

Towards a Theory of Aspectual Nesting for New Testament Greek

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Abbreviations of New Testament Books

Matt.	The Gospel of Matthew
Mark	The Gospel of Mark
Luke	The Gospel of Luke
John	The Gospel of John
Acts	The Acts of the Apostles
Rom.	Romans
1 Cor.	First Corinthians
2 Cor.	Second Corinthinans
Gal.	Galatians
Eph.	Ephesians
Phil.	Philippians
Col.	Colossians
1 Thess.	First Thessalonians
2 Thess.	Second Thessalonians
1 Tim.	First Timothy
2 Tim.	Second Timothy
Titus	Titus
Philem.	Philemon
Heb.	Hebrews
James	James
1 Pet.	First Peter
2 Pet.	Second Peter
1 John	First John
2 John	Second John
3 John	Third John
Jude	Jude
Rev.	Revelation

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1 General

1.1 Goals and Structure

This is a preliminary study towards a fully developed theory of aspectual nesting for New Testament Greek. Such a theory would include a general theory of aspectual nesting, the study of the aspect of verbal stems in New Testament Greek (including prototypical uses), and the interaction of aspect with tense and mood (and the infinitive and the participle), and a study of the way nesting works in Greek in particular.

My specific goals in this work are to present a general theory of aspectual nesting (section 2), and to argue for specific aspectual values for the verbal stems of New Testament Greek (section 5), and to study the temporal reference of the Greek tenses in the indicative (section 6).

1.2 Material

This study is concerned with the Greek of the New Testament, which in this study will be referred to as Greek without further specification. References to other Greek dialects will be specifically mentioned.

The New Testament was written in Koine Greek in the first century AD¹. Koine Greek is later than Classical Greek and earlier than Byzantine Greek. The New Testament has several authors and thus it is not stylistically uniform. Not all of the authors knew Greek to the same extent. It has many allusions to and quotations from the Old Testament, many of the quotations being from a Greek translation called the Septuagint. I will not assess the relationship between New Testament Greek and other Koine in general, other than to note the opinions of Porter and McKay. Porter (1989:156) evaluates that in the area of verbal aspect, New Testament Greek was unaffected by Semitisms, except for occasional enhancement of pre-existing patterns. He does not deny Semitic influence in other areas of New Testament language use. McKay (1981:294-295) is in essential agreement, though he does not really argue his case.

¹ Some, however, date portions of the New Testament in the second century AD. I do not follow this late dating.

Although I have read the whole corpus of the Greek New Testament, I have not systematically analyzed aspect in all of it. Many of my examples are taken from other studies, and I have tried to cover the most relevant categories.

1.3 General Definitions

Aspects are defined by Comrie (1976:3) as "different ways of viewing the internal temporal constituency of a situation". I will accept this basic definition. (For other definitions, especially with reference to Greek, see Porter 1989:88, Fanning 1990:84-85, and McKay 1994:27.)

Comrie's definition contrasts aspect with tense. Tense is concerned with locating the event relative to a deictic center (absolute tense) or some other reference point (relative tense), whereas aspect is concerned with the way the event is temporally distributed within the time frame it occurs in, irrespective of when the event takes place. This means that aspect is concerned with the way the event is viewed as taking place. (Comrie 1976:1-2, 1985:56.)

For this definition it is irrelevant how the aspect is coded, whether lexically, morphologically, grammatically, or any other way. Aspect is viewed as a semantic phenomenon, which can have grammatical reflexes or can be morphologically coded.

Some (e.g. Lindstedt 1985:58) reserve the term aspect to cover grammaticalized aspectual distinctions, and use the term aspectuality in the semantic sense. This may be useful, since a semantical perfective may at times be coded with an imperfective form, according to Lindstedt (1985:60). If this distinction needs to be expressed, I will use the term *grammatical aspect* in the sense Lindstedt uses aspect.

I will illustrate aspect by using its manifestations at the lexical level. There are several ways of how the view of the internal temporal constituency of a situation can differ. The expression can be bounded or unbounded within the scope of predication. An example of a bounded

expression is the lexeme 'kill'². There is a certain result that has to be reached for killing to have taken place. In other words, bounded expressions have a limit that has been reached³. This aspect is called **perfective**. An example of an unbounded expression is the lexeme 'swim'. There is no inherent limit to be reached for the action to be swimming. In other words, once started, it can be stopped at any moment and still swimming took place. This aspect is **imperfective**. The perfective and the imperfective aspects in the above examples are called by some the telic and the atelic aspects respectively (e.g. Smith 1997:3-4).

A situation may not change within the predicated time frame and it may not require any activity to continue unchanged. Such situations are **stative**. Verbs describing stative situations are stative verbs. In English it is characteristic that such verbs do not easily take the progressive form, whereas **dynamic** (non-stative) verbs do. Sentence (1) describes a dynamic situation, and thus allows the progressive. Sentence (2) describes a stative situation, and thus the progressive is ungrammatical.

(1) I am swimming.

(2) *I am knowing.

Sentence (1) illustrates the dynamic aspect, and sentence (2) illustrates the stative aspect.

A situation may be, linguistically speaking, temporally indivisible. By the qualification 'linguistically speaking', I mean that a situation may be divisible into smaller parts in the physical world, but linguistically one cannot divide it into smaller parts. Such events are called **punctual**. An example of the punctual aspect is the lexeme 'blink' (in a non-iterative sense). One cannot blink over a period of time (without repeating the action). The counterpart of the punctual aspect (non-punctual aspect) is the **durative** aspect.

² See section 2.3.1.2 for a view of aspectual nesting where the aspect of the lexeme is not changed by the progressive (e.g. 'I was killing the dragon.').

³ The actual reaching may be cancelled by an outer layer of nesting. See section 2.3.1.2.

Sentence (3) has an **iterative** reading. Iteration also deals with the internal temporal constituency of the situation. The action (as a whole, over the whole time frame) is divided into smaller, repeated actions. The action as a whole is not continuous. The counterpart of the iterative aspect is the **semelfactive** aspect. The semelfactive aspect indicates that the action takes place only once. Also, sentence (3) codes **habituality**. Habituality deals with what is characteristic over a period of time. It can also be considered an aspect.

(3) He used to blink his eyes.

Above I introduced the perfective, imperfective, stative, dynamic, punctual, durative, iterative, semelfactive, and habitual aspects. This is not meant to be an exhaustive list of different aspects, but rather an illustration of different phenomena that Comrie's definition of aspect can account for.

1.4 Prototype Nature of Linguistic Categories

The main thesis of Taylor (1989) is that the prototype view is central to linguistic categorization in general, including grammatical categorization (especially Taylor 1989:142-157, 197-221). Dahl (1985:3-26) argues that the prototype view is essential also for the analysis of aspect, tense, and mood categories. If the prototype nature of grammatical categorization is not recognized, there is a danger that the resulting grammatical analysis reflects an unnatural view of language and not the linguistic intuition of the native speakers. In the following section I will explain what I mean by prototype categorization.

1.4.1 IMPRECISENESS AND CATEGORY MEMBERSHIP

Dahl (1985:3) discusses impreciseness in categorization. With this he means that with respect to category membership there are clear cases of inclusion and exclusion, but also difficult cases in between. This is illustrated with the word 'bald'. How many hairs can a bald person have? He can have some, and still be considered bald. There is no precise limit.

A prototype is a typical representative of a category. There are, however, less typical category members. This means that all members of a category do not have the same status. Thus the category has a focus, where the most typical members are, and a periphery, where the borderline cases are. There is no precise limit where the periphery fades into non-membership.

1.4.2 CENTRALITY OF FEATURES

Some features are more central than others with respect to category membership. For example, a typical woman is an adult female human being (categorization by prototype would normally involve more features, but as they are not necessary for this illustration, I will not try to define a prototypical woman further). Adulthood is not as central a feature with respect to categorization (in a neutral context (if there is such a thing!)) as gender. A relatively young girl could be called a woman.

A corollary of the prototype being characterized with respect to several features is that describing the invariant meaning of the construction does not exhaust its meaning. Frequent associations also add their own nuances (less central features) to the semantics of the construction, even if they do not change the truth conditions of the construction.

What this means with respect to tense and aspect is that it is possible that a grammatical category in some language codes prototypically both tense and aspect, but either is more dominant with respect to categorization. For example, a form may prototypically mean past tense and perfective aspect, but pastness may be secondary (there are far more exceptions to the tense meaning than to the aspectual meaning). I will argue this to be the case for the Greek aorist in section 6.6.

1.4.3 MULTIPLE FOCI

A category may have several foci. This means that there may be several prototypes that have something in common, relative to which the category is characterized. A prototypical tree might be a spruce or a birch. A palm tree is less prototypical, at least in a Finnish context. A typical family tree shares the branching structure with a birch (but less so with a

palm tree). But a family tree might be considered fairly prototypical of the meaning of the word *tree* used in diagrams etc. Thus a family tree may be considered a secondary focus of the tree category, fairly far removed from the primary focus. What these foci have in common may be represented by a more abstract prototype (or schema, to use the terminology of Langacker 1987).

A grammatical prototype category with multiple foci may be illustrated with the Greek imperfect. It is often used to indicate past tense, which is one focus of the category (McKay 1994:42-43). It also has another important use, which is to indicate in a conditional protasis that the premise is presupposed to be untrue (McKay 1994:75-76, 173-174). These two uses may be illustrated with sentence (4)⁴.

- (4) ...οὐκ ἦσαν (imperfect) ἐξ ἡμῶν· εἰ γὰρ ἐξ ἡμῶν ἦσαν
(imperfect), μεμενήκεισαν (pluperfect) ἂν μεθ' ἡμῶν·
'...they were (imperfect) not from us. For if they had been
(imperfect) from us, they would have remained (pluperfect) with us.'
(1 John 2:19)

The first imperfect codes past tense. The second imperfect codes that the condition is assumed to be unfulfilled. The English language has two quite similar uses of the imperfect.

1.4.4 NECESSARY AND SUFFICIENT CONDITIONS?

Categorization by prototype is usually regarded as opposed to categorization by necessary and sufficient conditions (e.g. Taylor 1989:21-37). By espousing the prototype view of categorization I do not, however, wish to exclude *a priori* that some things in language seem to follow

⁴ There is a variant reading that changes the word order of 'ἐξ ἡμῶν ἦσαν' to 'ἦσαν ἐξ ἡμῶν'. This does not affect the issue at hand, nor would it change the gloss. So, it does not matter which reading is adopted. I simply follow the text of Nestle-Aland (1993) here.

categorization by necessary and sufficient conditions⁵. The categories of even and odd numbers seems to be quite close (discussed by Taylor 1989:68-70). But even in this case the prototype is characterized with more features than the mathematical definition. Thus, there are more prototypical even and odd numbers than others, even though the mathematical definition gives equal status to all members of the group.

I view categorization by necessary and sufficient conditions as just an extreme of two parameters of categorization by prototype. It is extreme in the sense that there is a minimal area of unclear categorization, and in the sense that some feature(s) are so central to the exclusion of others as to be alone decisive in category membership.

1.4.5 SUMMARY OF CATEGORIZATION BY PROTOTYPE

Prototypical categories have members that do not have equal status as members of the category. Membership is judged on the basis of similarities to a prototype. The closer the membership candidate is to the prototype, the more often it is considered a member. Usually, some features are more central than others in determining proximity to the prototype. A polysemous category has several prototypes that are interrelated. Categorization by necessary and sufficient conditions can also be handled with a prototype model.

⁵ For a more thorough discussion of the status of these in language, see Taylor (1989:68-74) on expert categories.

2 A General Theory of Aspect

My goal here is to present a general theory of aspect based on the idea of nesting. I will discuss lexical aspect, grammatical aspect, and their mutual relationship.

2.1 Lexical Aspect

2.1.1 GENERAL

The phenomenon that I call lexical aspect has been variously named. Verb types, procedural characteristics, inherent meaning, Aktionsart, and lexical aspect are some of the terms used. Some scholars explicitly deny that this phenomenon is aspectual, but rather set up a distinct semantic category called Aktionsart (e.g. Bache 1982, Fanning 1990:30-42, Porter 1989:46). I, however, will argue below (in section 2.3.2) that what Bache and Fanning call Aktionsart can be analyzed as aspect at the lexical level.

Verbs have been classified into different verb types according to their co-occurrence with certain time adverbials. This has been examined by such scholars as Aristotle, David Dowty, Buist Fanning, Anthony Kenny, Alexander Mourelatos, Gilbert Ryle, and Zeno Vendler. Here I will give a brief presentation of the classification.

2.1.2 VENDLER'S CLASSIFICATION

Vendler (1967) argues for a division of English verbs into four groups, which he calls states, activities, accomplishments, and achievements. These differ in their capability of being in the progressive and of co-occurring with some time adverbials. This division is aspectual as noted by Mourelatos (1981:194).

Vendler (1967:99) begins by dividing English verbs according to their capability of occurring in the progressive. The question "What are you doing?" might be answered "I am running." but not "I am knowing." He explains this on the basis that running is a process, roughly meaning that it consists of successive phases following one another. Knowing, on the other hand, is not a process, but a state.

"It may be the case that I know geography now, but this does not mean that a process of knowing geography is going on at present consisting of phases succeeding one another in time." (Vendler 1967:100.)

The characteristic of a process thus seems to be change⁶. Those verbs that do not describe a process are called states. Processes (which can occur in the progressive) are further divided. Some processes, when stopped, necessarily entail that the process has taken place, others do not have such an entailment. If I am pushing a cart and stop, I will have pushed a cart. But if I am running a mile, and stop, I may not have run a mile. The difference is that one group has a climax to be reached for the action to be what it is claimed to be. Those verbs that do not have a climax are called activities⁷. (Vendler 1967:100-101.)

The remaining verbs are classified into accomplishments and achievements. Accomplishments take time (like *run a mile*), whereas achievements cannot be predicated for a period of time (e.g. *to reach the top*). While one can say "It took him three hours to reach the summit", this does not mean that the "reaching" of the summit went on during those hours. (Vendler 1967:103-104.)

The four kinds of verbs that Vendler (1967) described can be presented by three different aspectual oppositions: stative-dynamic, perfective-imperfective, and punctual-durative. States are stative, imperfective, and durative. Activities are dynamic, imperfective, and durative. Accomplishments are dynamic, perfective, and durative. Achievements are dynamic, perfective, and punctual.

2.2 Grammatical Aspect

Some languages code grammatically the same aspectual distinctions that others code lexically. This is illustrated by Mourelatos (1981:194-195). English codes resultativity with treatment lexically: treating implies nothing as to results, but curing is successful treating. In Russian this difference is

⁶ 'Phases succeeding one another' suggests change, for without change it is difficult to divide the time into phases.

⁷ Vendler summarizes the names for these classes in Vendler (1967:106).

expressed by means of a morphological aspect (lehit;, 'treat' is imperfective, vylehit;, 'cure' is perfective).

2.3 The Relationship Between Lexical and Grammatical Aspect

Both lexical and grammatical aspect are important. Their mutual relationship has been variously explained. Below I will present a view of their relationship based on nesting (section 2.3.1) and assess Bache's (1982) view of them as two semantically different phenomena (section 2.3.2).

2.3.1 NESTING

By nesting I mean that a linguistic construction is embedded in another so that, with respect to a semantic feature, the outer construction changes the meaning of the composite expression from the meaning of the inner construction. The value of the feature in the inner construction still contributes to the semantics of the whole expression. This may be illustrated with the following figure.

$$[[X_{Fa}] Y_{Fb}]$$

F stands for a semantic feature. Fa is the feature F with value a. Fb is the feature F with value b. X has the semantic feature Fa. Y[X] (the composite expression) has the semantic feature Fb. It is irrelevant whether Y precedes, follows, or circumscribes X. It may even be zero (see section 2.3.1.2). This is *semantic nesting*.

Different layers of semantic nesting may have slots in the structure of the language where they can be coded. I have already presented two such slots for aspect: the lexical and the grammatical layer. These two layers are *structurally nested*.

That tenses can be nested is a central argument of Comrie (1985). Aspectual nesting was proposed by Lindstedt (1984 and 1985:169-210). It can be illustrated with the Finnish sentence (5). Parentheses describe layers of nesting.

(5) ((((((Luen) kirjan) päivässä) viikon ajan) joka kuukausi) vuoden ajan).

The English equivalent is below (6).

(6) ((((((I read [present tense]) a book) every day) for a week) every month) for a year).

Note, however, that English *read a book* is aspectually neutral. It does not express whether one finishes the book or not. The Finnish *luen kirjan* requires that the book is read through⁸. The Finnish expression is aspectually perfective.

Semantically *luen* (I read) can be considered imperfective (open, unbounded). By adding an object in the accusative case, the expression is bounded (there is a set limit, 'I read one book'). It thus becomes perfective (bounded). It is opened again by adding *päivässä* (every day), thus changing the expression to be imperfective again⁹. It is then bounded again by adding a temporal adverbial in the accusative *viikon ajan* (for a week)... In this sentence every accusative makes the sentence bounded and every non-accusative adverbial makes the sentence unbounded. In this example the semantic layers coincide with the structural ones.

The fact that these aspects are not grammaticalized in English or that they are not grammaticalized in Finnish in the verb is no counter argument. They do not have to be. But Lindstedt (1985:169-210) argues that the Bulgarian verb has forms that grammaticalize two layers of aspect (imperfective inside perfective, and perfective inside imperfective). These two layers do not include the lexical meaning.

⁸ The nature of of the bound is largely dependent on contextual and encyclopedic knowledge in Finnish. It is possible to specify explicitly some other limit to be reached (e.g. "Luen kirjan puoliväliin/hajalle.", 'I read a book half way through/(so that it becomes) broken.'). Unless some other limit is somehow specified, it is pragmatically required that the whole book is read.

⁹ Actually the sentence becomes ambiguous. It can mean either that 'I read a/the book in a day' referring to only one book, or 'I read a book a day' in an iterative sense. Here I am concerned only with the latter meaning.

Lexical aspect (Aktionsart) is not incompatible with the same or different aspectual oppositions realized grammatically. Since the lexical level expresses more delicate distinctions than what are grammaticalized in a particular language, one would expect that more aspects would be expressed lexically than grammatically.

2.3.1.1 TWO KINDS OF RESULTS FROM OPENING A PERFECTIVE

A perfective expression, when opened, yields two quite different interpretations. In one, the bounded situation is iterated. In the other, an inner viewpoint of the situation is obtained.

Sentences (5) and (6) illustrate the interpretation with iteration. The reading of a book occurred every day. The bounded layer was opened again with iteration. I will discuss here one Greek example, but note that the English gloss is just as good an example.

(7) Νηστεύω (present indicative) δὶς τοῦ σαββάτου.
'I fast (present indicative) twice a week.' (Luke 18:12)

Here the Pharisee boasts about his religious activities. Fasting is an activity. It is imperfective. However, it is bounded in the next layer, implied by the word δὶς, 'twice'¹⁰. But this bounded expression is opened again using the present stem of the verb¹¹. Thus this fasting twice a week

¹⁰ See Lindstedt (1984:33) and my section 2.3.1.2 for implied layers. Not every layer of aspect has a formal expression. This means that there may be more layers in the semantic sense than there are in the structural sense. Also the opposite is true: there may be more structural layers than semantic ones.

¹¹ I have not yet argued that the present stem codes the perfective aspect. I do that in section 5. However, it would require a somewhat forced interpretation to understand that the pharisee boasted of his achievements over one week. The more natural understanding is that it was his habit to fast twice a week. This argument is apart from any aspectual value the present stem might contribute. Thus there is a semantic argument that at least in this instance the overall expression is imperfective. This saves the use of this example from circularity: here I build a general theory of aspect using a Greek example, and in section 5 I apply it to Greek. Also, the English gloss is a non-Greek example that is enough to prove the point.

occurred several times. In this case the opening of a bounded expression yields a habitual sense.

In this example, as well as the previous ones, the outer layer did not change the meaning of the inner layer in any way. This is what Lindstedt (1984) calls nesting¹².

The other way to open an expression is structurally similar¹³, but semantically different. I call this also nesting (in accordance with the definition I gave above), but note that here I expand the meaning of nesting from Lindstedt (1984). In this other way of opening a bounded expression, the situation described in the inner layer is not multiplied, but it rather becomes unbounded. The original bound remains meaningful in the expression, but the limit is not actually reached within the scope of predication. Sentence (8) is an example of this.

(8) I was baking a cake.

Sentence (8) does not entail that the making of the cake was ever completed. To bake a cake is an accomplishment and bounded as such. Here the bounded expression is opened by the progressive. This time the result is not any repetition of the action, but rather a view of the action in progress. The limit of the inner layer is not reached within the scope of predication. But it is the intended goal. I was baking a cake, with a certain goal, regardless of whether the goal was ever reached. The composite expression is not an accomplishment but an activity.

The viewpoint is changed here to taking an inner perspective of the situation, leaving parts of the situation described by the inner layer outside of the scope of predication of the composite expression.

¹² He is concerned only with the alternation of perfective and imperfective layers.

¹³ The structural similarity is apparent when one compares sentences such as 'he was baking the cake' and 'he was kicking the ball'.

2.3.1.2 IMPLIED LAYERS

Not every layer of aspect is formally represented. An example of this is the Finnish sentence (9).

(9) Hän räpäytti silmiään kolme kertaa.
'He blinked his eyes three times.'

Räpäytti 'blinked' is a punctual verb in Finnish. The expression is bounded by an adverbial quantifier *kolme kertaa* 'three times'. This forces an iterative meaning for blinking. Thus a punctual is iterated and the iteration is bounded. The semantic structure may be illustrated as follows: (((Punctual, one blink, expressed by -ä- in *räp-ä-ytti*) iterated, blinked repeatedly, this layer is not formally expressed) perfective, repetition limited to three by *kolme kertaa*).¹⁴

2.3.2 EVALUATION OF BACHE'S DISTINCTION BETWEEN ASPECT AND AKTIONSPORT

Bache (1982) claims that a rigid semantic distinction must be made between aspect and Aktionsart. Bache (1985) further elaborates his theory of aspect based on this distinction.

Bache (1982) argues against conflating aspect and Aktionsart into one category, as Comrie and Lyons do. Comrie (1976:6-7) explains that the distinction between aspect and Aktionsart has been drawn in two different ways: 1) aspect is the grammaticalization and Aktionsart the lexicalization of the relevant semantic distinctions, and 2) aspect is the grammaticalization of the semantic distinction and Aktionsart is the lexical distinction provided that it has been arrived at by derivational morphology.

Bache's (1982) argument is that aspect and Aktionsart constitute two semantically different categories. The distinction between imperfective and perfective is aspect. All else seems to be Aktionsart. The view that there are only two aspects is mentioned with approval in Bache (1985:6).

Bache's main basis for rejecting Comrie's approach seems to be that Comrie's other aspect categories (habituality, progressiveness and

¹⁴ The existence of implied layers is more thoroughly argued by Lindstedt (1984:31-33).

continuity) are not logically incompatible with perfectivity (Bache 1982:62). This is true only when dealing with different layers of nesting. A continuous expression can be summed up as a single unanalyzable whole in another layer. As far as the same layer of nesting is being described, they are logically incompatible. Progressiveness and continuity are subtypes of imperfectivity. What I mean by this is that a continuous expression is never in itself a single unanalyzable whole summed up. Thus they are logically incompatible in the same layer of nesting. I argue that this analysis is superior to making a semantic distinction between aspect and Aktionsart.

Bache (1982:61-62) argues that habituality does not leave the speaker with a choice as in the case of perfectivity versus imperfectivity, and therefore it cannot be aspectual but deals with Aktionsart.

"Though in one sense its [habituality] presence or absence could be said to depend on the speaker/writer's 'different ways of viewing the internal constituency of a situation', the speaker/writer is never left with a choice as in the case of perfectivity versus imperfectivity" (Bache 1982:61.)

This argument seems to presuppose that aspect leaves a free choice, and Aktionsart does not¹⁵. This is the view of some scholars (see Bache 1982:64-5), but Bache himself repudiates this view if taken to the extreme (1982:65). The fact that Bache considers aspect to have an objective element and Aktionsart to have a subjective element erodes the premise on which he builds the distinction between aspect and Aktionsart, at least in his argumentation on habituality. The distinction between aspect and Aktionsart cannot be more rigid than the distinction between objectivity and subjectivity, if that is regarded as the basis of the distinction.

The same argument Bache used to say that habituality is not an aspect can also be used against classifying the perfective as an aspect. Consider the Finnish sentences (10) and (11).

¹⁵ For a defence of a denotative view of aspect (as opposed to a subjective view that considers aspect quite independent of the kind of situation referred to) from the standpoint of nested aspects, see Lindstedt (1984).

- (10) Rakensin talon (perfective). 'I built a house.'
 (11) Rakensin taloa (imperfective). 'I was building a house.'

Sentence (10) entails sentence (11), but not vice versa. Whether the speaker can truthfully say (10) is dependent on objective facts, even if sentence (11) is true. The speaker is no more free to choose between (10) and (11) than he is between non-habitual (12) and habitual (13).

- (12) Throughout last year Sally threw stones at my window at 5 a.m.
 (13) Throughout last year Sally used to throw stones at my window at 5 a.m.

The same situation may well be described using either sentence (12) or (13). Sentence (13) adds the information that the speaker considers the occurrence characteristic enough to use the habitual, just as sentence (10) adds the information that the speaker considers that the building of the house was completed.

There are a few reasons why I think that Bache's distinction between aspect and Aktionsart as two semantically distinct phenomena is not the best view.

1) Aspect changes Aktionsart. If they are semantically distinct, one still has to be able to explain why such changes are so common. (See sections 2.4 and 2.5.) Aspectual nesting gives a better motivated account for this. For example, an imperfective aspect makes an accomplishment into an activity.

2) Aktionsart also codes the perfectivity versus imperfectivity distinction. While activities are unbounded (imperfective), accomplishments have a limit or terminus in them, and are thus perfective.¹⁶

3) There is no basis to claim that the semantic distinctions Bache calls Aktionsart differ from those he calls aspect in terms of objectivity in any

¹⁶ For the terms bounded and unbounded with respect to Aktionsart, see Fanning (1990:143). Some (e.g. Smith 1997:3-4) use the term telic to refer to resultative expressions. Telicity may be considered as one kind of perfectivity.

rigid way. Bache notes this, but does not seem to note that this erodes his basis to maintain that there is a rigid semantic distinction between aspect and Aktionsart.

4) To use Occam's razor, if there is no need to set up a distinction, a theory without one is to be preferred.

Part of the problem may be that in a language that has grammaticalized aspect, the lexical aspect may be changed without it affecting the aspect of the overall expression, despite the change in meaning. This constitutes no argument against regarding aspect and Aktionsart as semantically similar. They are both significant, but realized often in semantically different layers.

However, the distinction between aspect and Aktionsart is a step forward from a theory of aspect that views them as similar and does not include the idea of nesting. The distinction makes one consider at least two layers and study their interaction. I do not claim here that it is impossible to include the idea of nesting in a theory of aspect that differentiates between aspect and Aktionsart as two different semantic categories. However, I see no need for such a distinction if the idea of nesting is included in the theory. Thus I do not reject the contribution by Bache and other aspectologists who have maintained the distinction. I am only saying that the arguments presented for the distinction are no longer valid when nesting is considered.

2.3.3 SUMMARY OF THE RELATIONSHIP BETWEEN LEXICAL AND GRAMMATICAL ASPECT

Aspect is best seen as a nested semantic structure. Grammatical and lexical aspect realize different layers of nesting¹⁷. I argued that this

¹⁷ Lindstedt (1984:33) denies that an aspect can be nested outside the same aspect without a different aspectual layer in between. But Lindstedt (1985:172) considers it possible to code aspect (or at least perfectivity and imperfectivity) outside a layer of the same aspectual value. The difference is that Lindstedt (1984:33) was concerned with the semantics, Lindstedt (1985:172) with structure. Lindstedt (1985:172) says that the coding of the same aspect in adjacent layers is possible. In this case these layers are not

analysis is superior to seeing aspect and Aktionsart as two semantically distinct phenomena. Instead, I prefer to treat them as two different layers of nesting, both dealing with aspect.

2.4. Mourelatos' Verb Types

Mourelatos (1981) examines further the divisions into verb types proposed by Vendler (1967) and Kenny (1963). The main difference between Vendler's and Kenny's classifications is that Kenny does not differentiate between accomplishments and achievements.

Mourelatos (1981:194-195) claims that the phenomenon Vendler and Kenny had studied is aspect. Aspect is grammaticalized for example in Russian, where there are two aspectual forms of the same verb corresponding to the English activity *treat* (lehit;, imperfective) and achievement *cure* (vylehit;, perfective). He cites ancient Greek as an example:

"In Plato's *Ion* 530 A, Socrates asks: "ἡγωνίζου [imperfective preterite] τι ἡμῖν; καὶ πῶς τι ἡγωνίσω [same verb, perfective preterite]" 'And how did you compete [activity]? And how did you succeed [achievement]?"

Mourelatos (1981:196) claims that the same verb can function differently in different contexts as far as Vendler's classification is concerned. For example *understand* can get an activity interpretation in context: *I'm understanding more about quantum mechanics as each day goes by*. This illustrates the very important point that verbs may be aspectually polysemous.

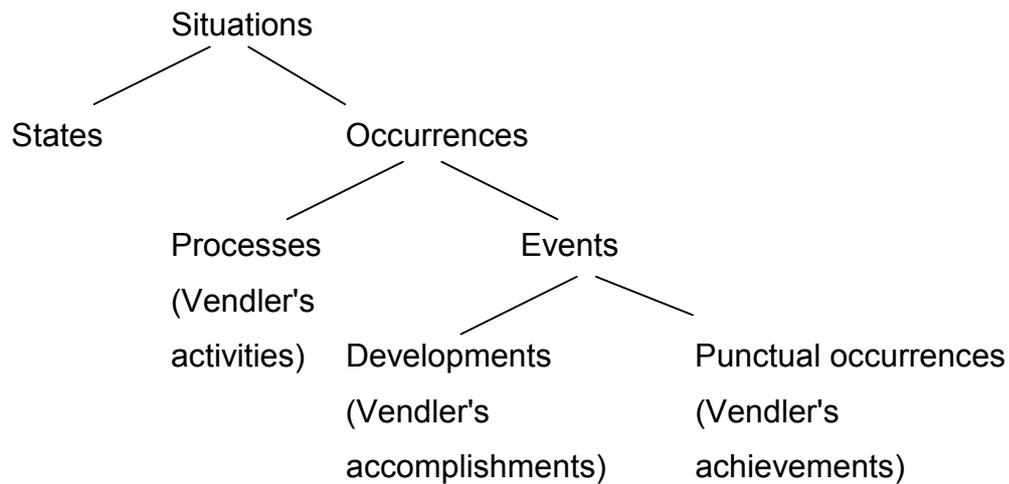
Mourelatos notes that the function of aspect is not limited to the Kenny-Vendler typology. For example, aspect can be used to code habituality. The verb's aspectual marking does not specify the relevant category alone. Mourelatos (1981:199) enumerates six factors that are involved: (a)

independent, and the expression is semantically equivalent to only one layer of the same aspect, i.e. B(B) is still B, and U(U) is still U, where U and B stand for unbounded and bounded, respectively. Here I am concerned with the structural sense of nesting.

the verb's inherent meaning; (b) the nature of the verb's arguments, that is, of the subject and of the object(s), if any; (c) adverbials, if any; (d) aspect; (e) tense as phase (e.g., the perfect); (f) tense as time reference to past, present, or future.

2.4.1 VERBS OF SEEING

Mourelatos further criticizes Vendler's analysis of seeing (Mourelatos 1981:200-201). A case in point is how *saw* is to be analyzed in *I saw him run*. It is not an achievement, for it can stretch over time, even though in some contexts seeing can have an achievement meaning. Nor is it, according to Vendler (1967:115), a process, since it cannot occur in the progressive. (Sentences of the type '*I was seeing him.*' have a different sense of seeing). So Vendler (1967:115) classifies it as a state. But this is counter-intuitive, according to Mourelatos (1981:200), since we are not tempted to paraphrase *I saw him run* as *I was in a state of visual awareness of him running*. Further, *I saw him run* can answer the question *What happened next*. So Mourelatos would classify it as an event. He presents his scheme in the following diagram (Mourelatos 1981:201). Vendler's activities correspond to Mourelatos' processes.



Mourelatos uses examples of physical situations:

State: The air smells of jasmine.

Process: It's snowing.

Development: The sun went down.

Punctual occurrence: The cable snapped. He blinked. The pebble hit the water.

According to Mourelatos (1981:202), there can be visual states (*I see dimly*), visual processes (*I'm seeing a bright light*), visual developments (*I saw him cross the street*), and visual punctual occurrences (*I caught a glimpse of him as he was crossing the threshold*). Thus, there can be state predications, process predications, and event predications.

2.4.2 THE PARALLELISM OF ASPECT AND COUNT-MASS NOUNS

Mourelatos (1981:203-210) argues that the aspectual distinction between the imperfective and perfective aspects is parallel to the distinction between mass and count nouns. Countability is a feature of the perfective aspect. He uses the following sentence pairs as examples:

(14) Vesuvius erupted three times. - There were three eruptions of Vesuvius.

(15) Mary capsized the boat. - There was a capsizing of the boat by Mary.

But:

(16) John pushed the cart for hours. - For hours there was (*a) pushing of the cart by John.

(17) Jones was painting the Nativity. - There was (*a) painting of the Nativity by Jones.

Bounded (perfective) expressions (14)-(15) differ in their nominalizations from unbounded (imperfective) expressions (16)-(17) with respect to countability. This demonstrates the proximity of perfectivity to countability.

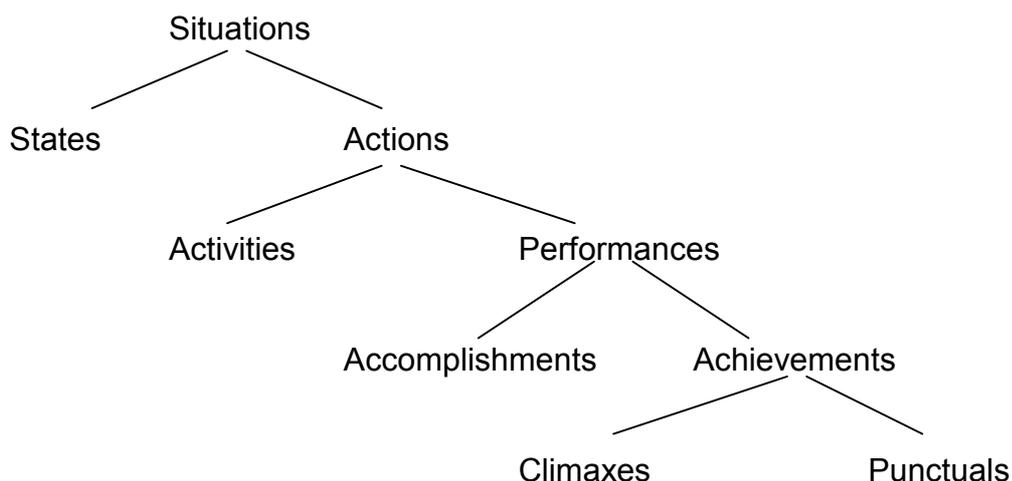
Armstrong (1981:1-12) argues that there is a selection restriction in ancient Greek that adverbs of cardinal count do not (with few exceptions) occur with the present (imperfective) stem. This supports Mourelatos' argument about countability being a quality of perfective aspect.

2.4.3 SUMMARY OF MOURELATOS' CONTRIBUTION

Mourelatos argued that the phenomenon Vendler studies was aspect. He also pointed Vendler's problematic analysis of verbs of seeing, and noted that a lexeme may be polysemous with respect to aspect (he used the term semantic multivalence). Further, he noted the close relationship between perfectivity and countability.

2.5 Fanning's Classification And Diagnostics of Verb Types

Fanning (1990:128-163) proposes a classification of verb types somewhat similar to that of Vendler, but more elaborate. I will evaluate his classification and criteria. His classification can be illustrated with the following diagram.



2.5.1 STATES VERSUS ACTIONS

The basic distinction in Fanning's classification of verb types is between states and actions, represented by stative and dynamic verbs respectively. They are differentiated on the basis of change. There is change in activities, whereas states have no change. States are durative and unbounded.

While some linguists (e.g. Langacker 1987:254-256) think that the crucial feature is change, others disagree. English, for example, does not allow statives in the progressive. There are still a number of cases where a verb may occur in the progressive even though there is no change. A case in point is "John is refraining from saying anything rude". There the point seems to be, not change, but volition. Dowty (1979:165) analyzes the sentence using a semantic feature [volitive]¹⁸. Comrie (1976:49) suggests that the issue is whether an input of energy is required to maintain the situation.

Volitionality seems to be the right analysis for why "John is refraining from saying anything rude" can occur in the progressive. Of course, mere lack of volitionality is not enough for a situation to count as stative. The expression *the rock is rolling down the hill* is grammatical.

¹⁸ Here Dowty follows Cruse (1973), who postulates two different features: [volitive] and [agentive] (and actually more, but Dowty uses only these two). Dowty (1979:184) considers some statives to be agentive.

Assuming a prototype view of grammatical categorization (see section 1.4), it should be no great surprise that there are difficult cases. A prototypical stative involves no change and no volition. The situation continues on without change, unless change is introduced by the input of energy.

While the distinction between stative and dynamic verbs is grammaticalized in many languages (see Bybee 1985:147-149 for some examples), it is necessary to see what is grammaticalized as stative in Greek for the study to be maximally relevant to the study of Greek grammar. The most prototypical cases can be accepted as statives and those far from the prototype as actions, and then one can study if the difference is grammaticalized in Greek.

Fanning (1990:129-134) evaluates five criteria for states. The evaluation given here for these five criteria is approximately the same as Fanning's.

1) States cannot occur in the progressive form. While this criterion is useful in languages that have the progressive form (see Comrie 1976:32-40 for discussion with focus on English), Greek has no progressive. This test is therefore not applicable. There is a construction in Greek that morphologically resembles the English progressive (the periphrastic construction), but it combines freely with both states and actions.

2) States cannot occur in the imperative mood or as complements of verbs of 'persuading' or 'forcing'. This is, however, rather a test of volitionality, not stativity. Thus, it is of limited value.

3) States cannot occur with manner adverbials like 'reluctantly', 'carefully'. Here the same criticism applies as in the former test. This also tests for volitionality.

4) States cannot be used as a substitute or parallel for the active proverbs 'do' or 'happen'. A stative does not fit into the linguistic frame "What he did was ____". This is basically a test of semantic compatibility. It is difficult to apply since we do not have native speakers of Koine Greek alive.

5) States can occur with temporal phrases of the sort 'for x time' but not with adverbials like 'in x time' or 'quickly'. While this is true of states, it is not distinctive of them.

However, a sixth criterion might be suggested for Greek. The aorist form of statives often (but not always) denotes entrance into the state (Fanning 1990:137-138, McKay 1994:28). The beginning of an action denoted by a dynamic verb is described, rather, using the present stem (McKay 1994:28). This is a useful criterion even though in some cases it is still difficult to establish whether a verb is stative or dynamic. For an example of the difficulty of applying this criterion to some verbs, see McKay's study of verbs of knowing (McKay 1981:298-309, especially 305-306). One also has to remember that a given verb may be aspectually polysemous, i.e. belong to both categories according to its sense in context. And since it is hard to resurrect natives for informants, not all verbs could be classified using this criterion.

No strict criteria were set up to determine the Greek use of a verb with respect to stativity. Probably the best way to detect the Greek use is to study the difference between the aorist and the imperfect uses.

2.5.2 ACTIVITIES VERSUS PERFORMANCES

Fanning further subdivides actions into activities and performances. Activities are unbounded whereas performances are bounded. Fanning (1990:141) describes the difference as follows:

"A bounded expression involves, either as part of the inherent lexical meaning of the verb or as part of a nominal or adverbial complement used with the verb, a terminal point at which the action is 'finished', not just 'ended'. Unbounded actions or activities have no such terminus."

Fanning gives three criteria that distinguish between activities and performances.

1) Temporal adverbials of the type 'for x time' can occur with unbounded expressions using simple aspect (aorist), but not with bounded ones in the simple aspect. This assumes a non-iterative reading. Fanning further warns that the test must be applied to the simple verb, since the

progressive distorts the results in assuming an iterative sense, which is durative.

Fanning seems to confuse Greek and English here. Greek has no progressive, and English has no aorist. Maybe he uses the somewhat curious term 'simple aspect' to exclude any iterative reading, thus including the Greek perfective (aorist) and the English non-progressive. However, any iteration does not distort the results. The results still apply, but another layer of aspect is tested. Thus "he walked in the park for one hour" is acceptable, and the action 'walk in a park' is classified as an unbounded activity. "*He walked a mile for one hour" is unacceptable, and therefore it is bounded performance. But the progressive works fine, too. "He was walking a mile for an hour" is acceptable, as it should be. There a bounded expression "walk a mile" is opened by the progressive. "Was walking a mile" is thus unbounded and therefore an activity. A time adverbial of minimum duration is compatible with an activity.

For the purpose of classifying verbs, it is true that iteration skews the results. But the change of the aspect does not change the applicability of the test to the study of aspect of the whole expression. Fanning (1990:142) notes that an iterative reading makes the expression unbounded. Here we are dealing with aspectual nesting. Unfortunately he did not follow the thought through.

Fanning further warns that when the test is applied, it is possible to have a time adverbial referring to the duration of the effects, not the occurrence itself. He uses as an example Luke 4:25 ἐκλείσθη ὁ οὐρανὸς ἐπὶ ἔτη τρία καὶ μῆνας ἕξ, 'The sky was closed for three years and six months.' (The sense is that it did not rain for three and a half years.)

2) The second criterion is the entailment difference between an imperfective verb in an unbounded expression compared to a bounded one. This works in two ways:

a) The past imperfective of an unbounded expression entails the parallel preterite verb, but for bounded expressions there is no such entailment. In other words, if he was verbing, then it is true that he verbed,

if verbing is unbounded. The terminus of a bounded expression must be reached for the action to have been truly done. With bounded expressions there is no such entailment.

b) The present imperfective entails the negative perfect verb for bounded expressions, but not for unbounded ones. Thus, "he is building the house" entails "he has not (yet) built the house".

However, these entailment tests may be difficult to apply to punctuals, since the imperfective reading usually (according to Fanning) makes the sense iterative. (If the expression is truly punctual, an imperfective reading makes it always iterative in some sense.)

3) Only bounded expressions (performances) can appropriately be used as complements of the verb *finish*. Unbounded actions (activities) fit more naturally with the verb *stop*. The corresponding Greek verbs that can be used for this test are *τελέω* and *παύω*.

The classification of a verb or expression as an activity involves both estimation of the semantics and syntactic tests (where appropriate texts can be found).

2.5.3 ACCOMPLISHMENTS VERSUS ACHIEVEMENTS

This distinction operates only within performances (bounded actions). The distinction is based on duration. Accomplishments are durative, achievements are non-durative. However, this duration does not mean actual, objective, factual duration, but it is rather concerned with whether the action is linguistically coded as having duration. Fanning (1990:149-150) gives two tests for accomplishments.

1) Inclusive durational phrases like 'in x time' (in a durative sense, not in the sense of 'within x time') can occur with accomplishments, but not achievements. The verb has to be in the simple aspect in this test, according to Fanning. This is true in the sense that if the aspect is imperfective, we do not have a bounded expression at all, and thus the test is irrelevant. "I read this book in five hours" is acceptable, but "I bought this book in five hours" is not, according to Fanning. However, if it took almost five hours to finally get the book bought, one might say "I

bought this book in five hours". But then buying actually loses its achievement nature and is viewed as an accomplishment.

2) Point temporal phrases can occur with achievements but not accomplishments. "I bought the book at five o'clock" is acceptable, but not "I read a book at five o'clock". Sometimes a point temporal can be used with an accomplishment (according to Fanning), but it changes the meaning into "begin to verb". "I gave a lecture at five o'clock" means I began the lecture at that time. There are actually two ways in which this can be analyzed. One analysis is that in these phrases the accomplishment changes into an achievement. The other is that an accomplishment can allow a point temporal adverbial to denote a prominent moment in the whole accomplishment.

2.5.4 CLIMAXES VERSUS PUNCTUALS

This division of achievements goes a step further than Vendler's (1967) classification, following Østergaard (1979:90-91). The distinction is based on the feature of 'prefacing'. Some achievements occur as a result of a process or effort which culminates in this event, but is regarded as a separate action. These are called climaxes. Other achievements imply no other action. They are called punctuals.

A climax could be illustrated by "she found her coat" or "he arrived just in time". Climaxes are similar to accomplishments in that both involve a process leading to a terminus. The difference is whether the process is separate or not. Climaxes can take momentary adverbial modifiers like 'at five o'clock', but not inclusive durational modifiers like 'in five hours' (to describe the duration of the action). Accomplishments behave in the opposite manner. Climaxes do occur with phrases like 'in five hours', but then the duration describes, not the time when the action is done, but the time when the action is not done.

The criterion Fanning gives for distinguishing climaxes from punctuals is the different sense that they will get in the imperfective aspect. With a punctual the sense becomes iterative, but with a climax, the emphasis is on the prefacing action, according to Fanning. Here I would like to add that with a climax there is no reason why iteration cannot be implied in a

context. The real difference is that for a punctual to be put into an imperfective aspect, it must lose its punctuality, for punctuality and imperfectivity are mutually incompatible. The difference between climaxes and punctuals is that a climax can change its meaning in an unbounded expression by including the prefacing action. A punctual cannot thus change, and so the only way for it to be open is iteration of the event.

What really happens in climaxes in the imperfective aspect is that they actually become accomplishments, once again illustrating aspectual polysemy. This accomplishment is then nested inside an imperfective which changes it into an activity. Thus it cannot co-occur with a point temporal phrase any more, and is no longer an achievement. This distinction between climaxes and punctuals can be used as a criterion to classify verbs according to their aspectual polysemy, but otherwise it is of limited value.

2.5.5. SUMMARY OF FANNING'S CONTRIBUTION

Fanning studied the different lexical aspects, or as he would say, procedural characteristics of Greek verbs. His main contribution is his study of the diagnostics as applied to New Testament Greek (with lots of examples of lexemes, which I have omitted here). The aspects he deals with at the lexical level are the same Vendler deals with. Fanning did not arrive at these aspects (he would call these procedural characteristics) by looking at Greek data, but their relevance to the study of Greek aspect is well demonstrated in the rest of his book.

2.6. Aspect Hierarchy

I do not attempt to present any complete aspect hierarchy, but I just organize the aspects already studied into a hierarchy.

Three aspectual features were studied. They are stativity, boundedness and punctuality. Punctuality means that the expression is linguistically indivisible timewise. Boundedness means that the action has a terminus or a limit that has been reached (this can be cancelled by opening the bounded expression in an outer layer). All punctuals must be bounded, since the mere occurrence of a punctual action is itself a limit.

Stativity is incompatible with perfectivity (and thus also with punctuality). This has been argued by Comrie (1976:50). For a state to be bounded, there has to be change in the state. If there is change, it is dynamic.

This could be represented by two separate hierarchies: imperfective>stative and dynamic>perfective>punctual. The aspect on the right side of the symbol > is necessarily also the aspect on the left side of the symbol. Thus all punctuals are perfective and dynamic, and all statives are imperfective. This, of course, applies only to the same layer of nesting.

2.7. The Number of Necessary Aspects for the Analysis of Greek

Do we need more aspects for the analysis of Greek, such as iterativity, habituality, and ingressivity (the beginning of a state)? These meanings are brought out by the interplay between the three aspectual features. Imperfective forms may cause the resultant aspect to be iterative or habitual. The iterative and habitual aspects may be considered as more specific foci of the more abstract prototype, the imperfective. Perfective forms of a stative verb may cause the resulting aspect to be ingressive (i.e. describes the change into the state). I suggest as a hypothesis that in New Testament Greek the rest of the aspects may be worked out of the interplay of the three aspects and their interaction with lexis (and its possible other aspects). To study this interplay of nested aspects, and also to give a definite answer to the question of the number of necessary aspects must be left outside the scope of this study¹⁹.

¹⁹ See Fanning (1990:126-196) for an analysis of the interaction between lexical and grammatical aspect. It may be used as a helpful starting point for further study to solve this question.

3. Overview of the Greek Verbal System

Greek is a morphologically rich language. The verbal morphology codes person, number, mood, voice, tense (Porter 1989 denies tense), and aspect (according to traditional terminology, aspect is subsumed under tense, e.g. Robertson 1923:824). Verbal inflection is fusional, i.e. there is no separate morph for each morphologically coded semantic opposition.

There are three morphological voices: active, middle, and passive. The active and the middle are the oldest voices (Robertson 1923:332). Originally the morphological middle coded also the passive meaning, but already in Classical times the two voices were morphologically distinct. However, the distinction never extended beyond the aorist and the future, and in some cases the distinction is not semantically apparent. This is especially true for those verbs that formed the present tense with the active voice, and the future tense with the middle or passive voice.

There are four moods: indicative, imperative, subjunctive, and optative. The optative had almost disappeared in Koine, but survived well in some fixed idioms (like μή γένοιτο 'may it not happen!'), and in Atticizing style.

Person and number are coded as a suffix (a portmanteau morph). There are different person-number endings for different tenses. Generally, the personal endings are divided into two groups: primary and secondary endings (according to traditional terminology, e.g. Robertson & Davis 1933:150-152). In the indicative, the present and future tenses have primary endings. The aorist and imperfect tenses have secondary endings. The perfect and pluperfect tenses have modified secondary endings. The subjunctive mood always has primary endings, whereas the optative mood has secondary endings (with the exception of 1st person singular optatives ending in -μι). The choice of primary or secondary endings thus codes tense and mood to a degree. It codes tense because the tenses (I am again using traditional terminology) can be divided into two groups in the indicative by the choice of the ending; and it codes

mood because the choice of ending differentiates between the subjunctive and optative moods (though this is not the only difference between them).

Traditionally, seven tenses are recognized: present, imperfect, aorist, perfect, pluperfect, future, and future perfect. The future perfect was always rare, and almost extinct in Koine. The present and the imperfect tenses use the present stem. The aorist tense uses the aorist stem. The future uses a stem that is close to, or identical with the aorist stem, with the exception of suppletive futures (e.g. οἴσω, 'I will carry' of the present φέρω, 'I carry'). The perfect and the pluperfect tenses use the perfect stem. The future perfect uses a stem formed from the perfect stem.

The voice may change from one tense to another with some verbs, especially some suppletive verbs. Some verbs have only middle or passive futures (so-called deponent verbs, e.g. λαμβάνω (present active 'I receive') - λήψομαι (future middle, 'I will receive')).

Also infinitives and participles can be formed from different stems. There are perfect, aorist, present, and future participles and infinitives.

Some of the traditional tenses are in opposition only aspectually. I believe that the aorist stem codes the perfective aspect, and the present stem codes the imperfective aspect. I will argue for this in sections 5.1 and 5.2.

4 Brief History of Studies on Greek Aspect and Tense

The purpose of this brief history is to provide some background for the study of New Testament Greek tense and aspect, as this is relevant for many current issues today. My purpose is not to give an exhaustive treatment of the history of Greek grammar. Thus I will not express here all the various views that have been presented. Up to the section 4.5 on recent approaches, this background is mainly a summary of Porter (1989:17-73) and Fanning (1990:8-42).

4.1 19th Century Grammars

The rudimentary aspectual analysis of the ancient Greeks was forgotten because of the influence of Latin grammar in the medieval and early modern eras (Fanning 1990:9). Up to the middle of the 19th century temporal reference was seen as the main distinction in the Greek tense and aspect system. Jelf (1851) considered Greek to have three absolute tenses (without reference to any other action) and nine relative tenses (with reference to some other action expressed by some other predicate). He included periphrastic tenses. (Porter 1989:23.)

Buttmann (1819-27, 1863) also sees relative tense as important. But he also finds a kind of aspect-distinction, though secondary to relative tense. Aorist is opposed to present in non-indicative moods and to imperfect in the indicative. The aorist represents momentary action and the present and imperfect tenses represent durative action. Porter (1989:24-25) lists also Goodwin (1894), Jannaris (1897), Kühner & Gerth (1955), and Smyth (1956) (though not all from the 19th century) as belonging to the same category of approaches to Greek tense-aspect. (Fanning 1990:9-10, Porter 1989:23-26.)

Winer (1882), a New Testament grammarian of the early 19th century, lamented that great mistakes had been made in the study of New Testament grammar with regard to tenses. In his opinion, the aorist refers to the occurrence of an event in past time considered as a momentary act. The imperfect and the pluperfect represent relative time. The perfect brings the past into connection with the present time representing the action as complete. (Porter 1989:51.)

4.2 Curtius' Influence

Curtius (1846, 1863, 1875) advanced a different approach. He attempted to combine comparative linguistics and Greek philology. He claimed that Greek distinguishes between *Zeitart* or "kind of time" and *Zeitstufe* (which refers to external time or temporal deixis). He argued that the augment (a prefix added to the pluperfect, the imperfect, and the aorist) signaled past time. The augmented tenses differed with regards to *Zeitart*. He used a point to describe the aorist and a line to describe the present, and a surface bounded by lines to describe the perfect. An aorist may be ingressive (denoting a starting point) or effective (denoting a culmination of an act). The perfect is completely limited in every direction. (Porter 1989:27, Fanning 1990:10-11.)

Curtius' approach gained wide acceptance²⁰. During the period of about 1890-1910 many aspect studies were made on the basis of Curtius' distinction between *Zeitart* and *Zeitstufe*²¹. There was some difference of opinion as to what was the real meaning of *Zeitart* or *Aktionsart*, as it was also called. Some (Blass 1889:406-430, Herbig 1896, Miller 1895:141-185) claimed that the primary opposition (present and aorist) was incompleteness vs. completion. To others (Hultsch 1893:6-8) the issue was extension in time (durative vs. momentary), though they emphasized that the issue was perceived duration, not actual. Others (Purdie 1898:67-68, Mutzbauer 1893:10-12, 21, Stahl 1907:74-79) considered the aorist as mainly having a summarizing, constative meaning. The present was, as a counterpart to this view, considered to view the action in its development (Mutzbauer 1893:25-27). (Fanning 1990:14.)

A number of grammars followed Curtius' general approach. These include Blass & Debrunner (1961), Moulton (1908) and Robertson (1923).

²⁰ Fanning (1990:12) lists the following publications: Delbrück (1879), Hultsch (1893), Miller (1895), Herbig (1896), Mahlow (1883), and Mutzbauer (1893).

²¹ Fanning (1990:12) lists Blass (1889), Streitberg (1889, 1896), Mutzbauer (1893), Hultsch (1893), Miller (1895), Herbig (1896), Delbrück (1897), Purdie (1898), Meltzer (1901, 1904-5), Pedersen (1901, 1904), Brugmann (1902-4), Lindroth (1905), Stahl (1907), Rodenbusch (1907, 1907-8), Hentze (1907-8), and Schlachter (1907-9).

Blass & Debrunner (1961) give five Aktionsarten: 1) punctiliar (momentary), represented by the aorist stem, including three kinds of aorists: ingressive (ἐβασίλευσεν, 'he became king'), effective (ἔβαλεν, 'he threw'), and constantive (ἐποίησεν, 'he made'); 2) durative represented by the present stem (γράφω, 'I am writing'); 3) iterative represented by the present stem (ἔβαλλεν, 'he threw repeatedly or each time'); 4) perfective in the perfect stem, where a past action results in a condition or state (ἔστηκεν, 'he placed himself there and stands there now'); 5) perfectivizing represented by the addition of a prefix. Porter (1989:70) gives κατακαίω, 'I burn up', as an example of a perfectivizing prefix. It is made from the prefix κατά, 'down', and καίω, 'I burn'. The prefix changes an activity into an accomplishment.

Robertson (1923) sees only three essential kinds of action: momentary or punctiliar, durative or linear, and perfected or completed. In addition he recognizes perfectivizing prefixes. These three kinds of action are represented each by a stem: momentary by the aorist, durative by the present, completed by the perfect. In the aorist he recognizes the same three-fold subdivision made also in Blass & Debrunner (1961).

4.3 Aspect and Aktionsart

There was an attempt to classify different Aktionsarten from the late 19th century on. Brugmann's (1913) categories were punctual, cursive, terminative, iterative, perfective, and a verb perfectivized by a prefix. Porter (1989:33-34) considers it problematic to claim objectivity to Aktionsarten when formal criteria are lacking for deciding to which Aktionsart a verb belongs.

I will present here Fanning's (1990) view on the difference between aspect and Aktionsart, but note that I already argued in section 2.3 for a view that they are dealing with the same semantic phenomenon. This overlap is for the purpose of presenting Fanning's view more fully in this historical sketch.

Fanning (1990:35) notes that two approaches to the relationship between aspect and Aktionsart developed, differing in regard to the

degree of semantic parallelism between aspects and Aktionsarten. The first view considers these semantically equivalent. According to this view, both categories are concerned with such matters as duration, profession, fulfillment, termination, accomplishment, and so forth. The difference between aspect and Aktionsart in this approach is the linguistic means used to code the relevant semantic distinctions. Aspect expresses these grammatically and Aktionsart lexically.

The other view considers aspects semantically different from Aktionsarten. In this view the Aktionsarten are concerned with matters like duration and fulfillment, and are thus more dependent on the objective, external facts of the situation. The aspect, in contrast, is concerned with how the speaker chooses to view the action, whether as a process going on or a single whole, as summarized in one event from beginning to end. In this approach the question of duration (or lack of it) and fulfillment (or lack of it) are left out of view in the choice of aspects. Fanning opts for the second alternative.

He argues for the importance of making a distinction between aspects and Aktionsarten with three arguments (Fanning 1990:32-3).

1) Some of the Aktionsarten were not differences in grammatical form, but lexical meaning. He cites as examples the 'terminative' and 'intensive' meanings that are often expressed by prepositions prefixed to the root as in *κατεσθίω* (eat up, from *ἐσθίω*, eat) and *ἐκδιώκω* (chase away, from *διώκω*, chase).

2) Aspect involves subjectivity, since the same situation can be described by either of the primary aspect-forms. Fanning (1990:32-34) says that the 'objectivity' of Aktionsart has been exaggerated, for the degree in which linguistic features reflect actual situations varies greatly. Also, the subjectivity of aspect has been exaggerated, for in most cases the speaker's free choice of aspect is restricted by other factors.

3) This gives a better solution to some questions that have been considered problematic. He gives as an example aorists that have duration. If the meaning of the aorist is considered separately from the inherent meaning of the verb, he thinks that one is closer to solution.

Fanning is to be commended for seeing that lexically expressed aspect is different in some respects from grammatically expressed aspect. One of the strengths of his book (1990) is that he studies the interaction between the lexical and the grammatical aspect (or Aktionsart and aspect, as he would prefer). These arguments hardly prove that the distinction between Aktionsart and aspect is a semantic one. He did not claim here that he was arguing against regarding aspect and Aktionsart as one semantic category, but rather that it is important to see the distinction. His first argument well supports this. His second argument is weaker, as he does not consider Aktionsart totally objective and aspect totally subjective. The third argument has more to do with what the real aspectual value of the aorist is than with the distinction between aspect and Aktionsart.

4.4 Aspect as Time Based

Some scholars have argued that aspect is essentially time based. These include Ruijgh (1971:231), Hettrich (1976:12-24, 94-97), and Rijksbaron (1984). Rijksbaron (1984:1) defines the Greek present and aorist as follows: "...the present stem signifies that the verbal action continues through a point in time given in context or situation and is, therefore *not-completed* (imperfective value) ... the aorist signifies that the verbal action is *completed* at a point given in context or situation (confective value)."²² This time based view sees aspect essentially as relative time. (Fanning 1990:22-25.)

Aspect and relative time behave sometimes quite similarly, especially in narratives. The perfective aspect cannot be used when something is not yet (relative to the reference point) completed. Nevertheless aspect and relative time must not be seen as the same²³. There are too many exceptions to make that view plausible. Often the aorist refers to an action yet to take place without a reference point in the future. An example is

²² It is to be noted that Rijksbaron changed his definition in the second edition so that his new definition is less time based (Rijksbaron 1994:1).

²³ Fanning (1990:26, 28) considers relative tense to be a secondary function of aspect when combined with other elements.

Luke 19:14 οὐ θέλομεν τοῦτον βασιλεῦσαι ἐφ' ἡμᾶς. 'We do not want this one to become a king (aorist or perfective infinitive of βασιλεύω, 'I am a king') over us.'

4.5 Recent Aspectual Approaches²⁴

4.5.1 KENNETH MCKAY

Kenneth McKay has written a New Testament Greek grammar with special reference to aspect (McKay 1994) as well as some articles (e.g. McKay 1981, 1992) dealing with Greek aspect. He recognizes four aspects: the imperfective, the aorist, the perfect, and the future (his terminology, McKay 1994:27). He considers aspect as far more important than tense throughout the history of ancient Greek (McKay 1994:x-xi).

"Three aspects are usually recognized and are clearly distinguishable: the *imperfective* expresses an activity as in process (in progress); the *aorist*, which expresses it as whole action or simple event; and the *perfect*, which expresses the state consequent upon an action. The *future*, which is usually regarded simply as a tense, lacks some of the moods which the other aspects have, but is best regarded as a fourth aspect of intention." McKay (1994:27).

He recognizes that the verb type influences the meaning of the aspect. Stative and dynamic verbs (or stative and action verbs, as he calls them) take different interpretations with different aspects. The aorist with a stative verb often signifies the transition into a state, but entrance into an action is better expressed by the imperfective aspect (McKay 1994:28). He thinks that in Greek grammar, there is no practical use for subdividing the verb types further, regardless of its usefulness for the theoretical linguist. (McKay 1994:29.)

He also believes that the imperfective aspect is used to express an activity as going on without reference to its completion. It may be a single activity or a series of repetitions, by one agent or distributively. In context,

²⁴From this point on, I no longer summarize Fanning (1990) and Porter's (1989) historical sketch.

it may also imply attempt, continuing, setting about, beginning or the like. (McKay 1994:29-30).

The aorist aspect, he views as expressing an activity in its totality, whether the action is momentary, prolonged or a series of activities viewed as a whole. In narrative contexts referring to past time, the aorist indicative normally has past reference, but in other contexts it is just as likely to have a timeless (or even present or future time) implication. In other moods there is no time reference. (McKay 1994:30.)

The perfect aspect he views as expressing the state or condition of the subject of the verb, as a result of an action, though with some verbs the antecedent action fades out of the picture (like οἶδα, 'I know', a perfect). Sometimes the action leading to the state may be implied so strongly that there is an adverbial defining the time of the action (e.g. 1 Cor 15:4 καὶ ὅτι ἐγήγερται τῇ ἡμέρᾳ τῇ τρίτῃ, and that he rose (perfect indicative) on the third day (and remains risen)). With action verbs the perfect is sometimes used to express responsibility for the action. With stative verbs, he says, the perfect usually denotes a state consequent on the aoristic action of the verb (here McKay must refer to the ingressive use, meaning consequent on the entrance into the state), even though sometimes the verb refers to the state that has already ended (Mark 5:15 τὸν ἐσχηκότα τὸν λεγιῶνα, 'the man who had had (but no longer had, according to the context) the legion.' (McKay 1994:31-33.)

The future he considers an anomaly in the Greek verbal system. In some verbs a middle form in the future corresponds to the active of the other aspects. It does not occur in the subjunctive, imperative, or optative²⁵. The infinitive and participle are limited to a small range of functions. The future is used to express intention, and consequently simple futurity. (McKay 1994:34.)

4.5.2 STANLEY PORTER

²⁵ He claims that the future optative had a limited non-modal function in classical Greek.

Stanley Porter wrote an extensive monograph on Greek aspect in 1989. In his scheme Greek does not grammaticalize absolute tense. His system has three aspects: perfective (aorist stem), imperfective (present stem), and stative (perfect stem), the future being aspectually vague, grammaticalizing a feature Porter calls [+expectation]. The imperfect and the pluperfect differ from the present and perfect by grammaticalizing [+remoteness].

Porter approaches the question of aspect from the standpoint of systemic linguistics. He also sees a distinction between aspect and Aktionsart. Aktionsart refers to the objective nature of the event, aspect to the way it is viewed. He views aspect as so subjective a category that he criticizes Comrie's (1976:3) definition of aspect as a view of internal temporal constituency to be rather a theory of Aktionsart than aspect, since it deals with the objective nature of the event (Porter 1989:46). It seems that Porter considers almost anything dealing with an objective description of the event to be concerned with a theory of Aktionsart, not aspect. To him, aspect has to do only with visualization of the process and prominence, not anything to do with the process itself (see e.g. his criticism of McKay in Porter 1989:104).

I think that change in aspect often causes a different understanding of what is reported. Therefore, aspect is not in this sense altogether a subjective category. A similar view is expressed by Fanning (1990:34), and Lindstedt (1984:21).

Porter considers aspect as dealing with the way an event is viewed. In his scheme this is closely related to what he calls grounding (Porter 1989:91-93). The aorist (perfective aspect) is the background aspect, the present (imperfective aspect) is a foreground aspect, and the perfect (stative aspect) is the frontground aspect (most foreground). This scale he derives, at least partly, from the markedness value of each aspect. He considers the aorist to be the background tense which carries the discourse, and the present or imperfect is the foreground tense. Porter's view of grounding seems to differ radically from what some others consider grounding (e.g. Frawley 1992:301-302 claims that the foregrounded aspect is the perfective. See also Wårvik 1992). He does

not analyze sequential story line in relation to aspect. Porter (1989:92) refers to Wallace's (1982) article and Hopper's (1979) article. These two scholars also use their terminology in the opposite way from Porter's (see Hopper 1979:216, Wallace 1982:209). Porter appeals to Kühner & Gerth (1955:1.157)²⁶, Gildersleeve (1900:91) and Schwyzer (1950:275). These references discuss the difference between the imperfect and the aorist in general terms, labeling the imperfect as the descriptive tense and the aorist as the tense that carries the story forward. Porter does not discuss the difference in terminology further than just noting that Wallace and Hopper disagree. I think it is less confusing to retain Wallace and Hopper's more traditional terminology than to use Porter's rather idiosyncratic terminology on grounding.

Porter (1989:92) further states that in Greek, the basic narrative is often laid down by the third person aorist, a common trait of the background tense, and that the imperfect or present introduces significant characters or makes appropriate climactic references to concrete situations, which he claims is typical of the foreground tense. (Here Porter uses tense rather than aspect.) Porter seems confused about grounding. Climactic references to concrete situations may, instead of grounding, deal with a discourse peak (see Longacre 1985). According to Longacre (1985:85), at discourse peak the marking of event line often fades out and sometimes special markers of a peak occur. Significant (and non-significant) characters could well be introduced in the background before they participate in event line action. Thus these observations of Porter's about aspectual usage in Greek do not validate his claim about the particular grounding values of the Greek aspect. It is better to retain the more traditional and common way of treating the imperfective as the background aspect and the perfective as the foreground aspect.

Porter based his denial of grammaticalized tense in Greek on his observation that the actual time reference may not always match the tense used (Porter 1989:75-83). Even for imperfect and pluperfect he

²⁶ I was not able to get hold of the fourth edition, which is what Porter used. I used the third edition instead (Kühner & Gerth 1898:157).

rather uses the feature [+remoteness] to avoid temporal implicature (Porter 1989:207). These particular tenses are used also in conditionals of unfulfilled condition. McKay (1994:75-76) calls this and some related uses that of excluded potential (cf. English 'if I were'). So, the imperfect and pluperfect do grammaticalize other things beside tense, and this seems to be a sufficient argument for Porter to say that they are not tenses.

This is not, however, sufficient ground to reject the analysis of these forms as tenses. The non-temporal uses are secondary, but there is no *a priori* reason to assume that a grammatical form always in all contexts grammaticalizes the same thing. On the contrary, one would assume that there are more prototypical uses of the imperfect (tense), and less prototypical (excluded potential). For further arguments, see Comrie (1985:18-23), my section 6.2 on the imperfect, and Taylor (1989:197-221) (though he does not address tense in particular).

Porter's emphasis on aspect lacking reference to the objective nature of the event and denial of grammaticalized tense actually makes it difficult to come up with counter-examples that would falsify his theory. Since his application is mostly to what he calls grounding, this is the arena where his theory would have to be tested. He would need to explicate carefully what he means by grounding, especially as his definition seems to be quite different from what many others mean by grounding, inferring from his examples and analyses. Otherwise it is difficult to test his view. If he means discourse peak, he would need to analyze a text and see how the discourse peak is signaled (using arguments outside of aspect to determine the discourse peak to avoid circular reasoning). If his view of grounding relates to the sequential story line, that is what he should analyze. Without doing this, his conclusions about the pragmatic use of the aspects with respect to grounding are only tentative.

4.5.3 BUIST FANNING

Buist Fanning's monograph on Greek aspect appeared in 1990. Many of his views have already been mentioned in sections 2.5 and 4.3, so here I will only bring up a few things left unmentioned so far.

Much of Fanning's book is an examination of the interaction between procedural characteristics and aspect in different moods. The fact that he studies this interaction is a major step forward from Porter's theory. Fanning uses this interaction as a basis for explaining the pragmatically based categories of the Greek grammatical tradition. Even though he does not use aspectual nesting as part of his analysis, most of his analysis of the interaction between aspect and Aktionsart can be analyzed in terms of aspectual nesting. He only concentrated on two layers (which he considers to be aspect and Aktionsart, not two layers of the same phenomenon).

Fanning considers traditional Greek tense-forms to grammaticalize both tense and aspect in the indicative, and only aspect in the other moods, infinitive, and participle. The perfect he sees as an interaction between aspect (perfective), Aktionsart (state), and tense (anteriority). The pluperfect is the perfect tense put in the past. The aorist grammaticalizes the perfective aspect and the past tense (with exceptions). The imperfect grammaticalizes the imperfective aspect and past tense. The future is aspectually neutral, grammaticalizing only tense (he sees modal uses as secondary).

5 The Meaning of Verbal Stems

The Greek verb has three primary stems: the aorist, present and perfect. There is also a future stem, which is morphologically linked with the aorist stem. The morphology can be illustrated with the verb λύω, using first person indicative in the examples. I have underlined the stem, and transliterated the Greek letters.

Aorist: ἔλυσα elysa

Present: λύω lyoo

Perfect: λέλυκα lelyka

Future: λύσω lysoo

The choice of the stem has to do with aspect. In the following I will discuss each stem and its meaning. There are two assumptions that I make in this section without really arguing for them.

The first assumption is that the different forms of the same verbal stem represent the same aspect. By this I mean that the perfect and the pluperfect are aspectually similar, as are the present and the imperfect. Almost any Greek grammar lists similar uses under both members of the pairs, with the exception of temporal reference. They are opposed only in the indicative, other moods having only one form (that is aspectually significant). The second assumption is that the same stem represents the same aspect in all moods.

I consider these assumptions to be safe and fairly uncontroversial. Proving these assumptions would require a multiplication of examples, because different tenses and moods would all have to be represented.

5.1 The Aorist

The aorist has been interpreted in various ways. There are four different approaches for the general meaning of the aorist as summarized by Fanning (1990:87-97).

5.1.1 INSTANTANEOUS OR MOMENTARY ASPECT

The view that the aorist describes an instantaneous or momentary aspect is extremely common in earlier grammars. Some proponents of

this view emphasize that the action may not be momentary but in these cases the use of the aorist is seen as exceptional, or the aorist is considered to code only the beginning or endpoint of the action, the aorist still being momentary or punctiliar.

Here are some counter-examples against seeing the aorist as a punctual aspect (I have not quoted the entire verse each time, and I have slightly shortened the examples, but I trust that it has not changed anything essential):

(18) ἐβασίλευσαν (aorist) μετὰ τοῦ²⁷ Χριστοῦ²⁸ χίλια ἔτη.

'They reigned (aorist) with Christ for a thousand years.' (Rev. 20:4)

(19) τεσσαράκοντα καὶ ἕξ ἔτεσιν οἰκοδομήθη (aorist) ὁ ναὸς οὗτος.

'This temple was built (aorist) in forty-six years.' (John 2:20)

(20) ἀλλὰ ἐβασίλευσεν (aorist) ὁ θάνατος ἀπὸ Ἰῶάννου ἄδὰμ μέχρι Μωϋσέως καὶ ἐπὶ τοὺς μὴ²⁹ ἁμαρτήσαντας ἐπὶ³⁰ τῷ ὁμοιώματι τῆς παραβάσεως Ἰῶάννου.

'But death reigned (aorist) from Adam to Moses also those who did not sin the same way Adam transgressed'. (Rom. 5:14)

(21) τὸν γὰρ ἀόρατον ὡς ὁρῶν ἐκαρτέρησεν (aorist).

'As seeing the invisible, he endured (aorist).' Heb. 11:27

Though some grammarians were very much aware of counter-examples against seeing the aorist as a punctual aspect, they nevertheless used such terminology as "All aorists are punctiliar in statement. The 'constative' aorist treats an act as punctiliar which is not

²⁷ This definite article is lacking in some manuscripts. Its presence or absence does not affect the gloss.

²⁸ Some manuscripts insert a definite article here (τὰ). Its presence would change the 'a thousand years' to 'the thousand years'

²⁹ A few manuscripts lack this word. It would change the gloss to '...those who did sin the same way...'

³⁰ Some manuscripts replace this word with ἐν. This does not affect the gloss.

in itself point-action." (Robertson 1923:832, though his view is better classified under the perfective aspect view). Part of the problem seems to be the term punctiliar, which in some cases seems to be used for punctual and in other cases for perfective.

As the aorist combines freely with adverbials of duration, it is questionable whether the aorist even treats an action as punctual or momentary. In (19) the forty-six years was considered a long time in comparison to Jesus' claim to build the temple in three days. Thus a grammatical form that emphasizes shortness of duration is contextually inappropriate. Rather the aorist is to be seen as unconnected to the duration of the event. It does not grammaticalize the punctual aspect as a multitude of older grammarians claim. It does not even treat the action as momentary. A more satisfactory explanation for the use of the aorist must be found.

5.1.2 COMPLETED OR ACCOMPLISHED ASPECT

The second view given by Fanning sees the aorist as emphasizing the fulfillment or completion of an action. However, this view needs to be modified, since the aorist can be used of actions that are not completed, because they do not have any inherent terminus.

(22) τὴν δὲ δοκιμὴν αὐτοῦ γινώσκετε,³¹ ὅτι ὡς πατρὶ τέκνον σὺν ἐμοὶ ἐδούλευσαν (aorist) εἰς τὸ εὐαγγέλιον.

'You know his proven character that he has served (aorist) with me in the gospel like a child his father.' Phil. 2:22

Unless Paul referred to the completion of a specific service by Timothy (which is unlikely), there is no sense in which the service has been completed, since activities, being unbounded, have no terminus. Here the bound is determined on the basis of shared contextual and encyclopedic information. It could refer to the whole history of Timothy's past service, the period the Philippians were able to observe, or to some other

³¹ There is a variant (οἴδατε) that uses a synonym for this word 'you know'.

delimited time of service, but not to any inherent bound in the expression. Note that Timothy remained a co-worker with Paul at the time of the writing of the epistle (Phil. 1:1). Probably Paul just summarized Timothy's past service as proof of his trustworthiness.

5.1.3 UNDEFINED ASPECT

The third view expressed by Fanning is that the aorist represent the undefined aspect. The view developed as a reaction to the number of cases that the punctual aspect theory could not explain. Stagg (1972:222-223) emphasizes that the term aorist itself means undefined.

"Aorist' is one of the few grammatical terms well suited to its purpose. Many terms are arbitrary and poorly suited to what they are supposed to designate or illuminate. ... But 'aorist' is a term happily suited to the primitive form which it labels. It is 'a-oristic', i.e., undetermined or undefined. The aorist draws no boundaries. It tells nothing about the nature of the action under consideration. It is 'punctiliar' only in the sense that the action is viewed without reference to duration, interruption, completion, or anything else. What is 'aoristic' belongs to semantics and not necessarily to the semantic situation." (Stagg 1972:222-223).

Stagg (1972:222) considers the aorist to be "punctiliar", "point action", or "snapshot action" in terms of representation, but that says nothing of the action itself. Stagg's article seems to be a counter-reaction against "aoristitis" (Stagg 1972:227) or the theologians' misuse of the aorist tense in their exegeses. If the aorist is not necessarily related to the situation which it can truthfully describe, it can be characterized as the semantically unmarked aspect.

While it is obvious that it is not theoretically possible to find any counter-examples to this view of the aorist, it does not motivate the ingressive sense that is a very common interpretation of the aorist with a stative verb. It would be easy to test this theory if we had resurrected native speakers readily available, but now we have to be satisfied using lack of examples as evidence about the ungrammaticality of an

expression. Stagg's view cannot explain why imperfective aorists are practically³² impossible to find in ancient Greek.

5.1.4 PERFECTIVE ASPECT

This view is represented for example by Robertson (1923) and Fanning (1990:92-94, 97). "The 'constative' aorist just *treats* the act as a single whole entirely irrespective of the parts or time involved." (Robertson 1923:832, emphasis original)

This view makes sense with activities. This is illustrated by (22), which I quote here again.

(22) τὴν δὲ δοκιμὴν αὐτοῦ γινώσκετε, ὅτι ὡς πατρὶ τέκνον σὺν ἐμοὶ ἐδούλευσαν (aorist) εἰς τὸ εὐαγγέλιον.
 'You know his proven character that he has served (aorist) with me in the gospel like a child his father.' (Phil. 2:22)

The reason for the use of the aorist is probably that Paul summarized Timothy's past service, and looking at it from the standpoint of the present time, the service being past, it was bounded, though not completed. This bounding was not made on the basis of Timothy ceasing to serve Paul (since he still served him). This illustrates the fact that the nature of the limit of bounding can vary greatly.

This view explains well the use of the aorist to describe results. Mourelatos (1981:195) gives the following example of the difference of meaning between the aorist and the present stem.

"In Plato's *Ion* 530 A, Socrates asks: 'ἡγωνίζου [imperfective preterite] τι ἡμῖν; καὶ πῶς τι ἡγωνίσω; [same verb, perfective preterite]' 'And how did you compete [activity]? And how did you succeed [achievement]?'"

³² To claim that they do not exist at all would require a thorough analysis of the whole corpus. A single case would not necessarily destroy my conclusion, for misspellings are possible. The category of imperfective aorists is not found in grammars.

This view gives a well motivated account of why an accomplishment in the aorist is always completed³³. This view is also well compatible with the observation that aorists often get an ingressive meaning with states, and that is a common phenomenon in aspect languages (Comrie 1976:19-20). This view also predicts the fact that in narratives describing the past, the aorist is used to give foregrounded information and the imperfect to give backgrounded information. (Robertson 1923:838, McKay 1994:42-43, Frawley 1992:301.)

Also, if the basic aspectual opposition in Greek is between the aorist stem and the present stem, and the present stem codes the imperfective (argued for in section 5.2), it would be natural to assume that the aorist codes the perfective aspect. And finally, the lack of counter-examples (I am not aware of any) furnishes additional proof.

I consider this view to be correct: the aorist stem codes the perfective aspect.

5.2 The Present

Fanning (1990:98-103) lists three suggestions for the basic sense of the present (though not in the following order).

5.2.1 DURATIVE ASPECT

One very common view on the meaning of the present stem is that it codes the durative aspect.

"This was one of the earliest aspectual descriptions of the present forms, and it has been held in some form by almost all NT grammars of the past hundred years." (Fanning 1990:98).

According to Fanning (1990:99) it is possible that the term durative is meant not to emphasize temporal extension, but an event in progress.

³³ According to Smith (1997:264-265) in Mandarin Chinese the perfective morpheme –le does not follow this pattern. It may be used with stopped, unfinished accomplishments. However, I do not know of any example of this kind of usage in Greek, nor is this category found in standard grammars. Thus, it seems that the nature of bounding is different in Greek and in Mandarin Chinese (as far as the –le morpheme is concerned).

However, he says that this is not made clear, and temporal extension is often stressed. In other words, this view of the present stem as a durative aspect could either mean durative in the sense that I used the term in section 1.3 (meaning that the expression is linguistically divisible timewise), or that it emphasizes actual temporal duration.

All imperfectives are in fact durative (linguistically divisible timewise), since punctuality (the counterpart of durativity) is a subtype of perfectivity. Accomplishments are, however, durative, although not imperfective.

It is better to view this sense of duration that is often present as a consequence of an imperfective aspectual value. Mere duration as the basic sense of the stem does not explain the conative uses with accomplishment verbs (Fanning 1990:99). Furthermore, a perfective aspect contrasts easier with an imperfective than a durative. This view of the present as a durative aspect is probably linked to the view of the aorist as a punctual aspect and the emphasis in grammars on temporal duration.

5.2.2 UNACCOMPLISHED ASPECT

This view has been uncommon among grammarians. This view may explain well the actual usage with accomplishment verbs, but it hardly fits with activities. (Fanning 1990:100-101.)

5.2.3 IMPERFECTIVE ASPECT

This view (called confusingly progressive by Fanning 1990:101) best explains the various uses often listed in grammars, especially the iterative, progressive, and conative senses. The iterative sense comes out naturally when an achievement is nested inside an imperfective. Since a punctual cannot have duration, it cannot be viewed from within, unless the action is repeated. The progressive sense is very natural with non-punctual dynamic verbs. The conative sense is brought out by opening an accomplishment (see section 2.3.1.1). Fanning (1990:220-221) considers that the conative sense occurs with all kinds of dynamic verbs, not only with accomplishments. He gives three examples, which are rather to be taken as accomplishments. Unfortunately, he does not argue for this view.

The view that the present codes the imperfective aspect and the aorist the perfective aspect offers a good explanation for the selection restrictions that Armstrong (1981) argues for: the adverbials of cardinal count do not occur (with a few exceptions, which he discusses) with the present, but occur freely with the aorist (and perfect).

Imperfective aspect nicely contrasts with the perfective aspect that I argued to be the correct understanding of the aorist stem. I am not aware of any counter-examples to this view. I consider this to be the right view.

5.3 The Perfect

The perfect tense is usually described as denoting the state that resulted from a previous action (Fanning 1990:103-104, Porter 1989:251-252). Some verbs do not seem to denote the action, but rather a state (e.g. ἔστηκα, 'I stand', πέποιθα, 'I trust', οἶδα, 'I know', μέμνημαι, 'I remember', εἶωθα, 'I am in a habit'), while other verbs do not emphasize the state as much (or as often, e.g. εἶληφα, 'I received').

Greek perfect started out as expressing a state. Later it expanded its use to non-stative verbs. This is the state in the Koine period, though later on in the history of Greek the perfect and aorist tenses tended to blend. This confusion is clearly apparent from the fourth century AD on. First the perfect grew at the expense of the aorist, but later the process was reversed with some morphological blending. (Sihler 1995:564-566, Robertson 1923:898-902.)

According to Fanning (1990:103-4), most grammars recognize that the perfect is used of both completed actions and resulting states, but different grammarians do not give the same emphasis for both. There is disagreement on whether the resulting state is always that of the subject.

Porter (1989:251-259) analyzes the perfect as a stative aspect. He criticizes the traditional analysis of the perfect indicative as expressing a present state resulting from a past action, as he denies that tense is grammaticalized in Greek. He also claims that if there is reference to a previous act that results in a state, it is a matter of lexis in context, not the perfect itself. The fact is, that with some verbs the emphasis is usually in

the past act (εἶληφα, 'I (have) received') whereas with some other verbs the emphasis is usually in the present state (οἶδα, 'I know'). It seems that Porter's distinction here is unfounded. Rather it is better to see the perfect as a polysemous prototype category that readily accommodates both meanings of stativity and a past act as a continuum. This is well in accordance with the traditional understanding of the perfect.

Porter's analysis seems to stumble over a difficult problem overall in analyzing a language, especially a corpus one. Context, lexis, and grammar interact. It is often easy to tell the meaning of the whole, but it may be more problematic to divide the meaning into different components. In this case it seems that Porter's distinction makes his overall system simpler, as he does not treat grammatical categories as prototypical. Nevertheless it is hardly a matter of lexis in context, rather lexis in conjunction with the perfect stem.

One can easily understand the nature of the perfect as a continuum. At the one end are the stative perfects with no reference to a previous act. At the other end are those acts with (practically) no reference to a present state. In between fall many perfects that share in both: a past act producing a present state. There are two things that need to be clarified in this definition: what is meant by a state and what the state is a state of (subject or possibly also some other actant). A third question to be addressed is whether the perfect has an aspectual value for the way it depicts the past event if there is reference to one.

5.3.1 THE ASPECTUAL VALUE OF THE PERFECT

The action referred to by the perfect seems to be aspectually perfective. This view best explains the ingressive sense many stative verbs get in the perfect. Often these verbs in the perfect depict a state that results from a past action of entering into the state. Usually the emphasis is on the state. This is argued for by Fanning (1990:117-119). An alternative view is expressed by Robertson (1923:893). This view considers the perfect to intensify the meaning of the verb. However, this theory seems to be without support and the theory espoused by Fanning

seems to be sufficient to account for the data. That the action to commence a state is bounded is very natural, for there must be some limit reached for the action to commence a state.

Porter (1989) and McKay (1994) view the Greek perfect as a stative aspect. This is clearly proper in cases like οἶδα, 'I know'. There is a state in view, whether it is a state changed by the action depicted by the verb, or a state of responsibility or the like. However, in some cases this view is insufficient without reference to the event that caused the state (see examples below in section 5.3.2, especially the state of authority in example (30)). It would be better to speak of the prototypical perfect as combining two aspects, the perfective action described by the verb resulting in a stative aspect. This view is not far from Fanning's (1990:119-120), who sees the perfect as grammaticalizing tense (anteriority), aspect (summary viewpoint, i.e. perfectivity), and Aktionsart (stativity). The difference is that Fanning splits aspect into aspect and Aktionsart. I do not here comment on tense (but see section 6).

5.3.2 THE STATE DEPICTED BY THE PERFECT

The state depicted by the perfect is best understood as a prototype category. A prototypical use is with a bounded (accomplishment or achievement) verb, where the action produces a state that continues.

(23) τέθνηκασιν (perfect) γὰρ οἱ ζητοῦντες τὴν ψυχὴν
τοῦ παιδίου.

'They are dead (perfect, result of them having died) who seek the life of the child.' (Matt. 2:20)

(24) οὕτως γὰρ γέγραπται (perfect) διὰ τοῦ προφήτου·

'For thus it stands written (perfect) by the prophet (as a result of him having written it):' (Matt. 2:5)

(Even though 'he wrote' is an activity, 'he wrote a text' is an accomplishment.)

(25) τοῖς δὲ γεγαμηκόσιν (perfect participle)
παραγγέλλω...

'I instruct those who are married (perfect participle)...' (1 Cor. 7:10)

Sometimes the result of the action may have ended, but the object is referred to as one who had been in the state:

(26) καὶ ἔρχονται πρὸς τὸν Ἰησοῦν καὶ θεωροῦσιν τὸν δαίμονιζόμενον καθήμενον ἱματισμένον καὶ σωφρονοῦντα, τὸν ἐσχηκότα (perfect participle) τὸν λεγιῶνα (v.l. λεγεῶνα), καὶ ἐφοβήθησαν.

'And they come to Jesus and see the demonized one sitting clothed and in his senses, the one having (had) (perfect participle) the Legion, and they were afraid.' (Mark 5:15)

The formerly demonized person, who has just been freed from that state by Jesus is referred to by two participles, a present one (the demonized one) and a perfect one (having the Legion). The state no longer obtained, but the person was identified as the one whom the state concerned. McKay (1981:312) explains this example as a state beyond the completion of the relevant activity. We do not, however, need a separate category to account for this example. This is an instance of a general problem of reference. The term used to refer to an entity need not be true at the moment that is referred to. Thus (27) is possible.

(27) The deceased lived a wonderful life.

Sometimes the state may be a state of responsibility for the past action:

(28) εἰ μὲν οὖν ἀδικῶ (present) καὶ ἄξιον θανάτου πέπραχά (perfect) τι,³⁴ οὐ παραιτοῦμαι τὸ ἀποθανεῖν.

'If I do wrong (present) and have done (perfect) something worthy of death, I do not avoid death.' (Acts 25:11)

Here Paul's (legal) responsibility is clearly in view.

³⁴ There is a variant that reverses the word order of the last three words of the first clause. It does not affect the issue here.

(29) **ΚΕΚΟΪΝΩΚΕΝ** (perfect) **Τὸν ἅγιον τόπον τοῦτον.**
 'He (has) defiled (perfect) this holy place.' (Acts 21:28)

In the context Paul is accused of having brought Greeks into the sanctuary. The emphasis of the text is on Paul's guilt for the supposed action, not on the state of the sanctuary.

Sometimes the state may be the credit or authority for the action:

(30) **καὶ ὑπερπερισσῶς ἐξεπλήσσοντο λέγοντες· καλῶς πάντα πέποιηκεν** (perfect). . .
 'And they were utterly astounded and said: "Well did he do (did do is perfect) all".' (Mark 7:37)

In the preceding text Jesus had just healed a deaf man with a speaking disability. The object of the astonishment seems to be Jesus' authority or ability to do this.

The nature of the state depicted by the perfect is best seen as a prototype category. In a prototypical case a bounded expression produces a continuing state. Less prototypical uses are with other verb types, a state of responsibility, and a state of credit or authority.

5.3.3 THE STATE OF SOME OTHER ACTANT?

Whether the state denoted by the perfect is ever that of the object has been debated. McKay (1981:309-314), being in a minority position, argues that the state is always that of the subject. His arguments can be summarized as follows:

1) In the absolute majority of the cases, the state is clearly that of the subject. This includes all intransitives, all passives, and is the only possibility with some transitive actives.

2) The remainder of the cases yield a meaning that is either preferable to or as satisfactory as the object-state interpretation.

3) The onus of proof is with those who want to set up a special, discordant category for a small proportion of mere possibilities. (This argument is really Occam's razor.)

McKay deals with some New Testament cases he thinks could be used to argue for an object-state perfect.

(31) ἡ πίστις σου σέσωκέν (perfect) σε.
 'Your faith has made (perfect) you well.' (Matt. 9:22)

Here it is possible that the emphasis was not on the healed state but on the authority of faith to heal.

(32) ποῦ τεθείκατε (perfect) αὐτόν;
 'Where have you laid (perfect) him?' (John 11:34)

In the context Jesus' friend Lazarus has died and been buried. Lazarus' sister, Mary, had just complained to Jesus that Lazarus would not have died if Jesus had been present. Jesus was emotionally moved. Then he asks this question. Afterwards Jesus raises Lazarus from the dead.

McKay's (1981:313) point is that the question need not mean only 'where is he', but Jesus may have hinted at their limited ability. McKay gives as clumsy paraphrases "What is your solution?" and "What have you done with him?"

Fanning (1990:296) disagrees, claiming that surely their responsibility is not in view, but Lazarus' location.

(33) πειρασμός ὑμᾶς οὐκ εἴληφεν³⁵ (perfect) εἰ μὴ
 ἄνθρωπος.
 Temptation has not come (perfect) to you except a human one.'
 (1 Cor. 10:13)
 (McKay's own gloss: 'Temptation has not come to you except at
 a level appropriate to humanity.')

McKay argues that although the surrounding sentences have personal subjects, the overall topic in the context is temptation, so that the emphasis on the subject given is proper.

³⁵ There is a variant here (οὐ καταλάβη) with no perfect. It is hardly the correct reading. It has a meager attestation.

However, I wonder if McKay is here expanding his earlier comments on the meaning of the "state" of the subject, not to cover only responsibility and credit, but a general 'topical' emphasis. McKay does not define what he means by emphasis. It would be crucial to define it so that the textual fit of his explanation might be studied in context. The context hardly emphasizes the blame or responsibility for the temptation. However, the text could perhaps be understood as meaning that the temptation does not have authority. In this case the perfect is one of authority.

What else could this emphasis be? Unfortunately McKay does not explain and it is hard to guess. It would be crucial to define what is meant by emphasis and then offer linguistic analysis to support the claim.

It is possible that the meaning of the perfect is weakened through category extension, but this is not far from seeing a possibility that the state might be that of the affected actant which may be the object. In other words, as the change of state of the subject is weakened enough, it would be natural to expect that, as long as a change of state is implied, the change may lie with some other actant. Another possibility is that the perfect is weakened into something similar to the English perfect of current relevance (Comrie 1985:25).

Fanning (1990:296) gives an example that may be hard to understand as a subject-state perfect (one that McKay unfortunately does not deal with).

(34) ἔν τούτῳ γινώσκομεν ὅτι ἐν αὐτῷ μένομεν καὶ αὐτὸς ἐν ἡμῖν, ὅτι ἐκ τοῦ πνεύματος αὐτοῦ δέδωκεν (perfect) ἡμῖν.

'We know that we remain in him from the fact that he has given (perfect) us of his Spirit.' (1 John 4:13)

It is difficult to see how, in this context, the emphasis could be on God's authority in giving the believer of his Spirit. God does not seem to be very foregrounded. The text type here is argumentative. The immediate topic is abiding. It would be more convincing to see this example as a state of the indirect object rather than that of the subject, or to view this as a perfect of current relevance, if such a category is allowed in Greek.

The view that the perfect speaks of current relevance does not really differ radically from the view that the perfect speaks of the state (including authority, credit, blame, guilt etc.) of the subject or another actant. Current relevance comes from something being affected. In other words, the current relevance is often associated with one (or more) of the actants. It may not always have to be, but when it is not, it can be seen as a further category extension.

Judging from the relatively small number of cases where a plausible case can be made that the state is not that of the subject, it is most probable that the category extension did not extend so far (at least at this period of the language).

Prototypically, then, the perfect speaks of the state of the subject of the verb, but the state may (less prototypically, but not rarely) be only authority or guilt for the action. Even less prototypically the perfect can denote the state of another actant.

5.4 The Future

5.4.1 TENSE OR MOOD?

The future tense falls between mood and tense in the Greek verbal system. If one considers it a tense, it lacks counterparts in other moods (future optative does occur very rarely in Classical Greek, but in non-modal contexts, and no longer in New Testament Greek, according to McKay 1994:34). If one considers it a mood, it lacks counterparts in other aspects and tenses.

The future has been variously analyzed. Robertson (1923:872) considers it "almost a mode on a par with the subjunctive and imperative". Fanning (1990:122-123) considers it a tense expressing future time reference. McKay (1994:34) says that it is anomalous, but considers it to be an aspect. Later on McKay (1994:52) discusses it among the tenses. Porter (1989:403-439) argues that the future is not fully aspectual, but grammaticalizes a unique semantic feature [+expectation]. This feature is not temporal (Porter denies tense category in Greek), not fully aspectual, and not modal. He rules out the possibility that it could code both mood

and tense on theoretical grounds (Porter 1989:406-407). It does not stand in opposition to other moods (though future optative and subjunctive are very rare, and future imperative nonexistent, there are future infinitives and participles; and future does not offer paradigmatic choice of aspect like moods do). It is not aspectual either for Porter, since the definition of aspect would then have to be based on other criteria than elsewhere. The term [+expectation] seems to suggest a close connection with epistemic modality. A term in itself does not, of course, necessarily reveal much about the range of functions that the name covers. Unfortunately Porter does not elaborate on the relationship of [+expectation] to modality or tense.

Morphologically and historically, the future is related to the aorist subjunctive (Porter 1989:403-404). It occurs freely in the indicative, sometimes in the participle and in the infinitive, very rarely in the optative, and not in the subjunctive. There is a rare future perfect formed analogously with other futures, or most often periphrastically. Non-periphrastic forms seem to be limited to very few in the Hellenistic period, these being mostly "intensive" perfects, or perfects with a meaning very close to the present. See Robertson (1923:906-907) for examples.

The uses of the future are close to those of the subjunctive. Robertson (1923:873-876) divides the uses of the future into three groups: futuristic (not a modal use according to him), volitive, and deliberative. It is interesting that he gives the same categories for the subjunctive (1923:928-935).

The future as tense is considered by some to be an impossible category, since the future is more speculative than the past (see Comrie 1985:43-44 for an explanation of the view and counter-argumentation). This is not a good argument against a future tense, as noted by Comrie (1985:43-44), since the truth condition of a sentence pertaining to the future will be found in the future. Thus the truth of the sentence "it will rain tomorrow" will be manifest tomorrow.

Not all languages grammaticalize the future as an obligatory category. For example Finnish (e.g. *Minä menen huomenna*, lit. 'I go tomorrow') uses the present tense relating to the future. But it is possible to use

constructions with exclusively future reference (e.g. *minä tulen menemään* or *minä olen menevä*). So in Finnish the future is not a mandatory tense category. Finnish distinguishes between past and non-past, but not future per se. (These examples are from Comrie 1985:44-45.)

Yet some languages distinguish between the future and present/past. Comrie (1985:45) warns that in these cases the future may be an *irrealis* mood, the future time being only one manifestation of it.

In Greek the future time reference can be coded with the present tense. McKay (1994:41) explains this on the basis that the action is already begun or already being contemplated. This usage is chiefly with verbs of coming and going. He considers usage for a dramatic effect a rare extension of this usage. An alternative analysis is that the explicit coding of the future is not mandatory or exceptional per se (like Finnish). This is not to deny that patterns of use exist, such as McKay observed. The opposition between presents that refer to future time, and futures may be twofold. The present may be used to avoid modal implicatures of the future (see below), but the use of the present may have other limitations. Perhaps it was felt to be a present tense (as opposed to a non-past tense) to such a degree that it limited the future referring use of the present tense. Some examples of future referring presents:

(35) ἔγωγὸς πρὸς τὸν πατέρα πορεύομαι (present).³⁶
'I go (present) to the Father.' (John 14:12)

In sentence (35) it would be possible to consider Jesus already on the way toward the Father, but the explanation is not quite as convincing in other cases, like (36) and (37).

(36) μετὰ δύο ἡμέρας τὸ πάσχα γίνεται (present), καὶ ὁ
υἱὸς τοῦ ἀνθρώπου παραδίδοται (present) εἰς τὸ
σταυρωθῆναι.

³⁶ There is a variant with a future tense (πορεύσομαι). It can hardly be taken seriously since it is so meagerly attested.

'In two days it will be (present) Passover, and the Son of man will be handed (present) over to be crucified.' (Matt. 26:2)

(37) φάγωμεν καὶ πίωμεν, αὐριον γὰρ ἀποθνήσκομεν (present).

Let us eat and drink, for tomorrow we die (present). (1 Cor. 15:32)

These examples show that the future form is not mandatory. The present co-occurs with adverbials of future time reference.

The future can also express deontic modality, as in examples (38) and (39). Significant in example (39) is that in the midst of these future indicatives there is one present imperative. These futures clearly express deontic modality. They are used side by side with an imperative with no clear difference in meaning. However, both of these examples (38)-(39) are from the Septuagint. Thus they may not reflect the language of the New Testament writers, but translation Greek made a couple of centuries before from a Hebrew original.

(38) οὐκ ἐπιορκήσεις (future indicative), ἀποδώσεις (future indicative) δὲ τῷ κυρίῳ τοὺς ὄρκους σου.

'Do not swear (future indicative) falsely, but fulfill (future indicative) your oaths to the Lord.' (Matt. 5:33)

(39) τὸ οὐ φονεύσεις (future indicative), οὐ μοιχεύσεις (future indicative), οὐ κλέψεις (future indicative), οὐ ψευδομαρτυρήσεις (future indicative), τίμα (present imperative) τὸν πατέρα καὶ τὴν μητέρα, καὶ ἀγαπήσεις (future indicative) τὸν πλησίον σου ὡς σεαυτόν.

'This: do not murder (future indicative), do not commit adultery (future indicative), do not steal (future indicative), do not bear false witness (future indicative), honor (present imperative in the midst of future indicatives!) your father and mother, and love (future indicative) your neighbor as yourself.' (Matt. 19:18-19)

In example (40) the purpose of Paul going to Jerusalem was to worship. The future participle expresses deontic modality.

(40) δυναμένον σου ἐπιγνῶναι ὅτι οὐ πλείους εἰσὶν μοι ἡμέραι δώδεκα ἀφ' ἧς ἀνέβην προσκυνήσων (future participle) εἰς Ἱερουσαλήμ.

'...as you are able to know that there are not more than twelve days since I went to Jerusalem to worship (future participle).'

(Acts 24:11)

The future in (41) expresses intention.

(41) μόλις³⁷ γὰρ ὑπὲρ δικαίου τις ἀποθανεῖται.

'For a righteous man a person will scarcely (consent to) die (future indicative).'

(Rom. 5:7)

Sometimes the future expresses mere futurity:

(42) τέξεται (future indicative) δὲ υἶόν, καὶ καλέσεις (future indicative) τὸ ὄνομα αὐτοῦ Ἰησοῦν.

'She will bear (future indicative) a son, and you shall call (future indicative) his name Jesus.'

(Matt. 1:21)

Here we see a future expressing futurity side by side with a future expressing deontic modality.

A lot of examples of the future use can be explained with some reference to deontic modality, but sometimes the future is better seen as future referring, modal aspects fading in the background, like in the first future of example (42).

I suggest that the future is chiefly modal, but sometimes it can have a temporal meaning. Porter (1989:406-407) argues that this view is wrong *a priori* on a theoretical basis. But with respect to future time, deontic modality and futurity are not always very far apart. Futurity often develops out of expressions of deontic modality in the world's languages, according to Comrie (1985:45). In such development (assuming that it is not abrupt) there has to be a time when both uses occur side by side. That a form must express just one semantically invariant meaning always (apart from homonymy) is not a warranted aprioristic presupposition for the study of

³⁷ There is a variant (μόγις) with practically the same meaning ('hardly').

language. The possibility that a given morphological form is polysemous cannot be ruled out *a priori* as Porter does.

5.4.2 ASPECTUAL USE OF THE FUTURE?

Some scholars (e.g. Robertson 1923:870-872, for more references, see Porter 1989:408 and Fanning 1990:120-121) see the future as referring either to punctiliar or durative action, and try to classify verbs according to which aspect they prefer. If the future can be aspectually both perfective and imperfective, it means that either the future is aspectually neutral (as Fanning 1990:120-121 observes) or that its aspect is lexically determined.

If the future codes the perfective aspect, one would not expect to find examples where the future of an accomplishment is left uncompleted. On the other hand, one would expect to find examples of the ingressive use of stative verbs, if the ingressive use is considered to be dependent on the perfective aspect. (Compare this with the argumentation concerning the aspectual nature of the perfect: considering the perfect as aspectually perfective makes it easier to explain the ingressive perfects.) However, this criterion is somewhat difficult to apply to the future, since the ingressive meaning cannot be easily differentiated from an imperfective reading. The question that is hard to answer is whether the (possible) initial point of the future is just a result of the context, the entailment being only that at a future moment a state occurs. Only the context might tell that it did not occur earlier.

One must be careful when one wants to make a statement that the future does not necessarily code the imperfective aspect, since the imperfective aspect is semantically unmarked. This is not to say anything about the tendency to use either one as more natural in a context, only to mean that the bounding is not required and most situations felicitously described using a perfective aspect can also be described using an imperfective aspect. In other words, bounding a situation codes more information than not bounding. However, there is a happy exception³⁸ to this general rule that allows us to test the aspectual value of the future.

³⁸ This exception is due to an added layer of aspectual semantic nesting.

Punctuals get an iterative reading in an imperfective environment, since it is impossible to open a point to view it from the inside (see Fanning 1990:160-161, Comrie 1976:41-44). Examples of the future with punctual verbs that do not get an iterative reading in the context show that the future does not necessarily code the imperfective aspect.

(43) Μακάριος ἄνθρωπος ὃς ὑπομένει πειρασμόν, ὅτι δόκιμος γενόμενος λήμψεται (future indicative) τὸν στέφανον τῆς ζωῆς ὃν ἐπηγγείλατο τοῖς ἀγαπῶσιν αὐτόν.

‘Happy is the man who endures temptation, for having become tried he will receive (future indicative) the crown of life, which he promised to them that love him.’ (James 1:12)³⁹.

Λαμβάνω, ‘I receive’ is classified by Fanning (1990:157) as a climax. Here in this context there is no sense in which there is any emphasis on a prefacing action. It is an achievement according to Vendler’s classification. If there is any iteration in the sentence, it comes from the man having general reference. The receiving is not considered iterative. Thus the future indicative does not code the imperfective aspect.

Examples of the future coding the imperfective aspect are harder to find. A clear case would be a conative accomplishment, provided that the context makes it clear that it was not intended to be successfully carried out. I am not aware of any clear example, but there is one passage where this may be the intended meaning.

(44) καὶ γὰρ ἐὰν⁴⁰ ὑψωθῶ ἐκ τῆς γῆς, πάντας⁴¹ ἐλκύσω (future indicative or aorist subjunctive) πρὸς ἑμαυτόν.

³⁹ This is the text of Nestle-Aland (1993). There are minor variations in the manuscript evidence, but they do not affect the issue here. There is no variation (according to the margin of Nestle-Aland 1993) with the verb λαμβάνω, ‘I receive’, or any of its actants, or the general sense of the sentence.

⁴⁰ There are two variants here: ἂν and ὅταν. The former is rather synonymous with ἐὰν as a conditional particle. The latter means ‘when’. In the context the truth of the sentence is presupposed. The difference does not affect the issue here, nor the general meaning of the sentence.

‘And if I am lifted up from the ground, I will draw (future indicative or aorist subjunctive) all (people) to me.’ (John 12:32)

This is an example of the conative future at least in the case that the following premises are true:

- 1) This drawing is soteriological.
- 2) John's gospel does not teach universal salvation.
- 3) The form (ἐλκύσω) is a future indicative and not an aorist subjunctive.
- 4) πάντας (all, masculine plural accusative) refers to the whole class of human beings. (And that the variant reading, neuter plural accusative, is to be abandoned.)

Premise 1 seems natural in the context. Premise 2 is clearly true (see e.g. John 3:36). John's gospel teaches that salvation has one and only one condition, which is faith in Jesus. Premise 3 is supported by the fact that the aorist is bounded, and it retains the accomplishment nature of drawing. Thus Jesus would be presented as attempting to do something he clearly knew would not happen (in the gospel of John, Jesus did not teach universal salvation). But premise 4 is problematic.

According to Bauer et al. (1979:631) the Greek word πᾶς (all) can mean 'every kind of', 'all sorts of', and thus be synonymous with παντοδαπός and παντοῖος. Thus, instead of the passage meaning that Jesus will attempt to draw all men to salvation, regardless of whether it will result in them being drawn to salvation, this passage might only affirm that Jesus will draw all kinds of people to salvation. So, this potential example of a conative future is problematic in that it allows for at least one other interpretation where the future does not have to be conative.

If sentence (44) is a case of a conative future, then the future is either aspectually neutral or its aspect is lexically determined.

Another way to study the possibility of aspectual neutrality of the future is to see the entailments of sentences like (45) and (46).

⁴¹ There is a variant πάντα ('all things') for this word. If this variant is adopted, it further weakens the argument taken from this verse.

- (45) I will be singing when he enters the room.
(46) I will sing when he enters the room.

In the imperfective sentence (45) the starting point of the singing precedes the starting point of the entering, but in the perfective (46) the action begins after the entering has begun. This phenomenon can be used to analyze the aspect of the future tense⁴².

Unfortunately, I could not find one applicable instance in the corpus of the New Testament. This may well be due to the fact that ὅτε ('when') is seldom used with a clausal antecedent referring to the future.

In the absence of firm evidence I will resort to a hypothesis. The future has no aspectual counterpart. If it is aspectual, it will follow that if one wants to use the imperfective aspect, the future is not an option. In these situations one would have to use the present. But the future and present with a future reference are opposed mostly modally. I think it is less likely that they are also aspectually opposed. So, probably the future tense is aspectually neutral.

⁴² See Smith (1997:77-81) for this type of argumentation.

6 Tense Category in the Indicative

Porter (1993:34) denies that Greek grammaticalizes temporal reference. Fanning (1993:58) disagrees. McKay (1992:209-210) agrees with Porter about aspectual priority, but does not reject tense altogether (1994:39-52). What is the balance? It is true that if one only looks at the absolute temporal reference and the verbal form, one will find that they do not always match. This is the main basis on which Porter rejects the view that tense is grammaticalized in Greek. Fanning (1993:58) considers this too simplistic. He thinks that consistent patterns need to be explained.

I will discuss each tense (in the traditional terminology) separately with respect to temporal reference. But first I note that in some statements temporal reference is not an issue at all. Some sentences are equally true of all time (in the universe of discourse). An example of this is mathematical truths. Most grammars acknowledge this timeless or gnomic use. These are not the contexts to use when determining temporal reference. At best they can show whether the particular verbal form can be used to indicate timeless truths. Many tenses can function this way: the present (Fanning 1990:208-211), the aorist (Fanning 1990:265-269), the perfect (Fanning 1990:304), and the future (Rom. 5:7). The timeless pluperfect and the imperfect do not occur to my knowledge, except in the excluded potential sense (using the terminology of McKay (1994:75-76), others prefer *irrealis* or *unreal*).

6.1 The Present

The present occurs very often with present time reference. It can also co-occur with future time adverbials as I have already shown in section 5.4. It also has past time reference. In these situations it is in opposition with the aorist and imperfect tenses. Aspectually it is imperfective (see Armstrong 1981:10). The opposition to the aorist is aspectual. But what is the difference between an imperfect and a past referring present? If the present is considered as grammaticalizing a present or non-past temporal reference, it must be a shift in the temporal deictic center. This is a frequent phenomenon in narratives in other languages, for example

English and Finnish. Porter (1989:189) quotes Longinus (1st century AD), who supports this temporal analysis (translation in Porter 1989:189):

Again, if you introduce circumstances that are past in time as happening at the present moment, you will turn the passage from mere narrative into vivid actuality. 'Someone', says Xenophon, 'has fallen under Cyrus's horse, and being trampled on, strikes the horse in the belly with his sword. It rears and throws Cyrus, and he falls to the ground.' Thucydides is particularly fond of this device.

If one considers the present as not coding tense, then the opposition must be explained on some other basis. An argument against the view that the opposition is temporal is that the shift in temporal deictic center would have to be very frequent in Greek, since the present and imperfect alternate in quick succession. For more discussion on the phenomenon, see Porter (1989:189-198) and Fanning (1990:226-239). This argument is weakened when one realizes that the opposition served a textual function, and it can be analyzed as a secondary focus of the prototype category of the present, where the temporal meaning is neutralized. It need not relate to the status of the present as a tense in other functions.

Whatever is the most optimal analysis of the reason for the phenomenon of the historic present, the alternation is stylistically limited and serves a textual function. Rijksbaron (1994:22-25) mentions two functions of the historical present in Classical Greek: it is used in turning points of the story and enumerations. The fact that some authors do not use the historical present at all while others use it frequently points to its stylistic significance. The phenomenon may be partly explained by assuming that the present was felt to be a tense to such a degree that it was considered improper to use it with past time reference (in these styles).

The present tense is used with present and future time reference, and with a past time reference in certain styles.

6.2 The Imperfect

The imperfect was analyzed by Porter (1989:207) as grammaticalizing remoteness, avoiding terms associated with tense. This remoteness actually comprises examples of past time reference and extension from the past up to the present (cf. German *Ich arbeite schon zwei Jahre*, 'I have been working already for two years'), where the activity took place in the past and continues to the present. The present time reference examples of the imperfect are most commonly "in excluded potential statements and questions, unreal conditional protases, and excluded wishes". (McKay 1994:45. He has one more category (1994:46), the emphatic use, which I will discuss below. Hence "most commonly".)

Comrie (1985:19-20) argues that secondary meanings, such as counterfactual presents and a polite use of the past tense referring to the present, do not invalidate the analysis of the (English) past tense as a past tense. Along the same lines I argue that the imperfect form grammaticalizes both imperfective aspect and past tense. Palmer (1986:210-213) notes that unreal conditions are coded using the past tense in several languages. This other usage does not invalidate the analysis of the imperfect as grammaticalizing tense.

McKay's (1994:46) last category of present referring imperfects is emphatic. He says that there is no clear example of this in the New Testament. He considers a clear example to be $\tau\omicron\upsilon\tau\omicron\tau\omicron \tau\acute{\iota} \eta\grave{\nu}$; 'What is this' (really or essentially are words McKay used to describe the emphasis). However, this analysis leaves one wondering why the same grammatical form is used to express both counterfactuality and emphasis, seemingly somewhat antithetical in meaning. Maybe a better analysis for this last example would be the excluded potential (paraphrasing 'what could this be'). The speaker expresses amazement (and perhaps incredulity).

This analysis would leave the imperfect as a past time tense with a secondary meaning of unreality. This is common in the languages of the world, according to Palmer (1986:210).

6.3 The Future

The future, when not used modally, refers generally to future time. Porter (1989:411) gives Rom. 5:7 and Rom. 7:3 as examples of gnomic futures.

(46) μόλις⁴³ γὰρ ὑπὲρ δικαίου τις ἀποθανεῖται (future indicative).

For a righteous man a person will scarcely (consent to) die (future indicative). (Rom. 5:7)

(47) ἄρα οὖν ζῶντος τοῦ ἀνδρὸς μοιχαλὶς χρηματίσει (future indicative) ἐὰν γένηται ἀνδρὶ ἑτέρῳ.

So then, while her husband lives, she will be called (future indicative) an adulterer, if she goes to another man. (Rom. 7:3)

In the example (47) the future might signal deontic modality (should be called), epistemic modality (is expected to be called), or it could be considered to express relative tense (relative to the protasis - after going to another man she will be called). However, if this were relative tense, it would be quite exceptional since Greek conditional sentences do not anywhere else, as far as I know, signal the temporal relationship of the apodosis to the protasis with tense usage. So, this last hypothesis is probably to be rejected. Compare this with the English "he will go swimming in dangerous waters", which, according to Comrie (1985:47) refers to volition in the present time.

It seems that the so-called gnomic use of the future retains some of the modal force of the future. There are several tenses (according to the traditional terminology) in Greek that can be used to express timeless situations. But they are not all the same. They can differ aspectually (the present, the aorist, and often the perfect). The future seems to retain modality in distinction to the other tenses used gnominally.

6.4 The Perfect

⁴³ There is a variant (μόγις) with approximately the same meaning.

The perfect prototypically combines a past action with a present state. Either can be emphasized and the other can fade out. This is a matter of context and lexis. The perfect is considered by McKay (1994:49) to be parallel in usage to the present with regard to temporal reference. The state can be past (cf. historical present), present, or future.

There is some question concerning a futuristic (or proleptic) use of the perfect. There is a rare future perfect, but Robertson (1923:898) considers that a perfect tense could be used instead. He gives John 17:10, 22, 19:28, James 5:2-3 as examples and further refers to John 3:18, 5:24, James 2:10, Rom. 13:8 and 14:23. Fanning (1990:304-305) also acknowledges the category, citing as examples John 20:23, Rom. 13:8, 14:23, James 2:10 and 1 John 2:5. He considers it to be used after a conditional sentence in a parallel way to (his theory of) the futuristic use of the aorist (to be discussed in section 6.6).

Perhaps the most convincing example of those given above is James 5:1-2 (though Robertson referred to the text from verse 2 on).

(46) Ἄγε νῦν οἱ πλούσιοι, κλαύσατε ὀλολύζοντες ἐπὶ ταῖς ταλαιπωρίαις ὑμῶν ταῖς ἐρχομέναις⁴⁴. ὁ πλοῦτος ὑμῶν σέσηπεν (perfect indicative) καὶ τὰ ἱμάτια ὑμῶν σητόβρωτα γέγονεν (perfect indicative). . .
Come now, the rich, weep and cry aloud over your coming miseries. Your wealth will be rotten (perfect indicative) and your clothes will become (perfect indicative) moth-eaten. (James 5:1-2)

Here the present participle ταῖς ἐρχομέναις ('coming') relates the misery to the future. This misery is elaborated on in the next verse using the perfect indicative.

The perfect indicative can be future referring. Thus it functions parallel to the present tense in this respect that there is a way to make the future reference grammatically explicit, but it is not necessary. The perfect is primarily an aspect and relative tense (the action precedes the state), and only secondarily an absolute tense (non-past state).

⁴⁴ Some manuscripts add ὑμῖν, 'to you'.

McKay (1994:49) claims that the perfect indicative may also be past referring analogously to the historical present. Unfortunately he does not elaborate or give any examples of this.

6.5 The Pluperfect

The relationship of the pluperfect to the perfect seems to parallel that of the imperfect to the present. The pluperfect describes prototypically a past state as a result of an antecedent action, or secondarily excluded potential (McKay 1994:75-76).

6.6 The Aorist

The aorist has been traditionally analyzed as a past tense. The gnomic or timeless use of the aorist has been generally admitted, since clearly not all aorists are past referring (see Fanning 1990:265-269 for examples and discussion). These aorists code the perfective aspect. Some aorists are considered to refer to present time (the so-called dramatic aorists). It is common with verbs of emotion or understanding which seems to be in the immediate past or contemporary with the utterance (Fanning 1990:275). The most natural translation into English is the present tense. Fanning gives two possible explanations. The one he considers marginally better is that the emotion or understanding is just reached in the immediate past. The other is that the aspectual value of the aorist overshadows its temporal meaning. In some examples he appeals to Semitic influence (Fanning 1990:276-281).

Another interesting use of the aorist is the so-called proleptic aorist. The temporal reference is future. This idiom is most common in conditional sentences, but not limited to them. (See Fanning 1990:269-274 for examples and discussion). Fanning's view is that the conditional sentence is an exceptional environment which cancels the temporal reference of the aorist, and the non-conditional cases might be used to give the impression that the action is portrayed as already done.

To make this explanation hold, Fanning must stretch the conditional sentence type to include other sentence types (which he calls implied conditions, Fanning 1990:270). Porter, of course, would have no problem

with these aorists, since to him the aorist is not a tense at all. McKay (1994:48) argues that in classical Greek drama the aorist sometimes clearly refers to a present or future time. According to him, in the New Testament there are no examples of present time reference, and only one of future time: Jude 14-15.

(47) Προεφήτευσεν⁴⁵ δὲ καὶ τούτοις ἕβδομος ἀπὸ
 ᾿Αδὰμ Ἐνώχ λέγων·
 ἴδου ἡλθεν (aorist) κύριος ἐν ἀγίαις μυριάσιν
 αὐτοῦ⁴⁶...
 Enoch, the seventh from Adam, also prophesied to them
 saying:
 Behold, the Lord will come (aorist) with tens of thousands of his
 holy ones... (Jude 14)

This may not in itself be very convincing in a context of prophecy. It could be argued back that in the prophecy the deictic center is moved to the future. Also this passage is translation Greek, and the aorist may reflect an original Semitic perfect. It is unsafe to rely on this example when studying the language of the authors of the New Testament.

McKay (1994:48) says that the two other often cited New Testament examples (Matt. 18:15, John 15:8) are more naturally taken as timeless. He does not consider the cases with conditional sentences.

It seems clear that, at least in the conditional sentences, the aorist is not primarily a past tense, since it can have future time reference. Its aspectual force is predominant. Fanning gives no explanation as to why the conditional sentence apodoses should be exceptional. And he admits that there are other examples. So, the aorist indicative cannot be considered as a purely past time tense.

Yet, if one denies the temporal value of the aorist, one must account for the following phenomena:

⁴⁵ There is a morphological variant ᾿Επροφήτευσεν.

⁴⁶ There is some manuscript variation in this prepositional phrase. The glosses for the other readings would be 'with tens of thousands of (his) holy angels.' This has no effect on the issue here.

- The predominant association of the aorist with past time reference.
- The fact that the aorist shares the excluded potential use with the past time tenses (the imperfect and the pluperfect).
- The fact that the aorist shares morphological features with the imperfect and pluperfect. These are the augment (though no longer obligatory with the pluperfect in Hellenistic times) and secondary personal endings (though somewhat modified in the pluperfect).

The aorist has a lot in common with the past tenses. It is also mostly past referring, even though not without exceptions. These observations should caution us against rejecting the aorist as a tense too hastily.

I suggest that the aorist primarily grammaticalizes aspect, but it is strongly associated with past tense on account of its being most frequent in such contexts. What is bounded is often completed. So the aorist has a secondary meaning of past temporal reference (it is interesting that McKay said that the clear examples of classical Greek are from drama, where uncommon and old uses should not be startling). The aspectual use in non-past contexts remained especially common in the conditional sentences, since that provides an environment in which the future referring perfective aspect was most commonly needed. To answer the question whether the aorist was a tense, I suggest that primarily not (in terms of an invariant meaning, or in terms of the primary meaning), but yes in terms of the secondary meaning. At least it had a close connection with the past time and (other) past time tenses.

Whether such a hypothesis can be proved to be true is dependent on at least whether it can be shown that future referring perfectives are more common in conditional sentences than in other sentence types (maybe a statistical analysis of a living language with a future tense perfective aspect forms would provide relevant data).

This hypothesis would explain the anomalous uses but still explain why the aorist so predominantly is past referring.

7 Summary of Aspect and Tense in the Indicative in Greek

The present codes the imperfective aspect with a secondary meaning of non-past temporal reference. In past contexts it alternates with the imperfect in some styles. This alternation serves a textual function. The imperfect codes the imperfective aspect and past temporal reference, with a secondary meaning of unreality. The future shares features of both tense and mood, and is probably aspectually neutral. The perfect prototypically combines the perfective and stative aspects, but either can fade out. Temporally it is usually either non-past (stative) or past (perfective). The relationship of the pluperfect to the perfect parallels the relationship of the imperfect to the present. The aorist codes the perfective aspect, with a secondary meaning of pastness.

8 Conclusion and Prospect

This is a preliminary study for a thorough analysis of the Greek verb. I have not said much completely new with respect to Greek grammar, but I have attempted to lay a foundation on which much fruitful research could be made with reference to the Greek verb.

Aspect is not to be semantically differentiated from Aktionsart, but they must be seen as nested expressions of the same distinctions. I argued for the aspectual analysis of the present, aorist, and perfect tenses, the present being imperfective, and the aorist being perfective and the perfect perfective and stative (sometimes either eclipsed). The future I consider primarily modal, but it also has a temporal function referring to the future. The imperfect and pluperfect grammaticalize past time reference along with their aspectual values.

Punctuality, stativity, and perfectivity are aspects that are relevant to the study of Greek grammar. Perfectivity is grammaticalized in tense stems and stativity is partly grammaticalized in the perfect stem. The importance of the punctual aspect was not emphasized, but it can be seen when a punctual is nested inside an imperfective.

Much research still needs to be done. I have done very little with respect to aspect as a prototype category. Though I concentrated on the abstract, schematic values (perfectivity and imperfectivity) of the Greek verbal stems, I do not want to minimize the importance of studying the prototypical uses of these categories, such as are found in most reference grammars.

The importance of this work for the general linguist lies in my argumentation for the relationship of aspect and Aktionsart, and the idea of nesting. I hope this study has shown that such a theoretical viewpoint can be used to give a fruitful analysis of aspect in a language. Whether my view of aspect leads to a more precise analysis than for example the one given by Fanning (1990), remains, of course, unproven in this preliminary work. But I think that it can be shown if one pursues the study further.

The importance of this work for the Greek grammarian is to challenge some of the old suppositions about verb usage, primarily by arguing the

most important aspectual distinction in Greek being perfectivity versus imperfectivity, neither primarily dealing with duration. Also important is the predominance of aspect over tense. Of course, in these areas I did not present much that has not been already ably argued for by Porter, McKay, and Fanning. The application of the prototype theory to Greek grammar is also important.

The implication of this work for the New Testament exegete is important. It is too common to base a lot of exegesis on Greek tense (aspect) usage. Unfortunately, a lot of argumentation does not take into account the true nature of the aspect or the context very well. I hope that this study may help exegetes to be more sensitive to Greek grammar and aspect with relationship to nesting and context, and to think of what is grammaticalized from the linguistic point of view, not from the point of view of their current theological research question.

Finally, I hope that this study will encourage others to do further research on Greek grammar, and that it will in turn lead to a clearer understanding of the message of New Testament.

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