Greek morphology in STEPBible

Greek morphology in STEPBible originates from datasets created by James Tauber, Maurice A. Robinson and others, then adapted by Tyndale scholars They are converted to Robinson codes which are widely used, with the addition of a few features

The general form is: Function - Case, Number, Gender - Extra

For Verbs the form is "V-" Tense, Voice, Mood - Extra though participles are "V-" Tense, Voice, "P" - Case, Number, Gender - Extra

Personal pronouns add a person number before the Case, and Reflexive pronouns also have a Person number (which Robinson omitted for some reason)

Possessive pronouns add a person number and sing/plural for the possessor (eg "my"=1S, "our" 1P)

Robinson codes, extended

A good summary of Robinson Codes (and others) is on the Logos site at https://community.logos.com/kb/articles/2141-morphology-codes

In this table: Red=abbrev used in codes. Blue = in STEPBible but not in normal Robinson codes. Grey=Optional Not used or different in STEPBible.

GREEK Function-		Person	Case	Number	Gender	- optional Extra
[any]		- IRRegular / ABBreviated / HEBREW / ARAMAIC / ATTIC / K-Conjunction (kai) ad				MAIC / ATTIC / K-Conjunction (kai) added
PARTICLE eq	g PRT-N		- Interrogative / Negative			
CONDITIONAL PT ie	e COND					
CONJUNCTION eg	g CONJ	- Negative / Contracted				
PREPOSITION ie	PREP-G		- Accusative / Genitive / Dative			
INTERJECTION ie	INJ	ie G0281, G1204, G1205, G1436, G2396, G2400, G3758, G3759, G3785, G5599				
ADVERB eg	ADV-S				- Negative / Interrogative	ve / C =Comparative / S =Superlative / T itle

NOUN- eg N-APM eg N-LI eg N-ASF-LG		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	- Object Indeclinable / Letter Indeclinable / Proper name Indeclinable / Title[Gentilic] / Person[Gentilic] / Location[Gentilic]
ADJECTIVE- eg A-ASF-C eg A-NUI		Nom/Acc/Dat/Gen/Voc	Sing / Plural /	Male / Female / Neuter	 Comparative / Superlative / Negative / NUmberIndeclinable
ARTICLE- eg T-ASF		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	ie G3588
X=INDEFINITE PN- eg X-NSM		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	ie G5100
RECIPROCAL PN- eg C-APM		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	ie G0240
DEMONSTRATIVE PN-eg D-NSM		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	ie G3778, G1565, G3592, G5082, G5107, G5108, G5118
INTEROGATIVE PN- eg I-ASM		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	ie G4169, G4217
Q=CORRELATIVE OR INTERROGATIVE PN-eg Q-APN		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	ie G2245, G3697, G4214
K=CORRELATIVE PN-eg K-APN		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	ie G3745, G3634, G5118
RELATIVE PN- eg R-NSM		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	ie G3739, G3748, G3746, G8560
PERSONAL PN- eg P-NSM	(3)	Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	ie G0846
PERSONAL PN- eg P-2GS	1 / 2 person	Nom/Acc/Dat/Gen/Voc	Sing / Plural		ie 1=G1473; 2=G4771
REFLEXIVE PN- eg F-3APN	1 / 2 / 3 person	Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	1=G1683; 2=G4572; 3=G1438
POSSESSIVE PN- eg S-2SNPM	1S / 2S 1P / 2P	Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	1=G1700, G2251,G1699; 2=G4674
VERB-Tense+Voice+Mood-					- APocopated / Transitive
Participles: eg V-RMP-NSM		Nom/Acc/Dat/Gen/Voc	Sing / Plural	Male / Female / Neuter	

Infinitives: eg V-RMN			
Other Verbs: eg V-RMS-1s	1/2/3	Sing / Plural	

Verbal Tense: [2nd form]	A=Aorist / L=Pluperfect / R=Perfect / I=Imperfect / P=Present / F=Future / X=indefinite / Future Perfect
Verbal Voice:	A=Active / P=Passive / O=Passive Deponent / M=Middle / D=Middle Deponent / E=Either M or P / N=M or P Deponent /-Q=impersonal active / X=indefinite voice
Verbal Mood/Form:	I=Indicative / S=Subjunctive / O=Optative / M=Imperative / N=Infinitive / P=Participle / R=Imperative participle

EG V-2AAI-2P-ATT-ABB = verb agrist (2nd form) active indicative 2nd person plural Attic contracted

Codes patterns:

Part, Prep, Adv etc. ie [A-Z]{2,}(-[A-Z]+)* Function(-Extra)

Adj, Noun, Article ie [NAT](-[A-Z]{3})(-[A-Z]+)* Function-Case+Number+Gender(-Extra)
Non-person PnNoun ie [XCDIQKRPFS](-[A-Z]{3})(-[A-Z]+)* Function-Case+Number+Gender(-Extra)

Personned ProNoun ie [PFS]-\d[SP]*[A-Z]{3}(-[A-Z]+)* Function-Person+Case+Number+Gender(-Extra)

Verb Participles ie V-\d*[A-Z]{3}-[A-Z]{3}(-ATT|-HEB|-ARAM)* Function-Tense+Voice+Form-Case+Number+Gender(-Extra)

Verb Infinitives ie V-\d*[A-Z]{3}(-ATT|-HEB|-ARAM)* Function-Tense+Voice+Form(-Extra)

Verb Others ie V-\d*[A-Z]{3}-\d[SP](-ATT|-HEB|-ARAM)* Function-Tense+Voice+Mood-Person+Number(-Extra)

Notes:

3rd person is implied by the presence of Gender in Personal pronouns.

1st letter is the type eg Noun - Tense+Voice+Mood - Person+Case+Number+Gender - Extra IF they exist for that type of word

[&]quot;-K" in STEPBible becomes "CONJ +" (treating it as two conjoined words)

[&]quot;PRI" in STEPBible becomes "-L / -LG / -P / -PG / -T" and they are given Case+Number+Gender according to context

[&]quot;NUI", "X", "ARAM" & "HEB" in STEPBible are given morphology according to context

[&]quot;Title" is any Proper noun (ie with Upper case) that is not a person or location: status (eg King, Elder), month, deities (eg God, Satan, Gabriel), festival (eg Passover), language (eg Latin +G for 'gentilic'), group (eg Pharisee +G for 'gentilic')

Optional Extra items can be missing or multiple e.g.

περισσοτέρως = ADV-C = Adverb, Comparative - ie "more abundant" $\dot{\epsilon}$ αυτ $\ddot{\omega}$ = F-3DSM = Reflexive pronoun, 3rd person, dative, sing, masc - ie "to himself" ρμ $\ddot{\delta}$ = A-NPF-NUI-ABB = Adjective, Nom, Plural, Fem, Number Indeclinable, Abbreviated - ie "144" (case,numb,gender derived from context) $\dot{\epsilon}$ μ $\dot{\alpha}$ = S-1SNPN = Possessive pronoun, 1st person sing, Nom, Plural, Neuter - ie "my [things]" παρεῖναι = V-2PAN = Verb 2nd form of Present, Active, Infinitive - ie "to be present" περιεδέδετο = V-LPI-3S = Verb Pluperfect, Passive, Indicative, 3rd person sing. - ie "it had been wrapped" πρόσευξαι = V-ADM-2S = Verb Aorist, Deponent middle, Imperative, 2nd person sing. - ie "[you] pray!" γένοιτό = V-2ADO-3S = Verb 2nd form of Aorist, Middle Deponent, Optative, 3rd person sing - ie "may it happen"

Summary of abbreviations:

"-" separates sections

Non-verbs Col 1	Col 2A + 2	Col 2	Col 3	Col 4	Last col
A=Adjective ADV=Adverb C=Reciprocal pn- COND=Conditional pt CONJ=Conjunction D=Demonstrative pn- F=Reflexive pn- I=Interogative pn- INJ=Interjection K=Correlative pn- N=Noun P=Personal pn- PREP=Preposition PRT=Particle Q=Correlative or interrogative pn- R=Relative pn- S=Possessive pn- T=Article	1=1st person 2=2nd person 3=3rd person	A=Accusative D=Dative G=Genitive N=Nominative V=Vocative	P=Plural S=Singular	F=Female M=Male N=Neuter	ABB=Abbreviated ARAM=Aramaic ATT=Attic C=Comparative C=Contracted (only for CONJ) HEB=Hebrew I=Interrogative IRR=Irregular K=Conjunction (kai) added LI=Letter indeclinable N=Negative NUI=Number indeclinable OI=Object indeclinable PRI=Proper name indeclinable S=Superlative

X=Indefinite pn-				
Verbal Col 1	Col 1	Col 2	Col 3	
V=Verb	A=Aorist L=Pluperfect R=Perfect I=Imperfect P=Present F=Future X=indefinite	A=Active P=Passive O=Passive Deponent M=Middle D=Middle Deponent E=Either M or P N=M or P Deponent Q=impersonal active X=indefinite voice	I=Indicative S=Subjunctive O=Optative M=Imperative N=Infinitive P=Participle R=Imperative participle	

Variations in coding

The CrossWire LXX module has the following variations: M=Imperative

Alternative parsing

Greek, like most languages, is often ambiguous. For example, the word for "elders" at Acts.16.4 is πρεσβυτέρων which has an ending often used for a female plural. But this doesn't mean that all the elders were female. The same word can be parsed as masculine plural or neuter plural. It is most likely masculine plural, which is used for a group of males or a mixed group of males and females.

STEPBible, like all other similar resources, records only the most likely parsing. Alternate parsing can be discovered using the tool at <u>Perseus</u>. For this example the alternatives can be seen <u>here</u>.

Interpreting Verdict p

See the outline at http://www.bcbsr.com/greek/grklnk.html

Expressing Verbs in English

Aspect:		Voice:			
short term	long term	Active	Passive	Middle	
		ie [AODN]	ie [PE]	ie [M]n bennet	

Using just 4 English forms: "kill", "kills", "killed", "killing"

Tense	Form	Indicative (it is so)	Subjunctive (it may be so)	Optative (may it be so)	Imperative (make it so)	Infinitive (to be so)	Participle (being so)
	Pluperfect (had done)	LAI he had killed LPI he had been killed LMI he had killed himself					
Past	Perfect (did)	RAI he has killed RPI he has been killed RMI he has killed himself	RAS he may have killed RPS he may have been killed RMS he may have killed himself	RAO might he kill RPO might he be killed RMO might he kill himself	RAM you must kill / kill! RPM he must be killed RMM he must kill himself	RAN to have killed RMN to have been killed	RAP (already) killing / having killed RPP (already) been killed / having been killed RMP (already)killed himself
	Imperfect (was doing)	IAI he was killing IPI he was being killed IMI he was killing himself	IAS he may have been killing				
	Aorist (default: did/do)	AAI he killed API he was killed AMI he killed himself	AAS let's/ may you/ he may kill APS he may be killed AMS he may kill himself	AAO might he kill APO might he be killed AMO might he kill himself	AAM you do kill / kill! I/he should/make it kill APM do/should be killed AMM you should kill yourself	AAN to kill/ killing APN to be killed AMN to kill himself	AAP (is) killing APP (is) being killed AMP (is) killing himself
Present	Present (does)	PAI he kills PPI he is killed PMI he kills himself	PAS let's/ may you/ he may kill PPS he may be killed PMS he may kill himself	PAO might he kill PPO might he be killed PMO might he kill himself	PAM you do kill / kill! I/he should/make it kill PPM do/should be killed PMM you should kill yourself	PAN to kill/ killing PPN to be killed	PAP (is) killing PPP (is) being killed PMP (is) killing himself
Future	Future (will do)	FAI he will kill FPI he will be killed FMI he will kill himself	FPS he shall be killed			FAN to be going to kill	FAP he will be killing FPP he will be going to be killed

1st = Tense: L=Pluperfect / R=Perfect / I=Imperfect / A=Aorist / P=Present / F=Future

2nd= Mood: A=Active; O=Passive Deponent; D=Middle Deponent; N=Mid/Pass Deponent; Q=impersonal; X=indefinite / P=Passive; E=Either M or P / M=Middle

3rd= Form: I=Indicative / S=Subjunctive / O=Optative / M=Imperative / N=Infinitive / P=Participle; R=Imperative participle

Notes:

Optative uses "might" in the sense of a wish or pleading. This could be substituted by "let" or "may" but would not be so distinctive.

Subjunctive uses "may", or "shall" after a conditional and Future subjunctive (only 1x in NT).

Imperative uses "do" or "!". For Perfect Imperative is "must" to express a stronger form of the imperative.

Perfect Passive Participle acts the same as a stative, though non-passive less so.

There is a Fut.Subj.Pass in 1Cor.13.3 in some MSS, but this is prob an error which scribes corrected by changing ω to o or θ to x.

There is also a Fut. Subj. Pass καταισχυνθής at Zeph. 3.11. However, this form doesn't appear in non-biblical Greek works. Very few Perfect Imperatives occur, and only in Active.

Suppletion and Aspectual variation

Sometimes verbs mean different things in different tenses, and sometime different verbs supplement each other to fill in tenses. In English the the present tense "he goes" is from "to go" but the past tense "he went" is from "to wend".

When "he wends" is used in the present tense it means "to meander", and the past tense "he gat" is no longer used.

These kinds of complications are more common in Greek, especially with regard to knowing and seeing.

Tense	To see, perceive	To know, understand
Aorist (did see/ know)	εἴδω (eídō G1492)	γινώσκω (ginốskō G1097)
Perfect (have seen/ known)	ὀράω (horáō G3708)	εἴδω (eídō G1492) as οἶδα (oida G6063)
Imperfect (used to see/ know)	ὀράω (horáō G3708)	γινώσκω (ginốskō G1097)
Present (do see/ know)	ὀράω (horáō G3708)	γινώσκω (ginốskō G1097)
Future (will see /know)	ὀράω (horáō G3708)	γινώσκω (ginốskō G1097)

Tense	To say
Aorist (did say)	εἶπον (eípon G2036)
Aorist Passive (was said) Perfect (have said)	ἐρῶ (erō G2046)

Imperfect (used to say) Present (do say)	λέγω (legō G3004)
Future (will say)	ρέω (reō G4483)