

THE GREEK VERBAL SYSTEM AND ASPECTUAL PROMINENCE: REVISING OUR TAXONOMY AND NOMENCLATURE

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Abstract: *Verbal systems can give prominence to tense, aspect, or mood. The morphology of the verbal system within biblical Greek provides important evidence to suggest that Greek is an aspect-prominent language, though one that also incorporates tense within the indicative mood. Certain traditional grammatical labels inappropriately treat Greek as though it were instead a tense-prominent language like English (e.g. the use of “present” or “tense formative” outside of the indicative mood). We need to reform our descriptive labels and general conception of Greek accordingly. In doing so, the simplicity and beauty of the Greek verbal system emerges, offering pedagogical advantages for teachers of Greek and challenging exegetes to properly account for Greek’s particular configuration of tense, aspect, and mood.*

Key Words: *Greek grammar, aspect, tense, morphology, linguistics*

I. INTRODUCTION

Our task will be to set out clearly the aspect prominence of the Greek language and propose a morpho-syntactical system that is coherent with this aspect prominence.¹ First, let us consider a question that arises from the Greek text of Matt 2:20:

ἐγερθεῖς παράλαβε τὸ παιδίον καὶ τὴν μητέρα αὐτοῦ καὶ πορεύου εἰς γῆν Ἰσραὴλ. τεθνήκασιν γὰρ οἱ ζητοῦντες τὴν ψυχὴν τοῦ παιδίου.

“Arise and take the child and his mother, and go into the land of Israel; for those who were seeking the child’s life have died.”

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¹ Fundamental to the argument below has been the work that we have done under the auspices of the BibleMesh Biblical Languages project (www.biblemesh.com/biblemesh-biblical-languages). Our work, in turn, has been seminally influenced by the thought of Stephen H. Levinsohn and Randall Buth, with significant contributions by way of conversations with Christopher Fresch and Steve Runge. Many other contributors to this article have influenced our thinking in one way or another. We are therefore indebted to the ongoing conversation stimulated by this growing community of linguists, philologists, and biblical scholars. A shorter version of this article also appears under Nicholas J. Ellis, “An Overview of the Greek Verbal System in Koiné,” chap. 3 in Steven E. Runge and Christopher J. Fresch, eds., *The Greek Verb Revisited: A Fresh Approach for Biblical Exegesis* (Bellingham, WA: Lexham Press, 2016).

In the phrase *τεθνήκασιν γὰρ οἱ ζητοῦντες τὴν ψυχὴν τοῦ παιδίου*, we find the substantival participle *οἱ ζητοῦντες*. Traditionally, *ζητοῦντες* would be labeled a “present participle.” But is there anything in the semantics of this term that justifies this nomenclature? As we can see quite plainly, there can be no “present time,” for logically those who “have died” (*τεθνήκασιν*) cannot now be “searching” (*ζητοῦντες*) for the child at the time of the speech act. Indeed, the seekers are dead! Moreover, neither can there be “contemporaneous time,” as would typically be taught, given that the searching necessarily occurred prior to dying. Rather, something else seems to be fundamentally in view here, guiding the choice of the verb. In what follows, we will examine how the Greek verbal system matches structure with function and suggest a nomenclature that matches this structural framework better than the traditional nomenclature.

As any beginning Greek student will know, the standard approach to describing the morphological possibilities of the Greek verb are the six principal parts: present (I), future (II), aorist (III), perfect (IV), perfect middle (V), and aorist passive (VI). The fundamental observation about this system is that it provides a descriptive, organizational, and therefore cognitive framework for the Greek system that is based on tense prominence, prioritizing (by its initial position) the present tense within the indicative mood.

In what follows we will argue that this framework is fundamentally flawed. It fails to reflect the essential organizational principles of the Greek verbal system. We will argue that Greek, as an aspect-prominent language, is primarily oriented along a three-part aspect morphology rather than tense morphology. Recognizing this simple prototypical structure and reflecting it in our descriptive language has significant implications for both exegesis and pedagogy.

II. TENSE, ASPECT, AND MOOD AS POTENTIALLY PROMINENT CATEGORIES

First of all, let us consider what we mean by “grammatical prominence within the verb.” Languages tend to emphasize one of three verbal parameters: tense, aspect, or mood.² Thus, some languages are grammatically tense-prominent; other languages are grammatically aspect-prominent; and still others are grammatically mood-prominent.³ In the section that follows, let us examine a brief definition of these categories.

1. *Tense*. Tense includes a number of nuanced variables across languages, but generally speaking tense provides a temporal frame for an event. Tense is con-

² There are, of course, a number of other grammatical categories related to the verb, including voice, subject agreement, and in some languages, gender, transitivity, causativity, and even object agreement. The typology we present here is oriented around tense, aspect, and mood. Linguists have recognized that these three categories are closely related (so much so that they are often simply referred to with the abbreviation TAM).

³ This typology is based on D. N. S. Bhat, *The Prominence of Tense, Aspect, and Mood* (Amsterdam: John Benjamins, 1999). Bhat’s work has been found to be an effective typology for a large variety of languages.

cerned with a situation's location in time, usually in terms of being in the past, present, or future. Consider, in English, how tense is portrayed in example 1 below:

- 1a. "Your mother was reading a book." (past time)
- 1b. "Your mother is reading a book." (present time)
- 1c. "Your mother will be reading a book." (future time)

In the three sentences of example 1, the speaker adopts the moment of speaking as his reference point. Taking that moment as his reference point, we see three tense choices that the speaker might make as he expresses the relative time of the verbal event of the mother reading a book. The speaker's choice of a tense (past, present, or future) is, indeed, a choice. It should be noted that, while the above three sentences represent a default description of time, the speaker might for some practical reason choose to use a different tense and create a mismatch between the historical event and his description of the event. For example, the speaker could have framed a past event with a present tense verb form for heightened effect: "so yesterday, your mother is reading a book, and she sees this huge spider...." In this case, the speaker's reference point is not the speaker's own time of speaking but instead the past time in which the mother has her experience. Even though the speaker is describing a *past* event, the speaker uses *present* tense verbs. This is an example of what we mean when we say that tense is a "choice." Although the speaker could have used the past-tense verbs "read" and "saw," instead the speaker uses "is reading" and "sees." Greek speakers can make similar tense choices (e.g. the historical present).⁴

2. *Aspect*. If we have a clear mental picture of tense (which, as English speakers, we likely do), then what about aspect?⁵ Rather than denoting a situation's location in time, aspect is concerned with an event's internal temporal structure, or to put it another way, the manner and extent to which time unfolds within a situation.

English utilizes two aspects, which can be described as *perfective aspect* and *imperfective* (or "*progressive*") *aspect*. Take example 2 below:

- 2a. Jane ate an entire box of chocolates.
- 2b. Jane was eating an entire box of chocolates.

If the term *aspect* was foreign to you before, perhaps you can intuit its meaning from the above example. The clause in example (2a) is in the so-called *perfective aspect*. The perfective aspect presents an event as self-contained. The entire event, with its initiation and conclusion, are presented as a single whole with no reference

⁴ Cf. Steven E. Runge, "The Verbal Aspect of the Historical Present Indicative in Narrative," in Steven E. Runge, ed., *Discourse Studies and Biblical Interpretation: A Festschrift in Honor of Stephen H. Levinson* (Bellingham, WA: Lexham, 2011), 191–224.

⁵ Broadly speaking, aspect is concerned with a situation's internal structure, usually in terms of being bounded (self-contained) or unbounded (uncontained). For an excellent recent description of aspect, both of its semantics and its history of scholarship, cf. Chris Thomson, "What is Aspect? Looking Beyond NT Studies to the Linguists," chap. 2 in Runge and Fresch, *Greek Verb Revisited*.

to anything that happened between the initiation and the conclusion of the event. The “historical Jane” might have paused from eating the chocolates, called her mother, and then resumed eating the chocolates, but as far as the presentation of the event’s aspect in (2a) is concerned, this is irrelevant.

On the other hand, in example (2b) the so-called *imperfective aspect* conveyed by “was eating” communicates a different choice in portraying the event. The English past progressive form assumes that an event has begun but makes no reference to its conclusion. In the case of Jane and her box of chocolates, Jane might still be eating them now. The English progressive does not say anything about a conclusion. It leaves the event entirely open-ended. It simply describes the action as in progress. In the linguistic literature, the terms *self-contained* and *open-ended*, used to describe *perfective* and *imperfective* aspect, are often referred to as *bounded* and *unbounded*, respectively.⁶

Similarly, the Greek verb can utilize perfective and imperfective aspect to describe the inner workings of an event or action as well as a third aspect to convey a past event that displays ongoing relevance. We will examine these categories in greater depth in what follows.

3. *Mood*. The category of mood is a little more complicated than tense and aspect. In short, verbal mood indicates a state of being or reality, whether actual, probable, permissible, or possible. As our concern here is primarily focused on the distinction between tense and aspect, we note only a few illustrative examples. In English, mood is often expressed through auxiliary or helping verbs.⁷ Consider example 3:

- | | |
|------------------|--|
| 3a. Actuality: | He landed at Heathrow rather late. |
| 3b. Probability: | She <i>might</i> arrive home by dinner if traffic is good. |
| 3c. Permission: | You <i>may</i> substitute asparagus for the baked potato. |
| 3d. Ability: | He <i>can</i> type 50 words per minute. |

English auxiliary verbs can express additional modal functions such as possibility, necessity, and obligation. For our current purposes, note that mood functions in a language to express a range of possibilities, whether a factual (i.e. *realis*) event or situation or an extrafactual (i.e. *irrealis*) one. The *irrealis* category can express a possibility (“might,” “could”) or an obligation (“should,” “must”). Greek has four moods: indicative (a *realis* mood used for statements/questions), the *irrealis* imperative (used for commands), and subjunctive and optative moods (which also express *irrealis* events involving probable, possible, and/or desired events or situations).

⁶ Bernard Comrie, *Aspect* (Cambridge: Cambridge University Press, 1976), 3–4.

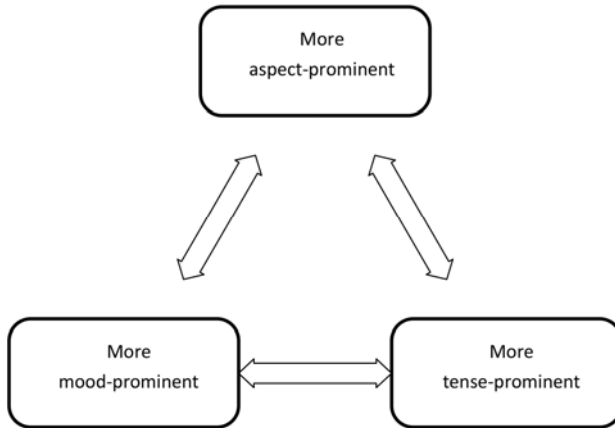
⁷ These are often called *helping verbs* in primary and secondary English grammar texts, but reference grammars prefer the term *auxiliary*. For a student-oriented discussion of mood in English, see Rodney Huddleston and Geoffrey K. Pullum, *A Student’s Grammar of the English Language* (Cambridge: Cambridge University Press, 2005), 53–56.

III. PROMINENCE WITHIN VERBS: CROSS-LINGUISTIC CRITERIA AND IMPLICATIONS

As already noted, languages have a tendency to give greater prominence to tense, aspect, or mood. In what follows, we will consider criteria for determining whether a language gives prominence to tense, aspect, or mood and we will conclude that, although English is tense-prominent, Greek is aspect-prominent.

Before we examine what grammatical prominence means, it is important to emphasize what it does *not* mean. It does not mean that the prominent category (whether tense, aspect, or mood) is dominant to the *exclusion* of the other two categories. It also does not mean that one category is more important than the other two, or that the other two become irrelevant. That is not how grammatical prominence works. Rather, grammatical prominence involves the extent to which one of these categories provides the primary or central concept for how a particular verbal system is arranged. The prominent category functions as a sort of organizing principle for the other two categories. For example, there is a close relationship between tense and mood: because mood deals closely with the certainty of an event, it should not be surprising that there are correlations between a clause referring to the past (tense) and that clause also being more certain in its existence (mood). In other words, if something has already happened, it is pretty certain! The same can be said of a future event (tense) being *less* certain (mood) since a future event has not yet happened. Similarly, a completed (and thus “bounded”) event (aspect) is more real (mood) than an incomplete event. D. N. S. Bhat shows how these three categories provide an interconnected system for organizing language and for assigning verbal prominence to one of these categories.⁸ Visually, we could represent this typology of possible verbal prominence in languages as a triangle, with tense, aspect, and mood each representing a corner.

⁸ D. N. S. Bhat, *Prominence*, 93–94.



Bhat's typology of language types⁹

1. *Criteria.* So what criteria do linguists use when classifying a language as tense-prominent, aspect-prominent, or mood-prominent? Most of these criteria involve the structure and grammatical forms of the language.

a. *First criterion: Extent of morphological encoding within the language.* The first criterion is the extent to which the category is grammaticalized within a language through morphological encoding. To properly understand this criterion, we must make a distinction between *grammatical meaning* and *lexical meaning*. In the English clause “I wanted a new hat,” the verb “wanted” denotes the lexical meaning of “desire,” but the suffix attached to the end of “wanted” denotes past tense. Thus the *-ed* suffix encodes *grammatical* meaning. One can assess whether a language gives greater prominence to tense, aspect, or mood by observing which of these three has the greatest extent of grammatical encoding within a language’s verbal system.

b. *Second criterion: The formation of a complete paradigm.* The second criterion is the degree to which tense, aspect, or mood forms a complete grammaticalized paradigm. In English, we use suffixes such as *-s* or *-ed* to grammaticalize tense (thus *jump*s is present but *jump*ed is past). This will be more fully illustrated in what follows.

c. *Third and fourth criteria: Pervasive and obligatory.* Finally, the third and fourth criteria for verbal prominence are whether the category is pervasive and obligatory, respectively, across the various forms within the verbal system. We will see below how aspect is the category that is most pervasive in Greek across all six major verb types. Tense only occurs in the indicative mood. Mood is present in many verb types (i.e. indicative, subjunctive, imperative, and optative). Aspect, however, is central to *all* Greek verbs.

⁹ Adapted from Michael Aubrey, “The Greek Perfect and the Categorization of Tense and Aspect” (M.A. thesis, Trinity Western University, 2014), 137.

2. *Implications.* When a language structurally aligns itself with either tense, aspect, or mood against the other two, there are a number of correlative implications.¹⁰ Three of the most important can be summarized as follows:

- The prominent category becomes especially apparent outside the indicative mood since the two non-prominent categories tend to recede outside the indicative. As a result, the non-indicative verb forms provide a litmus test for verbal prominence.
- Less prominent grammatical categories become associated with the prominent category, with many languages tending to use the prominent category to help express the less prominent categories.¹¹
- The prominent category will tend to be encoded through morphological inflection, while the less prominent categories will tend to be encoded by less direct means (e.g. through the use of auxiliary verbs).

With the above descriptors of verbal prominence in mind, let us examine both English and Greek with an eye toward their respective prominent verbal categories.

IV. TENSE PROMINENCE OF ENGLISH VERBS

English is widely considered to be a tense-prominent language. In English, past tense is grammaticalized in many verbal forms using the suffix *-ed*. Indeed, tense is the primary category grammaticalized in English verbs, and accordingly linguists widely describe English as a tense-prominent language.¹² The English verb, unlike Greek, inherently involves very little explicit verbal morphology. In other words, English verbs tend to be fairly static in their forms, with only the addition of simple changes such as an *s* or an *ing* to distinguish forms. However, when English does utilize morphological changes, these changes tend to encode tense.

Type of Grammatical Form	Give	Walk	Sing
1 st & 2 nd Present Form	give	walk	sing
Past Tense Form	gave	walked	sang
Past Participle Form	given	walked	sung
Present Participle Form	giving	walking	singing

In terms of our three categories (tense, aspect, and mood) it becomes clear quite quickly that English explicitly grammaticalizes only the tense category within its verbs. The other two categories, aspect and mood, are expressed with the use of helping words (e.g. where mood may use “should give,” “could walk,” “might

¹⁰ See a full examination in Bhat, *Prominence*, 101–2.

¹¹ In Greek, this is particularly the case with respect to the way future time reference and habituality become interrelated with aspect.

¹² E.g., Adeline Patard and Frank Brisard, eds., *Cognitive Approaches to Tense, Aspect, and Epistemic Modality* (Amsterdam: John Benjamins, 2011), esp. pp. 217–248; cf. Bhat, *Prominence*, 120. The same could be said for German and other Austro-Asiatic languages.

sing,” etc.) or are communicated through a tense form. For example, English tends to communicate aspect with a helping word rather than with a uniquely aspectual marker, as noted in example 4 below:

- 4a. Progressive aspect: John was giving Sally an apple.
 4b. Perfective aspect: John gave Sally an apple.

Note how tense markers are the primary grammaticalized features within these verbal forms. The progressive aspect in clause (a) is formed by using a helping verb, while the perfective aspect in clause (b) is expressed by the past tense form “gave.” In both instances, English aspect is communicated using English *tense* morphology, although with progressive aspect a helping word is also used. As Bhat predicts, we can see that the tense-prominent features of English, as well as its helping words, are used to convey the less prominent aspectual distinction. We could make similar observations about the English category of mood, where the various moods are expressed by means of helping words like *can* and *could*, *shall* and *should*, *will* and *would*, *may* and *might*. Similar to aspect, mood is not grammaticalized in the English verb itself.

Now, since the object of this investigation is the Greek verb, let us ask the obvious operative question: is Greek, like English, a tense-prominent language? To this question, we answer a hearty “No!” Greek is not a tense-prominent language, either in its semantics or its structure. To argue this point, we will now turn to a fuller examination of these principles with respect to Greek.

V. ASPECT PROMINENCE OF GREEK VERBS

Unlike English, with its tense prominence, some other languages will primarily grammaticalize mood (e.g. the Papuan language Amele and the Tibeto-Burman languages of Nepal). Still other languages will primarily grammaticalize aspect (e.g. Greek and other Indo-Aryan languages). In what follows, we will examine how Greek manifests its aspect prominence in its morphology. We further argue that this aspect prominence should be reflected in how we describe and conceive of Greek, particularly with respect to the descriptive labels we use in our teaching and exegesis.

The aspect-prominent nature of Greek is encoded within its morphological structure (as we will see below), and this structure reveals the presence of three aspects: perfective aspect, imperfective aspect, and what we describe as “combinative” aspect (due to its combination of morphology and semantics from the other two aspects) but which might more traditionally be described as perfect aspect (or even “stative,” if properly defined).

How, then, are these aspectual categories communicated in the Greek verbal system? As noted above, one criterion of verbal prominence is the degree to which tense, aspect, or mood forms a complete paradigm. Let us now turn to how tense, aspect, and mood are grammaticalized in the Greek morphological system.

1. *Morphological overview of active verbs.* In parsing the structure of the Greek verb, we analyze the Greek paradigm from the inside out. We begin with the lexical core of the verb. This is the most basic element of any verb. It is what makes that verb distinct in the lexicon from other verbs.¹³ Some examples of lexical cores are presented below.

λυ-	“loosen, destroy, release”
καλε-	“call”
αγαπα-	“love”
φανερο-	“reveal, make known”

None of these lexical cores will ever appear in the text by itself. They need some inflectional morphology before they can be used in a sentence.

The lexical core primarily requires some kind of morphological marker for aspect, its most prominent grammatical feature. The morphologizing of aspect thus forms the Greek verb’s structural backbone. In Table 1 below, note how aspect morphology attaches directly to the lexical core. In other words, the morphological features that express aspect appear either immediately before or after the lexical core. Another observation that has emerged from our work is that the aspect markers that are *prefixed* to the lexical core always encode imperfective aspect while those that are *suffixed* to the lexical core always encode perfective aspect. This combination of the lexical core and the aspect markers (whether imperfective aspect prefixes or perfective aspect suffixes) forms the *aspect stem*. The aspect stem of any Greek verb comprises its most basic grammaticalized feature.

Table 1: Overview of Morphological Features of Greek Verbs

	Aspect Stem			
Tense Indicator (indicative only)	Imperfective Aspect Prefix	Lexical Core	Perfective Aspect Suffix	Personal Endings

Cross-linguistically, verbal prominence tends to move from the inside out, with the more prominent, more foundational, and generally less static elements located closer to the lexical core, and the less prominent and more variable elements located on the periphery of the verbal form. This feature of verbal prominence correlates to the placement of aspect indicators, modal indicators, the temporal indicator, and personal endings, as we will discuss below.¹⁴

Greek verbs are therefore comprised of three basic aspect stems: the perfective, imperfective, and combinative. You should note here that we are scuttling the

¹³ In linguistics this would be called the verbal root. However, the term *root* in discussion of Ancient Greek usually refers to historical reconstructions of the proto-language. In order to avoid confusion on that point, we use the term *lexical core*.

¹⁴ See here Joan L. Bybee, *Morphology: A Study of the Relation between Meaning and Form* (Amsterdam: John Benjamins, 1985), e.g., p. 22; also Bhat, *Prominence*, 155.

more traditional language of *tense stems* in favor of *aspect stems*, thus reinforcing the aspect prominence of Greek with the labels that we apply to it.

Table 2 shows an analysis of the tense, aspect, and mood markers for three different (first singular) indicative forms of the Greek verb with the root $\delta\omega$: $\delta\acute{\iota}\delta\omega\mu\iota$ (“I am giving”), $\epsilon\delta\omega\kappa\alpha$ (“I gave”), and $\delta\acute{\epsilon}\delta\omega\kappa\alpha$ (“I have given”). Because tense is present in the indicative mood alongside aspect (and *only* in the indicative mood!), we identify both aspect and tense in the left-hand labels below.

Table 2: Tense and Aspect Morphology in Indicative Forms of $\Delta\acute{\iota}\delta\omega\mu\iota$

	Tense Indicator	Imperfective Aspect Prefix	Lexical Core	Perfective Aspect Suffix	Personal Ending
Imperfective Aspect/ Non-past Tense	\emptyset	$\delta\iota$	$\delta\omega$	\emptyset	$\mu\iota$
Perfective Aspect/ Past Tense	ϵ	\emptyset	$\delta\omega$	κ	α
Combinative Aspect/ Non-past Tense	\emptyset	$\delta\epsilon$	$\delta\omega$	κ	α

In Table 2 above, we can observe how Greek grammaticalizes tense, aspect, and lexeme, as well as a number of other features. Consider the first form, $\delta\acute{\iota}\delta\omega\mu\iota$; morphologically, this indicative form lacks the past-tense marker, and is therefore non-past (specifically, the present tense). It is unbounded/imperfective in aspect (“am giving”), utilizing an imperfective aspect prefix (the reduplication $\delta\iota$). In contrast, the form $\epsilon\delta\omega\kappa\alpha$ is past tense (which the ϵ augment marks). It is also bounded/perfective in aspect (“gave”), as expressed by a perfective aspect suffix (κ). Finally, the form $\delta\acute{\epsilon}\delta\omega\kappa\alpha$ is also non-past, as is indicated by the absence of the past-tense augment. Aspectually, $\delta\acute{\epsilon}\delta\omega\kappa\alpha$ is more complex since it has both an imperfective aspect prefix ($\delta\epsilon$) and a perfective aspect suffix (κ). One might question why we view the reduplicated $\delta\iota$ and $\delta\epsilon$ as well as the κ as markers of aspect rather than markers of tense—indeed, the suffix κ (and the σ in aorist and future forms) is often referred to as a “tense formative.”¹⁵ Although this should become clearer as we move forward, we will note here that it is the augment that is absent in the non-indicative paradigms (where tense is absent), not the reduplication or κ/σ suffixes. Thus we argue that it is the augment that expresses tense, not the other features (which instead express aspect). If the above analysis is correct, we can observe here that Greek has a systematic approach to morphologizing both tense and aspect in the indicative mood.¹⁶

¹⁵ So, e.g., William D. Mounce, *Basics of Biblical Greek* (2nd ed.; Grand Rapids: Zondervan, 2003), 356.

¹⁶ Although we have used $\delta\acute{\iota}\delta\omega\mu\iota$ as our example here, these principles apply not only to $\mu\iota$ -conjugation verbs but also to ω -conjugation verbs. Nevertheless, the encoding of imperfective aspect is more explicit in $\mu\iota$ -conjugation verbs since reduplication appears in *both* the imperfective and combina-

Outside of the indicative mood, the grammaticalization of aspect within Greek forms becomes even clearer. Particularly relevant here are Bhat's third and fourth criteria, which state that the prominent verbal category will be both pervasive and obligatory. When we move into the Greek subjunctive, imperative, and optative moods, as well as the Greek infinitive and participle forms, we find that aspect is pervasively grammaticalized across these forms. In other words, aspect appears in all Greek verbs and is thus both pervasive and obligatory. Tense, on the other hand, only appears in the indicative mood.¹⁷

Table 3 below provides representative examples from the non-indicative moods as well as from infinitives and participles. For the ω -conjugation verb λύω, note how the perfective aspect stem is the lexical core + perfective suffix σ ; the imperfective aspect stem is the lexical core alone (though we noted that the μ -conjugation paradigm uses reduplication to encode imperfective aspect); and the combinative aspect stem is an imperfective reduplicated prefix + lexical core + a perfective χ suffix.¹⁸

Table 3: Aspect as Pervasive and Obligatory in Greek

Active Voice						
	Perfective		Imperfective		Combinative	
Infinitive	λύσαι		λύειν		λελυκέσαι	
Participle	λύσαντος		λύοντος		λελυκός	
Imperative	λύσον		λύε		λελύκε	
Subjunctive	λύσωμεν		λύωμεν		---	
Optative	λύσαιμεν		λύοιμεν		---	
Indicative	Past (Aorist)	Non-Past (Future)	Past (Imperfect)	Non-Past (Present)	Past (Pluperfect)	Non-Past (Perfect)
	ἔλυσαμεν	λύσομεν	ἔλύομεν	λύομεν	ἔλελύκειμεν	λελύκαμεν

Aspect is pervasive across the entire Greek verbal system, and it is also the only grammatical category of the three that is always completely obligatory. In comparison, mood is not expressed at all with infinitives and participles, and the past/non-past distinction expressed by the Greek augment prefix disappears entirely outside of the indicative mood.

tive forms in these forms, while in ω -conjugation verbs reduplication appears only in combinative forms. Verbs in the ω -conjugation use the bare lexical core to express imperfective aspect (i.e. imperfective aspect functions as a morphologically default form).

¹⁷ Mood in Greek, like tense, is also represented in a more limited fashion than aspect.

¹⁸ Note that the perfect subjunctive and optative do not appear with a distinct grammaticalized form, but are formed periphrastically.

In all of this, Greek's aspect-prominent features stand in contrast to English's tense-prominent features. Aspect is more grammaticalized, more paradigmatic, more obligatory, and more pervasive than tense or mood. Understanding this linguistic framework for Greek's verbal prominence, and how it differs from our own English linguistic framework, is critical as we move forward to examine the formal morphology and semantic meaning of the Greek verb.

This fundamental linguistic principal of verbal prominence changes the basic question we ask when encountering a Greek verb form. Rather than orienting one's linguistic framework to grammaticalized "tense markers" as has commonly been taught, students of Greek should primarily orient themselves to the grammaticalized aspectual prominence of the verbal system. Why does this need special emphasis? The answer is simple. The majority of grammars of NT Greek over the past two centuries have been written by speakers of tense-prominent languages who naturally compare Greek to their own tense-prominent language. This has invariably affected how the Greek verbal system has been portrayed, with grammarians tending to place an undue emphasis on tense over against aspect. As Bhat puts it, "It is something like trying to understand the colour of various objects around us while looking at them through a red-coloured glass."¹⁹ Being aware of our own native linguistic bias from the beginning will help us to avoid misreading Greek.

When we utilize an aspect-prominent organizational and terminological system in our analysis of the Greek verb, suddenly our descriptions of the language become simpler and more coherent. In what follows, note how the three aspect stems provide the morphological options for any given lexeme. Let us take the standard λυ- paradigm, and observe how it is formed across the various aspect stems.

a. *Perfective aspect*. First we consider the structure of perfective indicative verbs before turning to examine perfective verbs outside of the indicative mood.

¹⁹ Bhat, *Prominence*, 99.

Table 4: Formation of Perfective Active Indicative Stems

	Tense Indicator	Perfective Aspect Stem			Personal Endings
		Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	
Past Perfective (Aorist)	ε	ϑ	λυ	σ	αμεν
Non-Past Perfective (Future)	ϑ	ϑ	λυ	σ	ομεν

With most perfective aspect verbs, an aspect suffix, σ, appears after the lexical core, marking these verbs as perfective in aspect.²⁰ Within the indicative mood, then, we have a binary choice between past (“aorist”) or non-past (“future”), a choice marked through the use of the augment to indicate past time. Note how the perfective aspect stem λυσ appears across the entire verbal paradigm of λύω, including both of the tense options in the indicative mood:

Table 5: Perfective Aspect across the Active Verbal Paradigm

Perfective Active Forms		
Infinitive	λύσαι	
Participle	λύσαντος	
Imperative	λύσον	
Subjunctive	λύσωμεν	
Optative	λύσαιμεν	
Indicative	Past (Aorist)	Non-Past (Future)
	ἐλύσαμεν	λύσομεν

b. *Imperfective aspect.* A similar framework is visible for the imperfective aspect stems. We have already seen how a complete paradigm is displayed by the older μι-conjugation verbs. Note how a similar structure is available for the standard ω-conjugation verbs. Again, we first consider the structure of imperfective indicative verbs before turning to imperfective verbs outside of the indicative mood.

²⁰ There are also verb types, such as the second aorist perfectives, in which the perfective aspect stem is marked through the use of a uniquely perfective stem rather than through a suffix. On the somewhat anomalous nonpast (future) perfectives outside the indicative mood, see below.

Table 6: Formation of Imperfective Active Indicative Stems

	Tense Indicator	Imperfective Aspect Stem			Personal Endings
		Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	
Past Imperfective	ε	ϑ	λυ	ϑ	ον
Non-Past Imperfective (ω-verb)	ϑ	ϑ	λυ	ϑ	ω
Non-Past Imperfective (μι-verb)	ϑ	δι	δω	ϑ	μι

Note again how imperfective verb forms may morphologize their aspect stems in one of two ways: some verbs will mark imperfectivity through prefixing a reduplicated consonant to their lexical core (as is the case with *δίδωμι*); other verbs lack aspect markers altogether, and therefore the lexical core alone serves as the imperfective aspect stem. As with the perfective verbs, this framework is consistent across indicative and non-indicative moods, with the imperfective aspect stem *λυ* appearing across the entire verbal paradigm of *λύω*:

Table 7: Imperfective Aspect across the Active Verbal Paradigm

Imperfective Active Forms		
Infinitive	λύειν	
Participle	λύοντος	
Imperative	λύε	
Subjunctive	λύωμεν	
Optative	λύοιμεν	
Indicative	Past (Imperfect)	Non-Past (Present)
	ἐλύομεν	λύομεν

c. *Combinative aspect*. Note how combinative aspect forms morphologize their aspect stems through the use of an imperfective aspect prefix (reduplication) as well as a perfective aspect suffix (*χ*) affixed to the lexical core. To this aspect stem will be attached modal and personal endings, and, in the indicative mood, a potential past-time augment.

Table 8: Formation of Combinative Active Indicative Stems

	Tense Indicator	Combinative Aspect Stem			Personal Endings
		Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	
Past Combinative	ε	λε	λυ	κ	ειμεν
Non-Past Combinative	∅	λε	λυ	κ	αμεν

Once again, this framework is consistent across indicative and non-indicative moods, with the combinative aspect stem **λελυκ** appearing across the verbal paradigm of **λύω**:²¹

Table 9: Combinative Aspect across the Verbal Paradigm

Combinative Active Forms	
Infinitive	λελυκέναι
Participle	λελυκότες
Imperative	λελύκε
Subjunctive	---
Optative	---
Indicative	past (pluperfect)
	non-past (perfect)
	ἐλελύκειμεν λελύκαμεν

Other scholars use a variety of differing labels to describe what we have called “combinative” aspect. Stanley Porter and those who follow him have called this “stative” aspect, per Porter’s theory that only a resultant “state” rather than a perfective event is in view.²² Most scholars, including Buist Fanning, instead speak of the “perfect” aspect.²³ Constantine Campbell has argued that this aspect is essentially imperfective in aspect, a sort of “intensive present.”²⁴ Here we should pause and comment on the terminological problem inherent to discussion of the perfect. In the English language, the term “perfect” is used to denote a tense category (both perfect as well as pluperfect or past-perfect tenses). Since tense exists in the Greek

²¹ No combinative subjunctive or optative forms of **λύω** are extant in biblical Greek. Of the approximately seventeen combinative subjunctive forms in the NT and LXX, all but one are forms of **οἶδα**. No combinative optative forms at all appear in biblical Greek.

²² Stanley E. Porter, *Idioms of the Greek NT* (2nd ed.; Sheffield: Sheffield Academic Press, 1994), 21–22.

²³ Buist M. Fanning, *Verbal Aspect in NT Greek* (Oxford Theology and NT Monographs; Oxford: Clarendon, 1994), 112–20.

²⁴ These three distinctions were on display at the 2013 Society of Biblical Literature session “The Perfect Storm,” featuring Porter, Fanning, and Campbell.

indicative mood, the traditional practice of using the terms “perfect tense” and “pluperfect tense” to label forms in the indicative mood is not problematic. However, a problem arises when this temporal label is extended to the entire aspectual system including non-indicative verbs. When we extend this tense-based category to describe the underlying aspectual system, a conflict with the temporal nomenclature is the result. We would be comfortable with the use of “perfect aspect,” but this would then require a distinction between the tense categories of “past perfect” and “present perfect.” However, given the entrenched use of pluperfect and perfect terminology for the tense category and given the inherent temporal nature of “perfect” within English, we would argue instead for the purely aspectual category to be labeled “combinative” (reflecting the perfective nature of the completed verbal event and the imperfective nature of its ongoing relevance), which allows us to retain the terms pluperfect and perfect for the indicative tense-forms.²⁵ Given the event + continued relevance semantics we have just described, we reject the term “stative” as both overly limiting and inherently misleading.²⁶

d. *Summary.* It is important to note that the aspect stems are the most basic feature of the Greek verbal system, structuring verbal morphology across the range of moods and verb forms. Examine again how this is the case for the three aspects, as represented in the following table:

Table 10: Formation of Aspect Stems

Active Voice						
	Perfective		Imperfective		Combinative	
Infinitive	λύσαι		λύειν		λελυκέναι	
Participle	λύσαντος		λύοντος		λελυκός	
Imperative	λύσον		λύε		λελύκε	
Subjunctive	λύσωμεν		λύωμεν		---	
Optative	λύσαιμεν		λύοιμεν		---	
Indicative	Past (Aorist)	Non- Past (Future)	Past (Imperfect)	Non- Past (Present)	Past (Pluperfect)	Non-Past (Perfect)
	ἔλυσαμεν	λύσομεν	ἔλύομεν	λύομεν	ἔελύκειμεν	λελύκαμεν

Note how all of the forms of λύω can be broken down into three aspect stems: λυσ, λυ, λελυκ. The indicative forms of these three aspects may further be broken into a past/non-past binary, as indicated by the use of the ε augment. The above table clarifies that the non-indicative verbs have not “lost” their tense markedness; instead, given that Greek is an aspect-prominent language, we should say that forms in the indicative mood “gain” tense. This stands in contrast to the standard cognitive experience of most Greek students, who typically view the in-

²⁵ Cf. Bhat, *Prominence*, 171–75.

²⁶ On the close relationship between morphology and semantics within the combinative aspect, note especially the chapters by Randall Buth (chap. 13) and Robert Crellin (chap. 14) in Runge and Fresch, *Greek Verb Revisited*.

dicative, with its tense binaries, as the most basic verbal form, with the non-indicative forms then somehow losing their tense markers. Keeping Greek's aspect prominence in view helps us maintain a proper orientation to the language's own structure.

2. *Morphological overview of middle/passive verbs.* We briefly note that the middle/passive forms follow a similar pattern as the active forms.

a. *Indicative.* Consider the following table of indicative middle/passive forms for the verb $\lambda\acute{\upsilon}\omega$, with examples taken from the first plural:

Table 11: Tense/Aspect of Middle/Passive Indicative of $\lambda\acute{\upsilon}\omega$ ²⁷

	Imperfective	Perfective	Combinative
Non-past	$\lambda\upsilon$ $\acute{\omicron}\mu\epsilon\theta\alpha$ (present)	$\lambda\upsilon\sigma$ $\acute{\omicron}\mu\epsilon\theta\alpha$ (future)	$\lambda\epsilon\lambda\acute{\upsilon}$ $\mu\epsilon\theta\alpha$ (perfect)
Past	$\acute{\epsilon}$ $\lambda\upsilon$ $\acute{\omicron}\mu\epsilon\theta\alpha$ (imperfect)	$\acute{\epsilon}$ $\lambda\upsilon\sigma$ $\acute{\alpha}\mu\epsilon\theta\alpha$ (aorist)	$\acute{\epsilon}$ $\lambda\epsilon\lambda\acute{\upsilon}$ $\mu\epsilon\theta\alpha$ (pluperfect)

Notice that each pair of forms in the three columns above share the same aspect stems: the imperfective forms (present and imperfect) share $\lambda\upsilon$; the perfective forms (future and aorist) share $\lambda\upsilon\sigma$; and the combinative forms (perfect and pluperfect) share $\lambda\epsilon\lambda\upsilon$. As we saw in the active voice, the imperfective aspect stem is the morphologically default $\lambda\upsilon$ (i.e. the simple lexical core). Similarly, the perfective aspect stem is a fusion of the lexical core $\lambda\upsilon$ and the perfective aspect suffix σ . The combinative aspect stem is a fusion of the lexical core $\lambda\upsilon$ and the imperfective aspect suffix, which here takes the form of the reduplication $\lambda\epsilon$. Curiously, the perfective aspect suffix κ does not appear here as it does in the active forms. Given the tendency of these middle/passive forms to focus upon a state, perhaps we can explain the presence of the imperfective aspect suffix as an indication that it is the ongoing resultant state or relevance that is to the fore, with the prior completed event having fallen largely out of view (and thus the omission of the perfective aspect suffix).²⁸ In any case, the perfect and pluperfect clearly share the same aspect stem.

Note once again, as with the active, the presence of the augment further divides the above middle/passive forms into past and non-past, with the augment appearing on the imperfect, aorist, and pluperfect forms.²⁹

It may come as a surprise to many that we classify the perfective forms $\lambda\upsilon\sigma\acute{\omicron}\mu\epsilon\theta\alpha$ (future) and $\acute{\epsilon}\lambda\upsilon\sigma\acute{\alpha}\mu\epsilon\theta\alpha$ (aorist) as “middle/passive.” Commonly these two “sigmatic” forms are described as middle while the corresponding $\theta\eta$ forms,

²⁷ As in the active, the perfective aspect of second aorists is marked by a distinct lexical core.

²⁸ Note recently Randall Buth, chap. 15 in Ruge and Fresch, *Greek Verb Revisited*.

²⁹ We note that the pluperfect sometimes omits the augment in both active and middle/passive forms, perhaps because these forms are already so distinctive. This may have happened due to its morphological bulk becoming unwieldy. Since past tense was already marked by the more obligatory secondary personal endings, the augment was a logical morpheme to discard.

λυθησόμεθα (future) and ἐλύθημεν (aorist), are described as passive. In reality, these are two alternative sets of middle/passive forms (that is, λυθησόμεθα is an alternate form of λυσόμεθα and ἐλύθημεν is an alternative form of ἐλυσάμεθα), with the θη forms gradually replacing the older sigmatic forms.³⁰ While it is true that within the NT period, the sigmatic forms had become strictly middle in function, historically they had both middle and passive functions.³¹ What is more significant and what will be even more surprising to many is that the θη forms are not just passive but often middle in function. Indeed, we would argue that so-called “deponent” θη forms (indeed, *all* “deponent” forms) are really middle in function, and thus we join with the growing chorus of scholars who reject the label “deponent.”³² Returning to our main point, we need to supplement the immediately preceding table with these alternative forms:

Table 12: Alternative Perfective Middle-Passive Forms (θη Forms)

	Perfective
Non-past	λυθησόμεθα (future)
Past	ἐλύθημεν (aorist)

Here we find another correspondence between the future and the aorist. Their perfective aspect markers, θησ in future and a simple θη in the aorist, are remarkably similar. Indeed, typically the aspect stems of the middle/passive forms of the aorist and the future are nearly identical (compare, for βάλλω, the aorist βληθη to the future βληθησ). These similarities are yet further evidence that the future and aorist share the same perfective aspect and that, overall, Greek’s verbal system is organized by aspect.

b. *Non-indicative*. Once we move outside of the indicative (where tense is not present), the structure of the Greek verbal system is simpler, reflecting not six choices (three aspects times two tenses) but only three (corresponding to the three distinct aspects). Consider the following table (with samplings of infinitives and participles and second plural moods), where once again appear the imperfective aspect λυ, the perfective aspect stem λυσ, and the combinative aspect stem λελυ:

³⁰ In our BibleMesh Greek courses we refer to the sigmatic forms as MP1 (i.e. middle/passive one) forms and the θη forms as MP2 (i.e. middle/passive two) forms, following Conrad.

³¹ The sigmatic middles for the aorist and future never had a passive function; cf. Rutger J. Allan, *The Middle Voice in Ancient Greek: A Study of Polysemy* (ASCP 11; Amsterdam: Gieben, 2003), 147, 156.

³² Especially influential on our thinking is the work of Carl W. Conrad, particularly his seminal article “New Observations on Voice in the Ancient Greek Verb” (November 19, 2002). Online: <http://artsci.wustl.edu/~cwconrad/docs/NewObsAncGrkVc.pdf>. For additional scholarship on this topic, see esp. Allan, *Middle Voice*.

Table 13: Three Aspect Stems in Non-Indicative Middle/Passive Forms

	Imperfective	Perfective	Combinative
Infinitive	λύεσθαι	λύσασθαι	λελύσθαι
Participle	λυομένου	λυσαμένου	λελυμένου
Imperative	λύεσθε	λύσασθε	λέλυσθε
Subjunctive	λύησθε	λύσησθε	---
Optative	λύοιτε	λύσαισθε	---

3. *Morphological overview of various paradigm types.* At the risk of a certain amount of redundancy, in what follows the general typological principles in the preceding charts will be fleshed out in further detail with special reference to ω -conjugation verbs, $\mu\iota$ -conjugation verbs, and irregular verbs.

a. *Regular ω -conjugation paradigm.* There are three basic paradigms for the Greek verb, which we discuss in order of their “productivity,” which is another way of speaking of their pervasiveness in the language.³³ The first and most productive consists of the ω -conjugation (or “thematic” conjugation). The formation of tense and aspect for these verbs is provided in Table 14 below.

³³ In linguistics, the term “productivity” refers to the extent to which a grammatical form and construction is pervasive in the language. The more common it is, the more productive it is. In this case, imperfective-stem verbs are the most productive kind of verb, followed by perfective-stem verbs, and lastly, $\mu\iota$ verbs are the least productive.

Table 14: Tense and Aspect for ω -Conjugation
First Singular Active Indicative Verbs

Non-Past Tense (with Primary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Non-Past Imperfective	\emptyset	\emptyset	$\lambda\upsilon$	\emptyset	ω	$\lambda\upsilon\omega$
Non-Past Perfective	\emptyset	\emptyset	$\lambda\upsilon$	σ	ω	$\lambda\upsilon\sigma\omega$
Non-Past Combinative	\emptyset	$\lambda\epsilon$	$\lambda\upsilon$	κ	α	$\lambda\epsilon\lambda\upsilon\kappa\alpha$
Past Tense (with Secondary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Past Imperfective	ϵ	\emptyset	$\lambda\upsilon$	\emptyset	$\omicron\nu$	$\epsilon\lambda\upsilon\omicron\nu$
Past Perfective	ϵ	\emptyset	$\lambda\upsilon$	σ	α	$\epsilon\lambda\upsilon\sigma\alpha$
Past Combinative	(ϵ)	$(\lambda\epsilon)$	$\lambda\upsilon$	κ	$\epsilon\iota\nu$	$\epsilon\lambda\epsilon\lambda\upsilon\kappa\epsilon\iota\nu$

In this table, we have combined the imperfective, perfective, and combinative forms, distinguishing between the past and non-past forms. The basic component of the ω -conjugation should be clear by now. With imperfective-stem verbs of the regular ω -conjugation, the imperfective aspect stem is the morphologically default option, that is, the simple lexical core. It has no overt inflectional markers. Each of the aspectual formatives becomes increasingly complex in its formation as we move away from the default imperfective morphology. The perfective aspect is realized with a σ aspect suffix. Combinative aspect, the most complex morphologically, is realized through reduplication in conjunction with the perfective aspect suffix κ . Thus, in the case of the verb $\lambda\upsilon\omega$, the non-past combinative aspect takes the form $\lambda\epsilon\lambda\upsilon\kappa\alpha$.³⁴ A tense formative is then available as a prefix, and verbal agreement (person, number, etc.) is realized in the personal endings.

Note especially how grammaticalization of tense happens outside the aspect stem. The distinction between past tense and non-past tense is marked by the ap-

³⁴ When the lexical core begins with a vowel, there is no consonant to reduplicate. Therefore, the initial consonantal reduplication goes unrealized and the epsilon merges with the initial vowel of the lexical core.

pearance of a prefix augment (typically ϵ) for past tense, in conjunction with the secondary subject agreement endings. While the first and foremost marker for tense on the Greek verb is the augment, Greek verb morphology involves additional tense marking that supplements the augment. The existence of the augment as a past tense marker collocates with the secondary personal endings. The lack of the augment collocates with the primary personal endings. This situation, in addition to the fact that secondary endings only exist in the indicative mood,³⁵ suggests that tense marking is a joint effort between the augment and the personal endings. In the study of morphology, this type of situation is called “extended exponence.”³⁶

One should note two qualifications to the typological approach portrayed above:

(1) For the combinative aspect reduplication and the augment are optional in the past tense. One possible explanation for this is that the bulkiness of the past combinative forms creates an unreasonable load on the user, especially when the α aspect suffix along with the past combinative endings (the $\epsilon\iota\nu$ ending above) are already weighty. Whatever the cause, what is most important in recognizing past combinative verbs is the verbal endings.

(2) Regarding the future indicative, the exact nature of this form, especially within the complex development of Greek, must be left to more complete treatments than this article allows. However, a brief comment on the state of affairs is in order. For Greek non-past perfective forms, the temporal location of the state of affairs is almost exclusively subsequent to the reference point, and for this reason the forms clearly fit within the realm of tense, specifically, future tense.³⁷ At the same time, Bhat notes that cross-linguistically the notion and indeed the form of the future relates closely to the prominent verbal category within a given language, whether tense, aspect, or mood. Thus, in an aspect-prominent language, the grammaticalization of the future tense will likely be closely related to aspect markers of the language. This prediction may be reflected in Greek by the use of the perfective σ in the future tense.³⁸ Indeed, the historical origin of the Greek future’s σ has been subject to widespread debate. Many linguists have observed that the concept of future often derives historically from modal forms, expressing desire, obligation,

³⁵ Note that the optative mood is very nearly gone by the time of the NT. Its endings were secondary endings. This suggests a parallel existed in earlier eras of the language between the use of the secondary endings as past tense markers for less probable modality in Greek and the use of the past tense in English (e.g. *I wish I had borrowed your car yesterday*, where *had borrowed* is a past tense form being used to refer to a modally *irrealis* event). See Rodney Huddleston and Geoffrey Pullum, *The Cambridge Grammar of the English Language* (Cambridge: Cambridge University Press, 2002), 149–59.

³⁶ An *exponent* is a phonological element associated with a particular meaning. When an exponent is extended, that particular meaning is extended over multiple phonological element, resulting in a situation where several meanings overlap. Helpfully, P. H. Matthews (*Morphology* [Cambridge: Cambridge University Press, 1991], 169–81), in his discussion of the concepts of extended and overlapping exponence, uses the Ancient Greek verb—though the reader should be aware that he uses the term “perfective” where we would expect the term “perfect.”

³⁷ For what follows on the future tense, see especially Aubrey, “Greek Perfect.”

³⁸ Bhat, *Prominence*, 176–77.

and ability.³⁹ Some hold that the future form is derived from the Proto-Indo-European desiderative suffix *s*.⁴⁰ Under this analysis, the future would be viewed as essentially modal in nature, coding an inherent sense of *irrealis*. Others, however, have argued that the Greek future should be viewed as derived from the perfective aspect suffix, which also takes the morpheme *s*.⁴¹ Similarly, it appears from ancient grammatical descriptions (e.g. Dionysius Thrax) that, regardless of the origins of the future form, native speakers of Koine Greek reanalyzed it as aspectual: a non-past version of the perfective aspect (the so-called “aorist of the future”).⁴²

b. *Older μ-conjugation paradigm.* Beyond the ω-conjugation verbs, there is an older paradigm for verbs as well. This paradigm is not very productive in that there are far fewer verbs in this paradigm during the Koine period than in the regular ω-conjugation.⁴³ However, the μ-conjugation is important because of the number of high-frequency verbs represented within this paradigm. The most common of these is Greek’s “to be” verb εἶμι. Similarly, verbs denoting common concepts like *to put* (τίθημι), *to make stand* (ἵστημι), and *to give* (δίδωμι) are all expressed by verbs in the μ-conjugation. The morphological structure of these verbs differs in a number of ways from the ω-conjugation.

³⁹ See here Joan Bybee, Revere Perkins, and William Pagliuca, *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World* (Chicago: University of Chicago Press, 1994); also Östen Dahl, ed., *Tense and Aspect in the Languages of Europe* (Berlin: Mouton de Gruyter, 2000).

⁴⁰ E.g., Andrew Sihler, *New Comparative Grammar of Greek and Latin* (Oxford: Oxford University Press, 1995).

⁴¹ So Jo Willmott, *The Moods of Homeric Greek* (Cambridge: Cambridge University Press, 2008), 79, who goes as far as to suggest that both the future tense and the perfective subjunctive arose from perfective non-past, each splitting and then taking on different meanings.

⁴² Indeed, there is no real consensus on which view of the Greek future is the correct one. Both Willmott, *The Moods of Homeric Greek*, and David Lightfoot, *Natural Logic and the Greek Moods* (Berlin: Mouton De Gruyter, 1975) conclude on the issue that the evidence is simply too ambiguous to decide in either direction. Allan, *Middle Voice*, 184 n. 325, comments on the historical development of the future: “Interestingly, in Homer the future formation δίδωσομεν (ν 358), δίδωσειν (ω 314) occurs, formed on the present stem of δίδωμι. This future form has an iterative (“presentic”) meaning. The formation can be regarded as a parallel to the future that is based on the aorist stem, cf. δαήσσει (γ 187, τ 325), μγγήσσει (κ 365). The future of the present stem probably vanished, contrary to the thriving ‘aorist’ future, because it could only yield morphologically transparent forms with few present types (namely the reduplicated present, and potentially also the nasal present).” This is interesting in that it is possible evidence of the development of the future struggling to “find its fit.” There may be existence of a future based on the imperfective aspect (presentic), suggesting that language users at one point in its early history considered fitting the form more fully into the tense system rather than the aspect system (which would have made the aspectual prominence of the language weaker than it otherwise became), but merging the future with the aspect system more fully as a perfective-type verb form won out in the end.

⁴³ BDAG has roughly 130 lexical entries for μ verbs. This contrasts with 2,133 lexical entries for verbs that are a part of the ω-conjugation. At one point in the language’s history, this paradigm was as productive as our first paradigm. It slowly fell out of use and eventually disappeared in the Byzantine era; so Geoffrey Horrocks, *Greek: A History of the Language and its Speakers* (2nd ed.; Oxford: Wiley Blackwell, 2010), 143.

Table 15: Tense and Aspect for μ -Conjugation
First Singular Active Indicative Verbs

Non-Past Tense (with Primary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Non-Past Imperfective	∅	δι	δω	∅	μι	δίδωμι
Non-Past Perfective	∅	∅	δω	σ	ω	δώσω
Non-Past Combinative	∅	δε	δω	κ	α	δέδωκα
Past Tense (with Secondary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Past Imperfective	ε	δι	δο	∅	ον	έδιδουν
Past Perfective	ε	∅	δω	κ	α	έδωκα
Past Combinative	(ε)	δε	δω	κ	ειν	έδεδωκειν

First of all, imperfective aspect is no longer the default morphological form. It now has its own overt inflectional marker, the prefixed reduplication. And of course, the personal endings are somewhat different (e.g. the non-past first singular ending above is $\mu\iota$ rather than ω).

Despite these formal differences, the basic morphological structure is essentially the same. There are still three aspects: imperfective, perfective, and combinative. Tense is still morphologically marked within a past/non-past binary system (a morphology that includes past, present, and future reference time). Reduplication is formed in a manner similar to the imperfective aspect suffix on the combinative aspect stem, except with the vowel iota rather than epsilon.

c. *Irregular aspect stems.* Verbs with irregular aspect stems are fairly common. In general their structure is fairly simple: an aspect-specific stem (unique to each aspect) indicates the choice of aspect (which must be memorized by the Greek student). As with regular aspect stems, these irregular stems also attach the augment to the front of the aspect stem in order to indicate past- or non-past tense in the indicative mood. The personal endings for these irregular perfective aspect stems are exactly the same as those of the imperfective aspect in both the past and non-past tenses.

An example of this kind of irregular aspect stem is shown below in Table 16.

Table 16: Tense and Aspect for Irregular
First Singular Active Indicative (βάλλω)

Non-Past Tense (with Primary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Non-Past Imperfective	∅	∅	βαλλ	∅	ω	βάλλω
Non-Past Perfective	∅	∅	βαλ	∅	ω	βαλῶ
Non-Past Combinative	∅	βε	βλη	κ	α	βέβληκα
Past Tense (with Secondary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Past Imperfective	ε	∅	βαλλ	∅	ον	ἔβαλλον
Past Perfective	ε	∅	βαλ	∅	ον	ἔβαλον
Past Combinative	(ε)	βε	βλη	κ	ειν	ἔβεβλήκειν

With these irregular verbs, the difference between each of the aspects is not merely in the inflectional marking but in the modification of the lexical core itself. For the verb above, for both past and non-past forms, the imperfective aspect stem is βαλλ, the perfective aspect stem is βαλ, and the combinative aspect stem is βλη. For the perfective aspect, the modification to the lexical core alone (i.e. without an aspect suffix) indicates the perfective aspect stem. The combinative aspect is unique here in that the change in the lexical core takes place in conjunction with the normal pattern: reduplication and the κ aspect suffix. Once an aspect is selected, the rest of the grammaticalized markers attach in the standard manner.

Some verbs of the so-called irregular stem type might exhibit this change only partially. A good example of a verb like this is καλέω, which only has an irregular lexical core in the combinative and the perfective middle/passive.

Table 17: Tense and Aspect for Irregular First Singular Active Indicative (καλέω)

Non-Past Tense (with Primary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Non-Past Imperfective	∅	∅	καλε	∅	ω	καλέω
Non-Past Perfective	∅	∅	καλε	σ	ω	καλέσω
Non-Past Combinative	∅	κε	κλη	κ	α	κέκληκα
Past Tense (with Secondary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Past Imperfective	ε	∅	καλε	∅	ον	ἐκάλουν
Past Perfective	ε	∅	καλε	σ	α	ἐκάλεσα
Past Combinative	(ε)	κε	κλη	κ	ειν	ἔκεκλήκειν

Observe that the perfective middle/passive takes the same κλη lexical core as the combinative aspect.

Table 18: Tense and Aspect for Irregular First Singular MP1 Indicative (καλέω)

Non-Past Tense (with Primary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Non-Past Imperfective	∅	∅	καλε	∅	ομαι	καλούμαι
Non-Past Perfective	∅	∅	κλη	θησ	ομαι	κληθήσομαι
Non-Past Combinative	∅	κε	κλη	∅	μαι	κέκλημαι
Past Tense (with Secondary Endings)						
	Tense Indicator	Imperfective Aspect Prefix (Reduplication)	Lexical Core	Perfective Aspect Suffix	Personal Endings (Active 1 Sg)	Final Form
Past Imperfective	ε	∅	καλε	∅	ομην	ἔκαλούμην
Past Perfective	ε	∅	κλη	θη	ν	ἔκλήθην
Past Combinative	(ε)	(κε)	κλη	∅	μην	ἔκεκλήμην

This pattern, in which the perfective middle/passive has the same lexical core as the combinative aspect, is fairly common for verbs with irregular aspect stems.⁴⁴

Finally, while irregular aspect stems are most prevalent with the ω -conjugation, this is only because this conjugation is the most common. Irregular aspect stems also appear with verbs of the μ -conjugation.

In sum, observe how the ω -conjugation, μ -conjugation, and irregular verb forms conform to the standard tripartite aspectually prominent framework across the Greek verbal system.

⁴⁴ Once again note how the $\theta\eta$ aspect marker tracks across the middle/passive in both the past and non-past perfective forms (i.e. aorist and future perfective forms). This close morphological relationship within the middle/passive forms further suggests a close aspectual link between the aorist and future forms.

Table 19: Aspect Stem Paradigms Summary

	ω -Conjugation	μ -Conjugation	Irregular Aspect Stems
Imperfective Aspect Stem	no overt aspect marker	reduplication	usually unique aspect stem
Perfective Aspect Stem	σ suffix	σ or κ suffix	unique aspect stem
Combinative Aspect Stem	reduplication + κ suffix	reduplication + κ suffix	reduplication + unique aspect stem + κ suffix

VI. IMPLICATIONS FOR TENSE IN THE GREEK VERBAL SYSTEM

Having examined in detail the nature of aspect prominence in the Greek verbal system, what can we say regarding the essential role of tense? The basic tense distinction in Koine Greek is that of a morphological past/non-past binary, in which past, present, and future reference time may be communicated. Recall that past tense is marked inflectionally on the verb with a prefix augment. This past tense prefix can appear in conjunction with all three aspects (perfective, imperfective, and combinative) in addition to the past-tense (i.e. secondary) personal endings. Tense is only marked morphologically in the indicative mood, which follows Bhat's cross-linguistic suggestion that within the indicative mood non-prominent features are elevated.

1. *Tense and imperfective aspect.* We can see this contrast between past and non-past in imperfective verbs in the example below:

a. ἃ δὲ **γράφω** ὑμῖν, ἰδοὺ ἐνώπιον τοῦ θεοῦ ὅτι οὐ ψεύδομαι

Now what **I am writing** to you, look, before God, [I swear] that I am not lying!
(Gal 1:20)

b. ἀνήγγειλέν μοι Ιερεμίας πάντας τοὺς λόγους τούτους, καὶ **ἔγραφον** ἐν βιβλίῳ

Jeremiah declared to me all these words, and **I was transcribing** them in a scroll (Jer 43:18).

These two clauses, one from the NT and the other from the Septuagint, demonstrate the contrast between past and non-past in the imperfective aspect. In Gal 1:20, Paul highlights the importance of the statement that follows. Since he is presently in the process of writing, he uses the imperfective aspect and non-past tense. As such, there is no augment prefixed on the verb and the personal ending takes its non-past form: *γράφω* (I am writing). In contrast, the verse from the Septuagint consists of Jeremiah's scribe, Baruch, stating that he wrote down the words of prophecy that Jeremiah spoke. Baruch is describing an event that was in process prior to the moment of speech and thus the verb appears in the past tense and has the past-tense augment and a past-tense personal ending: *ἔγραφον* (I was writing, i.e. transcribing). Thus, a basic binary exists within the imperfective indicative between past and non-past.

2. *Tense and the perfective aspect.* The situation between past and non-past tenses with perfective aspect is slightly more complicated. In English the simple present is used to express habitual situations, as in *I eat broccoli regularly*, and in Greek the non-past imperfective (i.e. present indicative tense-form) fills this role. In English, however, the present tense can also be used to communicate perfective aspect (e.g. “I eat”), much like the Greek past perfective (“aorist”) but with present reference time. In contrast, however, Greek does not utilize a specific form that is marked for non-past reference time and perfective aspect. Rather, the Greek perfective non-past form is exclusively used to indicate future reference time. For those rare times when a present event needs to be communicated with perfective aspect, the “aorist” form is chosen. In short, the binary choice available to perfective indicatives is prototypically that of past reference time (the “aorist” tense-form) and future reference time, as in the following examples:

a. **γράψω** ἐπ’ αὐτὸν τὸ ὄνομα τοῦ θεοῦ μου καὶ τὸ ὄνομα τῆς πόλεως τοῦ θεοῦ μου, τῆς καινῆς Ἱερουσαλὴμ, ἣ καταβαίνουσα ἐκ τοῦ οὐρανοῦ ἀπὸ τοῦ θεοῦ μου, καὶ τὸ ὄνομά μου τὸ καινόν.

I will write on him the name of my God and the name of the city of my God, the New Jerusalem, which comes down from heaven from my God, and my own new name (Rev 3:12)

b. Ἐγραψά τι τῇ ἐκκλησίᾳ

I wrote something to the church (3 Jn 9)

In order to illustrate the contrast in tense between past and non-past reference time available within the perfective aspect, we again use the verb **γράφω**. In Rev 3:12 Jesus uses the non-past perfective to refer to a future act of writing his name on the person who is victorious. The perfective aspect in conjunction with the non-past personal ending ω function to convey future time reference. Again, in contrast, the perfective aspect with the past tense in 3 Jn 9 has both the prefixed augment (ϵ) and the past-tense personal ending (α). In this verse, the elder refers to a previous letter that he wrote to the church.

3. *Tense and the combinative aspect.* For English speakers, the combinative aspect often feels like it is already a past tense. That’s because a verb that refers to a completed event that has established a state sounds suspiciously like a past tense. But that is primarily because we conceive of Greek aspect in terms of tense-prominent English. Completion, however, is a property of aspect, not tense. Semantically speaking, the non-past combinative (“perfect”) forms refer to an event that is completed at the time of speaking, though it has present relevance. The “pluperfect” indicative refers to an event that is completed at the time of speaking but the relevance was in the past. See the following examples:

a. ἀναδέδειχα τὸν υἱὸν Ἀντίοχον βασιλέα, ὃν πολλάκις ἀνατρέχων εἰς τὰς ἐπάνω σατραπείας τοῖς πλείστοις ὑμῶν παρεκατετιθέμην καὶ συνίστων, **γέγραφα** δὲ πρὸς αὐτὸν τὰ ὑπογεγραμμένα.

I have appointed my son Antiochus as king, whom, during the many times I hurried to the upper provinces, I entrusted and introduced to many of you. And **I have written** to him what is written [here]. (2 Macc 9:25)

b. Ἰησοῦς κατὰ τὸν καιρὸν τοῦτον **ἐγεγράφει** πρὸς αὐτοὺς πείσειν ἐπαγγελλόμενος τὸ πλῆθος ἐλθόντας ὑποδέχεσθαι

Jesus, about this time, **had written** to them promising that he would persuade the crowd to welcome them when they came. (Josephus, *Ljfe* 271)

Note the binary between a non-past combinative form in sentence (a) and a past combinative form in sentence (b). In clause (a) above, the verb *γέγραφα* (“I have written”) refers to an act of writing that the speaker had finished at the time of speaking. This form has both the combinative aspect’s reduplication (*γε*) and also the combinative aspect’s non-past personal ending (*-α*). There is no past-tense augment, however.

In sentence (b) from Josephus’s biography, Josephus is reporting that a governor named Jesus had completed a piece of writing and that piece of writing was already completed in the past before Josephus’s time of writing. Once again, the past-tense combinative has the past-tense augment (*ε*) as well as the combinative aspect’s past-tense personal ending.

VII. CONCLUSION

In light of the above discussion, let us return briefly to Matt 2:20, introduced at the start of this paper:

λέγων· ἐγερθεὶς παράλαβε τὸ παιδίον καὶ τὴν μητέρα αὐτοῦ καὶ πορεύου εἰς γῆν Ἰσραὴλ· τεθνήκασιν γὰρ οἱ ζητοῦντες τὴν ψυχὴν τοῦ παιδίου.

We asked previously whether the participle *ζητοῦντες* is better described by a tense-prominent system, with tense-prominent labels, or by an aspect-prominent system, with aspect-prominent labels. The adoption of a tense-prominent approach creates problems. In calling this verb a “present participle,” one is immediately led to think in terms of tense. However, by adopting an aspect-prominent approach, and calling this verb an imperfective participle rather than a present participle, we may simply and accurately describe the nature of this verb. We are now equipped to see the event in view (the act of “seeking”) as primarily an imperfective event rather than an event with grammaticalized time. In fact, this imperfective substantival participle could stand in place of either a past or non-past imperfective event. However, the temporal frame must be established contextually, and indeed, given the accompanying perfect tense *τεθνήκασιν*, we see that the relative time of the event “to seek” is understood to be in the past, preceding the death of the seekers. Had this event been framed in the indicative mood, an “imperfect” (i.e. past imperfective) form would have been used, and not a present-tense indicative form, since

the temporal frame of “searching” *logically* precedes the primary verb “they have died.” However, given the non-indicative form, the tense of the verb is simply left to context, being nowhere encoded in the morpho-syntax of the imperfective participle.⁴⁵

In this article, we have made a number of claims regarding aspect prominence that have far-reaching implications for the analysis and description of the Greek language.

1. We have argued that aspect prominence provides a pervasive, morpho-syntactical framework for the Greek verbal system. While both mood and tense are also found in Greek, and indeed are important components of the language, aspect is more grammaticalized, more paradigmatic, more obligatory, and more pervasive than either tense or mood. Aspect in Greek manifests in three distinct forms, each of which is grammaticalized at the heart of the verbal morphology: perfective, imperfective, and combinative aspect.

2. The prominence of aspect has provided a coherent, cognitive orientation for the language, which replaces the standard, tense-prominent, indicative-prominent orientation for mentally categorizing the Greek verbal framework.

3. It should be emphasized that the fundamental morpho-syntactical feature that our students should be orienting themselves toward is the aspectual prominence of the language. This seems to be the fundamental choice available to the author when framing a verbal concept, and it has significant implications for the pragmatic structure of the language.

4. Regarding pedagogical implications, teaching students within a tripartite verbal system that remains consistent across the variables of mood and tense offers a way forward for students seeking to penetrate the dense cloud that often descends upon beginning years of traditional grammatical instruction.

⁴⁵ Here, we should not view the participle to have “lost” its past tense. Rather, the most prominent feature (aspect) is in view, without the addition of the tense marking found within the indicative. Once again, keeping Greek’s aspect prominence in view helps us maintain a proper orientation to what the language is communicating.