the short vowel (*-ο-* or *-ε-*) is now followed by another syllable, not just by a single consonant, this vowel remains unlengthened. Paradigm D3.16 is followed by 13 New Testament nouns and by all New Testament adjectives in *-ων* (#D4.8) except *ἄκων* and *ἐκῶν* (#D4.5). Paradigm D3.17 is followed by four New Testament words, and there is a fifth word in which (as can sometimes be found) the nominative singular suffix *-ς* pushes the *-ν* out of the word, the *-ενς* thus first of all giving *-ες* and then (by compensatory lengthening for the loss of the stem consonant – #D3.09), becoming *-εις*. The word in which this occurs is the masculine flexion of *εἷς*, *ένός*, “one”. In the neuter of this word, no *-ς* suffix is added in forming the nominative singular (#D3.04), and therefore the form is *ἕν*, and being neuter the short vowel in this form does not lengthen in any way (#D3.09).

D3.18 When, as in *ἄρχων*, *ἄρχοντος*, a stem ends in *-οντ*, then the *-τ* drops out before a sigma suffix, giving *-ονς*, and next the *-ς* slides off the *-ν*, leaving *-ον*, and the short vowel followed by a

single stem consonant lengthens, becoming *-ων* (#D3.09). However, in the dative plural, *-οντ-σιν* becomes first *-ον-σιν* and then (as in Paradigm D3.16) the suffix *-σιν* dislodges the *-ν* to give *-οσιν*. But two phonemes (*-ν* and *-τ*) have now been lost from the stem and therefore compensatory lengthening occurs (#D3.09) to produce *-ουσιν*. This Paradigm is thus completely in accord with the rules, and therefore is to be classified as regular. Paradigm D3.18 is followed by five New Testament nouns, the adjectives *ἄκων* and *ἐκῶν* (#D4.5), and all participles in *-ων* (#D5.11).

D3.19 There are a small number of words with stem in *-οντ* which follow the alternative phonemic pattern: the *-τ* drops out before a sigma suffix, and then the nominative singular *-ς* dislodges the *-ν*, giving *-ος*, and because two stem consonants have now been lost from the nominative singular, compensatory lengthening occurs, giving *-ους* (#D3.09). This phonemic pattern is followed by one noun, *ὀδούς*, *ὀδόντος*, *ὄ*, “tooth” (12), and participles in *-ους* (#D5.31, #D5.32). Furthermore, it is also followed by participles in *-εις*: as these have their stem in *-εντ*, the *-ν* and *-τ* drop out in the manner of this Paradigm and the *-ε-* of the stem becomes *-ει-* before sigma by compensatory lengthening (#D3.09).

D3.20 Some words with stem in *-αντ* and *-υντ* follow the same phonemic pattern as for Paradigm D3.19. However, as in the case of *ἰμάς*, *ἰμάντος*, *ὄ*, “strap” (4), the stem vowel *-α* or *-υ* lengthens but does not change its form before sigma. Paradigm D3.20 is followed by this one noun, the adjectives *πᾶς* and *ἅπας* (#D4.6), participles in *-ας* (#D5.31, #D5.32), and participles in *-υς* (#D5.31).

D3.21–D3.40 IRREGULAR NOUNS

Many of Paradigms D3.1 to D3.20 contain nouns which are irregular in one or more forms. These are discussed here, in relation to the particular Paradigm which they follow, each irregular flexion carrying a paradigm number which is higher by 20 than the corresponding regular Paradigm.

D3.21–D3.25 There are no New Testament irregulars for paradigms D3.1 to D3.5.

| | D3.26 | D3.26 | D3.28 | D3.30 | D3.31 | D3.32 | D3.32 | |
|-------|--------|------------|------------|--------------|--------|----------|------------------|------------|
| | hair | wife/woman | strife | ear | hand | father | husband/man | |
| | ἡ θρίξ | ἡ γυνή | ἡ ἔρις | τὸ οὖς | ἡ χεῖρ | ὁ πατήρ | ὁ ἀνὴρ | |
| STEM: | θριξ- | γυναικ- | ἐριδ- | { οὖς ὠτ- | χειρ- | πατερ- | { ἀνερ- ἀνδρ- | |
| S | N | θρίξ | γυνή | ἔρις | οὖς | χεῖρ | πατήρ | ἀνὴρ |
| | V | θρίξ | γύναι | ἔρις | οὖς | χεῖρ | πάτερ | ἄνερ |
| | A | τρίχα | γυναῖκα | ἔριν | οὖς | χεῖρα | πατέρα | ἄνδρα |
| | G | τριχός | γυναικός | ἐριδος | ὠτός | χειρός | πατρός | ἀνδρός |
| | D | τριχί | γυναικί | ἐριδι | ὠτί | χειρί | πατρί | ἀνδρί |
| P | N | τρίχες | γυναῖκες | ἔρεις | ᾠτα | χεῖρες | πατέρες | ἄνδρες |
| | A | τρίχας | γυναῖκας | ἔρεις | ᾠτα | χεῖρας | πατέρας | ἄνδρας |
| | G | τριχῶν | γυναικῶν | ἐρίδων | ᾠτων | χειρῶν | πατέρων | ἀνδρῶν |
| | D | θριξί(ν) | γυναιξί(ν) | ἐρισί(ν) | ὠσί(ν) | χερσί(ν) | πατράσι(ν) | ἀνδράσι(ν) |

D3.26 *θρίξ*, *τριχός*, “hair” (15) has word stem *θριχ-*, but Greek avoids having in a word two successive syllables commencing with an aspirate. This is usually achieved by the first such aspirate losing its aspiration (called “de-aspiration – #E2.8). Thus the de-aspirated stem becomes *τριχ-* in all forms of the flexion except where the *-χ* amalgamates with sigma to become *-ξ*; in

these two forms there is nothing to prevent the first consonant being θ . Thus the flexion of $\theta\rho\acute{\iota}\xi$ is in fact in accord with regular phonemic rules, and follows D3.6, and is not actually irregular (though it certainly looks as if it is!). $\gamma\upsilon\nu\acute{\eta}$, $\gamma\upsilon\nu\alpha\iota\kappa\acute{o}\varsigma$, “wife”/“woman” (209) has its stem, $\gamma\upsilon\nu\alpha\iota\kappa$, as the vocative, and then loses the $-\kappa$ in accordance with #D3.07. The flexion follows D3.6 but has just the one irregular form, the nominative singular $\gamma\upsilon\nu\acute{\eta}$ (instead of the non-existent regular form, “ $\gamma\upsilon\nu\alpha\iota\acute{\xi}$ ”).

D3.27 There are no New Testament irregulars for paradigm D3.7.

D3.28 Four New Testament words with stems in $-ι-$ plus a dental have experienced “interference” from Paradigm D3.2 ($\rho\acute{o}\lambda\iota\varsigma$), resulting in their being found at times with accusative singular and nominative-accusative plural forms as if from that paradigm (as given for $\acute{\epsilon}\rho\iota\varsigma$ in the flexion here). Their regular dental-stem constructions for these forms (following D3.8) were in use as well, and also occur in the New Testament. These four words are: $\acute{\epsilon}\rho\iota\varsigma$, $\acute{\epsilon}\rho\iota\delta\omicron\varsigma$, $\acute{\eta}$, “strife” (9); $\kappa\lambda\epsilon\acute{\iota}\varsigma$, $\kappa\lambda\epsilon\iota\delta\acute{o}\varsigma$, $\acute{\eta}$, “key” (6); $\rho\rho\omicron\phi\acute{\eta}\tau\iota\varsigma$, $\rho\rho\omicron\phi\acute{\eta}\tau\iota\delta\omicron\varsigma$, $\acute{\eta}$, “prophetess” (2); and $\chi\acute{\alpha}\rho\iota\varsigma$, $\chi\acute{\alpha}\rho\iota\tau\omicron\varsigma$, $\acute{\eta}$, “grace” (155).

D3.29 $\gamma\acute{o}\nu\upsilon$, $\gamma\acute{o}\nu\alpha\tau\omicron\varsigma$, $\tau\acute{o}$, “knee” (12) has two stems: in the nominative-vocative-accusative singular it is $\gamma\acute{o}\nu\upsilon$ (not “ $\gamma\acute{o}\nu\alpha$ ”), and then $\gamma\acute{o}\nu\alpha\tau-$ in all its other forms, in which it thus follows Paradigm D3.9 ($\sigma\acute{\omega}\mu\alpha$). The Second Declension noun $\sigma\acute{\alpha}\beta\beta\alpha\tau\omicron\nu$, $\sigma\acute{\alpha}\beta\beta\alpha\tau\omicron\upsilon$, $\tau\acute{o}$, “sabbath” (68) always takes its dative plural form as $\sigma\acute{\alpha}\beta\beta\alpha\sigma\iota\nu$, from Paradigm D3.9 (instead of the expected Second Declension form “ $\sigma\alpha\beta\beta\alpha\tau\omicron\iota\varsigma$ ”, which does not occur).

D3.30 $\omicron\acute{\upsilon}\varsigma$, $\acute{\omega}\tau\acute{o}\varsigma$, $\tau\acute{o}$, “ear” (36) follows Paradigm D3.10 in having its stem in $-\varsigma$ in the nominative-vocative-accusative singular and in $-\tau$ in all other forms of its flexion, but is irregular in having $-ou$ as its stem vowel in these $-\varsigma$ forms instead of $-\omega$ (which would have been expected from the genitive singular $\acute{\omega}\tau\acute{o}\varsigma$).

D3.31 $\chi\epsilon\acute{\iota}\rho$, $\chi\epsilon\iota\rho\acute{o}\varsigma$, $\acute{\eta}$, “hand” (176) follows Paradigm D3.11 ($\sigma\omega\tau\acute{\eta}\rho$) and has just one irregular form: the dative plural is $\chi\epsilon\rho\sigma\acute{\iota}\nu$ (not “ $\chi\epsilon\iota\rho\sigma\iota\nu$ ”). $\mu\acute{\alpha}\rho\tau\upsilon\varsigma$, $\mu\acute{\alpha}\rho\tau\upsilon\rho\omicron\varsigma$, \acute{o} , “witness” (35) also follows Paradigm D3.11, and has two irregular forms. These have both resulted from the sigma suffixes of the nominative singular and dative plural dislodging the $-\rho$ of the stem in both forms and giving respectively $\mu\acute{\alpha}\rho\tau\upsilon\varsigma$ (instead of “ $\mu\alpha\rho\tau\upsilon\rho$ ”) and $\mu\acute{\alpha}\rho\tau\upsilon\sigma\iota\nu$ (instead of “ $\mu\alpha\rho\tau\upsilon\rho\sigma\iota\nu$ ”).

D3.32 $\pi\alpha\tau\acute{\eta}\rho$, $\pi\alpha\tau\rho\acute{o}\varsigma$, \acute{o} , “father” (415) follows Paradigm D3.12 ($\acute{\alpha}\sigma\tau\acute{\eta}\rho$) but loses the short $-\epsilon-$ of its stem in some of its forms. Like $\pi\alpha\tau\acute{\eta}\rho$ are declined $\mu\acute{\eta}\rho\tau\eta\rho$, $\mu\eta\tau\rho\acute{o}\varsigma$, $\acute{\eta}$, “mother” (84); $\theta\upsilon\gamma\acute{\alpha}\tau\eta\rho$, $\theta\upsilon\gamma\alpha\tau\rho\acute{o}\varsigma$, $\acute{\eta}$, “daughter” (28); and $\gamma\alpha\sigma\tau\acute{\eta}\rho$, $\gamma\alpha\sigma\tau\rho\acute{o}\varsigma$, $\acute{\eta}$, “womb” (9). $\acute{\alpha}\nu\acute{\eta}\rho$, $\acute{\alpha}\nu\delta\rho\acute{o}\varsigma$, \acute{o} , “husband”/“man” (216) has two stems, $\acute{\alpha}\nu\delta\rho-$ in all forms except the nominative and vocative singular, where it is $\acute{\alpha}\nu\epsilon\rho-$. Allowing for this, its flexion is very similar to that for $\pi\alpha\tau\acute{\eta}\rho$.

D3.33–D3.34 There are no New Testament irregulars for paradigms D3.13 and D3.14.

D3.35 $\kappa\acute{\upsilon}\omega\nu$, $\kappa\upsilon\nu\acute{o}\varsigma$, \acute{o} , “dog” (5) follows Paradigm D3.15, but has two stems, $\kappa\upsilon\omega\nu$ in the nominative singular and $\kappa\upsilon\nu-$ in all other forms of its flexion (its dative plural thus being $\kappa\upsilon\sigma\acute{\iota}\nu$).

D3.37 $\acute{\alpha}\rho\acute{\eta}\nu$, $\acute{\alpha}\rho\nu\acute{o}\varsigma$, \acute{o} , “lamb” (1) has an original stem $\acute{\alpha}\rho\epsilon\nu-$ (like $\rho\omicron\iota\mu\epsilon\nu-$, D3.17) but, apart from in the nominative, has lost the $-\epsilon-$. It occurs only once in the New Testament (Luke 10:3), in the accusative plural, $\acute{\alpha}\rho\nu\alpha\varsigma$, the Second Declension diminutive form $\acute{\alpha}\rho\nu\acute{\iota}\omicron\nu$, $\acute{\alpha}\rho\nu\acute{\iota}\omicron\upsilon$, $\tau\acute{o}$ (30), or $\acute{\alpha}\mu\nu\acute{o}\varsigma$, $\acute{\alpha}\mu\nu\acute{o}\upsilon$, \acute{o} (4), being the words preferred by New Testament writers.

D3.38–D3.40 There are no New Testament irregulars for paradigms D3.18 to D3.20.