LIBERTY UNIVERSITY SCHOOL OF DIVINITY

AN ANALYSIS OF THE –μός SUFFIX IN THE NEW TESTAMENT

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Abbreviations

BDAG Bauer, Walter, Frederick W. Danker, William F Arndt, and F. Wilbur Gingrich. *A Greek-English Lexicon of the New Testament and Other Early Christian Literature*. Chicago: University of Chicago, 2003.

DN *Deverbal Noun*

DNP *Deverbal Noun Phrase*

LSJ Liddell, Henry George, Robert Scott, and Henry Stuart Jones. *Greek-English Lexicon*. Oxford: Clarendon Press, 1996.

Abstract

This dissertation describes and analyzes the –μός suffix in the New Testament. This suffix indicates a noun derived from a verbal stem, i.e., a deverbal noun. Due to the lack of an in-depth analysis of this suffix, some incomplete ideas about this suffix have appeared in Greek grammars. Along with scholarship in Greek grammar, this dissertation employs terms from the field of linguistics, as well as patterns suggested from studies of deverbal nouns in other languages. This method will reveal two groups of conclusions. First, it will reveal that the suffix and nouns in which it occurs follow traditional expectations, such as morphological and grammatical rules. Second, it will reveal general principles to help scholars interpret –μός nouns. Principles for interpretation will first aid in distinguishing between occurrences that refer to a process and those that refer to a result. For occurrences that refer to a process, a second set of principles will equip scholars to determine the subject, object, and other important parts of the implied process.

Chapter 1

The Situation

Scholars commonly disagree as to whether a genitive modifier is subjective or objective. An example comes from the phrase ὁ βρυγμὸς τῶν ὀδόντων ("gnashing of teeth").[1] The disagreement comes from the genitive modifier ὀδόντων; specifically, whether it is a subjective genitive ("teeth gnashed") or objective genitive ("someone gnashed their teeth"). This decision between subjective and objective genitive is often preceded by another decision. First, a scholar must determine that the noun being modified represents a verbal idea. Often grammarians provide suggestions for determining if the noun represents a verbal idea, such as when the noun contains the suffix –μός. Scholars have claimed that this suffix indicates a noun derived from a verb (a *Deverbal Noun*).[2] Scholars have further claimed that a –μός noun represents the same action or process as the verb from which it was derived. As such a genitive modifier can represent another part of that process, such as the subject or object. However, some –μός nouns (such as φραγμός, "fence"), clearly take on a different meaning than its verbal cognate.[3] The difficulty of both of these decisions is due to an incomplete understanding of Greek deverbal nouns, and in particular, the –μός suffix.

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[1] Matt 8:12; 13:42, 50; 22:13; 24:51; 25:30; Luke 13:28.

[2] For clarity, this dissertation capitalizes and italicizes technical terms in their first occurrence.

[3] James A. Brooks and Carlton L. Winbery, *Syntax of New Testament Greek* (Washington, D.C.: University Press of America, 1979), 14; J. Harold Greenlee, *A Concise Exegetical Grammar of New Testament Greek* (Grand Rapids: Eerdmans, 1953), 25-28; Horace Addison Hoffman, *Everyday Greek: Greek Words in English, Including Scientific Terms* (Chicago: University of Chicago Press, 1919), 27-28; Curtis Vaughan and Virtus E. Gideon, *A Greek Grammar of the New Testament* (Nashville: Broadman, 1979), 34; Richard Young, *Intermediate New Testament Greek: A Linguistic and Exegetical Approach* (Nashville: Broadman & Holman, 1994), 29.

The goal of this dissertation is to describe and analyze the New Testament use of the –μός suffix. This suffix forms 56 words (such as πορισμός, "means of gain"), which appear 244 times (as in 1 Tim 6:5-6).[4] The description of this suffix will show that –μός nouns are a normal subset of New Testament Greek nouns. The analysis will lead to a systematic method for interpreting –μός nouns. This systematic approach will first help one determine if the –μός noun refers to an implied verbal action (a *Process*) or to a result of that process (a *Result*). For –μός nouns that refer to a process, this approach will also help determine other pertinent parts of the implied action, such as the subject and object.

This study will accomplish its goal by using current scholarship in both Greek grammar and linguistics to gather and analyze data from –μός nouns in the New Testament. It will first present some situations that Greek scholars currently face. A brief survey of Greek scholarship will illustrate the problems that have arisen from the lack of an in-depth analysis. A survey of linguistic scholarship concerning deverbal nouns will prepare the reader to better understand the forthcoming analysis. The analysis begins by analyzing the form of –μός nouns, focusing on their morphology and grammar. It will then analyze the semantics of –μός nouns, describing their features. After analyzing, this study will draw principles for interpreting –μός nouns, and finally it will organize those principles into a systematic method for interpretation.

This method will result in two distinct sets of principles. The first set will enable scholars to determine whether words with the –μός suffix refer to a process or a result of that process. An example comes from Luke 1:41, where Mary greets Elizabeth. The phrase τὸν ἀσπασμὸν τῆς Μαρίας ("Mary's greeting") could refer to either a process (Mary's action of greeting Elizabeth)

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[4] These numbers are minimums; see the Identifying –μός Nouns and Identifying Occurrences sections below.

or a result (the noise Mary made when she greeted Elizabeth). The context provides evidence for both; the question is the strength of the evidence. These principles, and more importantly the systematic method for interpretation, will help scholars determine what evidence is stronger. The second set of principles will help scholars when a –μός noun refers to a process. Specifically, it will enable scholars to determine whether a modifier is the subject or object of the action behind the –μός word. A difficult decision between a subjective and objective genitive comes from Heb 2:4, which contains the phrase πνεύματος ἁγίου μερισμοῖς ("distributions of the Holy Spirit"). The question here is whether the Spirit distributes, whether the Spirit is distributed, or even potentially if the Holy Spirit distributes himself. These principles will provide a structure for making decisions in situations like this one. This dissertation will accomplish its goal by using recent insights from linguistics to observe how this suffix is used in the New Testament. This dissertation will conclude by combining those ideas into a synthesized method for application.

The Problem

There are two primary problems, but all the problems stem from the same root cause. At the root of all the issues is the fact that there is no thorough analysis of the –μός suffix. The first primary problem that this causes is that there are no guidelines to distinguish occurrences of –μός nouns that indicate a process from those that do not (i.e., those that indicate a result). Second, for those that indicate a process, there are no guidelines for distinguishing between modifiers that are subjective and those that are objective. Other smaller issues exist, but they are of lesser concern.

The Primary Cause[5]

The cause of the problems concerning the –μός suffix in the New Testament is that there is no in-depth analysis of this suffix anywhere. At most one might find a handful of pages mentioning that –μός indicates a process, some examples of nouns with the –μός suffix, and some debated thoughts about whether its modifiers are subjective or objective genitives.[6] Three examples will illustrate the main ways scholars have discussed the suffix.

Abridged Discussions of the –μός Suffix

Most grammars that discuss the –μός suffix are so brief that they should be classified somewhere between incomplete and insufficient. A typical example is Harold Greenlee's *Concise Exegetical Grammar of the New Testament*. Greenlee mentions the different suffixes that can form nouns, and 1-2 glosses for each. He groups two suffixes together with the gloss of "Action/Process." Those two suffixes are –σις and –μός. Other suffixes are grouped under the glosses of "agent," "instrument," "result (thing itself)," and "quality."[7] On the surface, since at least half of –μός nouns describe a process, this is a good overview on the surface. However, it is too brief to be considered complete.

Since there are many exceptions to this gloss, it is at best incomplete, and at worst insufficient. There are 56 –μός nouns in the New Testament.[8] The following nouns all clearly fit under the description of "result (thing itself)": ἀναβαθμός (flight of stairs), βαθμός (step), βωμός

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[5] In order to be fair to the grammarians listed here, they are not attempting to conduct a thorough analysis of the –μός suffix. Their goal is to provide a general analysis, often as an introduction to Greek grammar.

[6] See the Modern Foundations section below.

[7] Greenlee, *Concise Exegetical Grammar*, 28.

[8] See below in the Identifying –μός Nouns section.

(altar), δεσμός (bond), ἱματισμός (clothing), ποταμός (river), φραγμός (fence), and ψαλμός (song). Therefore eight of the 56 are clear counter-examples. Two of those clear counter-examples (ποταμός, "river", and δεσμός, "bond") are two of the most common –μός nouns in the New Testament. Further, there are five –μός nouns that probably don't fit as "action/process". Three of these five are best classified under the "result" description, while two others are better classified under "agent" (παροργισμός, "cause of anger") or "instrument" (πορισμός, "means of gain"). The eight certain examples plus the five likely examples mean thirteen –μός nouns do not fit under "action/process." This accounts for 60 of the 244 occurrences, almost 25%. Further, lexicons are unclear about fourteen other –μός nouns, meaning 75 occurrences are not clearly classified as "action/process".[9] Adding these together, 55% of the New Testament occurrences of –μός nouns are not clearly categorized as "action/process." For this reason, Greenlee's information falls somewhere between incomplete (accounting for about 75% of occurrences) and insufficient (accounting for about 45% of occurrences).

Discussing Morphology, not Semantics

Even when scholars provide examples of –μός nouns, their analysis still falls short. James Hope Moulton, William Francis Howard, and Nigel Turner provide the most thorough analysis of the –μός suffix that this research found. They theorize the origins of the suffix, that it primarily (but not solely) forms verbal abstracts (i.e. they represent a process), and provides many examples both within New Testament and secular Greek.[10] However, it still falls short in more than one regard.

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[9] See Appendix B, heading "Basis for Initial Decisions," column "Lexical Meaning."

[10] James Hope Moulton, Wilbert Francis Howard, and Nigel Turner, *A Grammar of New Testament Greek* (Edinburgh: T & T Clark, 1967), 350-355.

While Moulton, Howard, and Turner go further than most discussions of the –μός suffix, there are multiple issues with their analysis. Two issues are straightforward. First, their work incorrectly classifies words as having the –μός suffix when more recent scholarship has shown that they probably do not, such as κόσμος ("world"). Second, it provides variants of the –μός suffix (such as –σμός) which are not variants, but are explained by morphological rules discovered after they published their work.[11] These issues are inconsequential, but reveal the larger issue: Moulton, Howard, and Turner focus their attention on discussing word formation and morphology, while only spending a few sentences on meaning. This is the core problem with current scholarship as a whole: this volume goes further than virtually any other in discussing the –μός suffix, and spends approximately one paragraph on meaning. While it mentions that not all –μός nouns represent a process, it provides no guidelines for determining which ones do not. If their work included a complete list of –μός nouns, classifying each one according to meaning, one could easily forgive them. However, they provide a gloss for only a few of them, and classify none of them. Therefore, the most in-depth analysis of the –μός suffix spends little space discussing semantics. A reasonable counter to this claim is that, although grammars do not discuss the semantics of –μός nouns specifically, they do discuss the semantics of deverbal nouns in general.

Vague Notions of Subjective and Objective Genitives

Although grammars commonly discuss the concept of subjective and objective genitives, they leave much to be desired. Different grammars have different strengths, but Young does a

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[11] William D. Mounce, *The Morphology of Biblical Greek* (Grand Rapids: Zondervan, 1994), 34-35, 36-37, 300, 303

solid job approaching these genitives from all aspects. He claims that –σις and –μός nouns usually (but not always) represent actions/processes, and adds that genitives with –μός nouns often represent the subject or object of the process. More broadly, he mentions that a noun representing the cognate verb's process must be involved in order to have a subjective/objective genitive.[12] He also warns that the mere presence of this noun does not indicate a genitive will be subjective or objective. In order to be a subjective/objective genitive, the genitive noun must also fit as the subject or object of the –μός noun's cognate verb. As an example, he provides the English phrase "blasphemy of the Spirit." This phrase carries roughly the same meaning as the sentence, "They blaspheme the Spirit." The other option is "the Spirit blasphemes," but this option makes little sense. Young suggests that the decision between subjective and objective genitive should be based on context.[13] Young's work provides many excellent ideas, but not as many as it could.

Young's discussion is good in all aspects, but still leaves much to be desired. More specifically, he mentions what steps to take, but only hints at how to take them. The first step Young suggests is to determine whether or not the deverbal noun refers to a process. The second is to determine how modifiers fit with deverbal nouns that do represent a process. In neither case does he provide details on how to accomplish these tasks.

Young rightly identifies the importance of distinguishing between deverbal nouns that indicate a process and those that do not, but provides too little information for how to do so. He mentions that determining when a noun represents a process is necessary, but not simple. Indeed

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[12] Young uses the term "verbal noun" in reference to nouns that represent a process. To avoid confusion with the similar phrase "deverbal noun" (which refers to any noun formed from a verbal root), the current section avoids using his phrase.

[13] Young, *Intermediate*, 23, 29-43.

it is not. Despite acknowledging that it is not simple, he provides very little information on how to do so. For instance, he says that –μός nouns usually represent processes. This is helpful, but does not explain how to distinguish which occurrences do and which do not. His examples suffer this same issue. In Rom 16:25 he claims that εὐαγγέλιον ("gospel") is a process noun (referring to the spread of the news Paul preaches), but in Matt 1:1 it is not (there it refers to the book Matthew wrote).[14] However, he does not explain how he distinguishes between the two. An example is certainly helpful, but the details about how he came to this decision are lacking.

There are multiple situations in which a grammarian would need to determine whether a noun represents a process but Young's criteria would not lead to a strong conclusion. One might find a word with a meaning that is is semantically unclear, such as γογγυσμός ("complaint"), which might refer to the act of complaining or the content of the complaint. Young's criteria would help the person determine that it could represent a process (as it has the –μός suffix), but would not help determine whether it actually does. One might also find a word that carries multiple meanings, some of which represent a process and some of which do not. A good example is θερισμός, which can refer to the action of harvesting or the physical crops for harvest. Young's guidance would not lead to a firm conclusion on which meaning applies to each specific occurrence. He certainly has criteria for making the distinction. That criteria may be conscious or subconscious, but he does not mention it. An eager reader will be left wondering about his criteria. The same situation applies to distinguishing between subjective and objective genitives.

Young rightly identifies the importance of matching genitive modifiers with the cognate verb. He notes that, in order for a genitive to be subjective, it must fit as the subject of the

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[14] Ibid.

process noun's cognate verb. An objective genitive has a similar criteria; it must fit as the object of the process noun's cognate verb.[15] Yet again, Young gives a very brief idea for determining the meaning of modifiers: they must fit with the cognate verb. This is very helpful, but still lacking.

There are a few situations in which a grammarian would want to discover more about the implied action, but Young's criteria would not lead to a firm conclusion. An aspiring grammarian might wonder how to distinguish between subjective and objective genitives when the genitive could fit either way. For example, take the phrase τὸν καθαρισμὸν τῶν Ἰουδαίων ("the purification of the Jews") in John 2:6. Being in the context of a wedding feast, it could refer to the Jews washing their dinnerware, as does a similar phrase in Mark 7:4. On the other hand, it could refer to the Jews being purified so they are clean and can participate in the feast. Young's suggestion would not lead to a conclusion in this case.

A grammarian might also wonder if a genitive modifier can represent another part of the implied clause other than the subject or object. Heb 10:24 contains the phrase παροξυσμὸν ἀγάπης ("provocation of love"). The genitive ἀγάπης ("love") could possibly fit as the subject (love provokes), but probably not as the object (love is provoked). However, the context points toward one believer provoking another, so both seem less than likely. In general, genitive modifiers can also be adjectival, ablative, and adverbial genitives. However, none of those other types fit well. If it is possible for genitives to represent another part of the implied clause, such as the indirect object, ἀγάπης would be a prime example. In this case, the implied clause would be

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[15] Ibid.

something akin to "Believers provoke one another to love." Young's suggestions would not lead one to believe this is possible.

These two examples of missing information are hardly the only two. John 3:25, Acts 15:39, and 2 Pet 2:22 are examples similar to John 2:6. Situations similar to Heb 10:24 appear in Heb 1:3 and 2 Pet 1:9. Further, one might find datives, prepositional phrases, or other non-genitive modifiers that seem to fit into the implied action, but no grammars mention this as even a possibility. Gal 4:14 is a very unique construction: τὸν πειρασμὸν ὑμῶν ἐν τῇ σαρκί μου ("your testing in my flesh"). While the genitive ὑμῶν ("your") probably represents the object of the implied action ("someone or something tested you"), one is left wondering how ἐν τῇ σαρκί μου ("in my flesh") fits into the implied action, or if it does at all. The readily apparent answer is that, in some vague way, Paul's physical situation (possibly his poor health) tested the churches in Galatia, i.e. ἐν τῇ σαρκί μου represents the subject of the implied action.

Finally, in some cases it is easy to confuse the subject and object. Two different phrases will illustrate this. Matt 8:12 contains the phrase ὁ βρυγμὸς τῶν ὀδόντων ("gnashing of teeth"). Heb 8:13 says τὸ … ἐγγὺς ἀφανισμοῦ ("(the first covenant), which nears disappearance"). In both cases, there is an imminent action (gnashing/disappearing) affecting an entity (teeth/the first covenant). Therefore, on the surface it appears that both represents the object of the implied action. However, in the second, it seems to make more sense as the subject ("the first covenant disappears") than as the object ("someone conceals the first covenant"), as Louw and Nida list

ἀφανισμός as parallel to the middle voice of the cognate verb.[16] Although Young's work touches on some unique situations, he does not mention this one.[17]

For these reasons, grammars do not fully flesh out how to determine whether a noun represents a process, nor do they provide the details of how to fit modifiers into the implied process. As will be further illustrated below,[18] Young's work approaches the topic better than most grammars. He rightly identifies the two main aspects of a deverbal noun's meaning: whether or not it represents a process, and if so, how any modifiers fit into the implied process. Despite Young being among the best, his work is still incomplete.

Conclusion of the Root Cause

For the reasons stated above, the root cause of issues comes from the lack of a thorough analysis of the –μός suffix. First, most discussions of the term have been quite brief, leading to incomplete ideas about the suffix. The longer discussions of the suffix have tended to focus on morphology and not semantics. Discussions concerning semantics are relegated to lumping all deverbal nouns together. Grammars do point out the two main semantic issues for deverbal nouns. The first is distinguishing between –μός nouns that represent processes from those that represent results. The second concerns distinguishing subjective genitives from objective genitives. However, in both situations, suggestions for reaching conclusions lack precision. These situations reveal two semantic problems.

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[16] Johannes P. Louw and Eugene A. Nida, *Greek-English Lexicon of the New Testament: Based on Semantic Domains* (New York: United Bible Societies, 1989), 13.98. The middle voice of the cognate verb indicates the idea of ceasing to exist or disappearing, meaning the cognate verb is unaccusative. Therefore, there is no agent argument slot, and theme is the only option.

[17] See the Richard Young section below.

[18] See the Deverbal Noun Research in Κοινῇ Grammar section.

Distinguishing between Process and Result

The first semantic issue is that there are no guidelines for determining when a deverbal noun refers to something other than the verbal action. Grammarians have mentioned not all deverbal nouns refer to the verbal action. However, Benjamin Schliesser's work is a rare example of distinguishing between deverbal nouns that refer to action and those that do not.[19] Even though he goes further than others in giving an example, he provides no guidelines.[20] Specifically with –μός, grammarians often gloss over its meaning. Instead of a healthy discussion, they often claim it refers to an action or process and then move on. These claims are likely an overgeneralization, especially considering that some words with the suffix refer to a physical item instead of an action, such as φραγμός ("fence"). However, the claim that –μός nouns usually refer to an action leaves one wondering what it means when it does not refer to an action.[21] Another semantic problem exists.

Distinguishing between Subjective and Objective Modifiers

There is also a lack of guidelines for determining whether modifiers represent the subject or the object of the implied action. When the –μός noun refers to a process and it has a modifier, that modifier often represents another part of the implied action. As stated above, genitive

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[19] Benjamin Schliesser, "Christ-Faith as an Eschatological Event (Galatians 3:23-26): A 'Third View' on *Pistis Cristou*," in *The Journal for the Study of the New* Testament 38.3 (2016), 277; Young, *Intermediate*, 29; Vaughan and Gideon, *Greek Grammar*, 34-35.

[20] For linguistic discussions of the matter, see Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 502, 523-524; Malka Rappaport Hovav and Beth Levin, "-er Nominals: Implications for the Theory of Argument Structure," in *Syntax and the Lexicon*, eds. Timothy Stowell and Eric Wehrli (San Diego, Academic Press, 1992).

[21] Greenlee, *Concise Exegetical Grammar*, 28; Moulton, Howard, and Turner, *Grammar*, 350-351; Smyth, *Greek Grammar*, 177.

modifiers can represent the subject or object of the implied action.[22] However, little research has been published concerning whether a genitive can represent an indirect object. As shown earlier, Heb 10:24 contains the phrase παροξυσμὸν ἀγάπης ("provocation of love"). While this could refer to the idea of love provoking someone, it could also mean someone is provoking someone else to love. In the second, ἀγάπης represents the indirect object of the action. Further, there is also little research concerning whether other modifiers (such as adjectives or prepositional phrases) can represent parts of the implied action. Acts 6 states that "a complaint from the Hellenistic Jews arose against the Hebrews" (ἐγένετο γογγυσμὸς τῶν Ἑλληνιστῶν πρὸς τοὺς Ἑβραίους). A valid understanding of this phrase is equivalent to "The Hellenstic Jews complained about the Hebrews." In that example, a prepositional phrase (πρὸς τοὺς Ἑβραίους) represents part of the implied action. Despite this example, up to this point Koine research has not provided guidelines for determining if and when this is valid. Along with these two main issues, there are some less important issues that exist.

Other Issues

The final few problems can be listed with little explanation. First, there is no agreement among grammarians as to whether or not objective genitives are similar to passive voice.[23] Neither is there agreement on whether the subjective genitive is the subject or the agent of the

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[22] Manfred Bierwisch, "Nominalization—Lexical and Syntactic Aspects," in *Quantification, Definiteness, and Nominalization*, eds. Anastasia Giannakidou and Monika Rathert (Oxford: Oxford, 2009), 311-313. See the Either/Or and Indirective section below.

[23] Smyth, *Greek Grammar*, 319, mentions this, and others such as F. Blass and A. DeBrunner, *A Greek Grammar of the New Testament and Other Early Christian Literature*, trans. Robert W. Funk (Chicago: Chicago Press, 1961), 98, hint at the idea, but not one has clearly disagreed or agreed with Smyth.

corresponding verbal idea.[24] Third, no one mentions that some deverbal nouns may lack the

normal structure of nouns, such as having adverbial modifiers.[25] This is a minor point, but either

deverbal nouns can take adverbial modifiers, or they cannot, and it would be helpful if this

feature (or lack thereof) were noted in the literature. These problems mean that the scholarly

discussion concerning –μός is incomplete; that can be overcome.

Conclusion of the Problem

There are multiple problems concerning the –μός suffix. At the root of them all is the

lack of thorough analysis of the –μός suffix. This is a problem because grammarians and

interpreters must make decisions on the meaning of –μός nouns, and their knowledge base for

doing so is incomplete. There are three gaps in the knowledge. The first concerns whether or not

–μός nouns follow the traditional morphological and grammatical rules. That –μός nouns follow

the traditional rules has been taken for granted, and time will tell if that was a safe assumption.

The second and third gaps have not been assumed. Those gaps have been identified, but not

thoroughly explored. The second gap concerns distinguishing between –μός nouns that represent

a process and those that do not. The third gap pertains to –μός nouns that represent a process;

specifically, it concerns whether modifiers represent the subject, object, or another part of the

implied process. The problem with the two semantic gaps is that no one has thoroughly

researched and explained how to make these judgment calls. While some have provided helpful

ideas, their suggestions are incomplete. These problems apply to most, if not all, deverbal nouns.

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[24] Stanley Porter, *Idioms of the Greek New Testament* (Sheffield: Sheffield, 1992), 95. "Subject" and "Agent" are separated in modern linguistics for a variety of reasons. See Heidi Harley, "Subjects, Events, and Licensing" Ph.D. diss., Massachusettes Institute of Technology, 1995, 16ff.

[25] Martina Wiltschko, "Patterns of Nominalization in Blackfoot," in *Cross-Linguistic Investigations of Nominalization Patterns*, ed. Illena Paul (Amsterdam: John Benjamins, 2014), 212-213.

However, the first step to remedying the larger knowledge gap concerning deverbal nouns is to break them down into smaller subsets for analysis. Focusing on –μός nouns is one such subset.

History of Research

The goal of this section is to cover a brief history of the research on the topic. This research has primarily occurred in two distinct areas: Koine Greek grammar, and modern linguistics. Each of these reviews have their own purpose. The history of Koine grammar serves to further illustrate the problems listed above. A history of deverbal noun research within the field of linguistics will provide background for the terminology and concepts used herein.

Deverbal Noun Research in Koine Grammar

Since grammarians say the –μός suffix can indicate a subjective or objective genitive phrase, and scholarship has little mention of the suffix outside of the context of subjective and objective genitives, this section traces the discussion around subjective and objective genitives (*Verbal Genitives*) in Koine Greek while pointing out references to the –μός suffix. [26] One might group this discussion into three distinct time periods. The first period occurs during the first millennium, from which there are few extant works. After almost another millennium with very little change, some modern works laid the foundation for the insights that exists today.[27] During this period scholars identified specific suffixes for deverbal nouns, and Robertson brought the

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[26] The only discussions outside of verbal genitives are brief mentions of the fact that the –μός suffix is added to verbs to make them nouns that indicate the same action as the verb. See Hoffman, *Everyday*, 27-28; Moulton, Howard, and Turner, *A Grammar of New Testament*, 350-351; Herbert Weir Smyth, *A Greek Grammar for Schools and Colleges* (New York: American Book Company, 1916), 176-178. J. Harold Greenlee, *A New Testament Greek Morpheme Lexicon* (Grand Rapids: Zondervan, 1983), 292-293, also mentions it as a suffix.

[27] "Modern foundations" is a concise way this dissertation refers to the time period when Greek grammars became plentiful (post-1850) and before technology allowed a more rigorous analysis (pre-1975).

major thoughts of his day into one work.[28] After modern linguistics, scholars such as Young,

Wallace, and Voelz presented new insights into Greek deverbal nouns, but even those insights

did not go far enough.[29]

The First Millennia

The scholarly discussion around verbal genitives is anything but new. Apollonius

Dyscolus lived in the second century and was one of the earliest grammarians. He proposed that

a noun can have the same referent as a verb; that is, both words can refer to a process or action.[30]

However, the first mention of action nouns and their modifiers came from Michael Syncellus,

who lived in the late eighth and early ninth centuries. When translating Syncellus, Donnet

appropriately used the linguistic term "deverbal noun" to refer to nouns that develop from a

cognate verb. Syncellus held that deverbal nouns, specifically those representing both active and

transitive ideas, required the genitive case.[31] These two insights were crucial in developing the

Koine Greek approach to deverbal nouns.

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[28] A.T. Robertson, *A Grammar of the Greek New Testament: In the Light of Historical Research* (Nashville: Broadman, 1934), 499.

[29] James Voelz, "External Entailment as a Category of Linguistic Analysis," in *Biblical Greek Language and Lexicography*, eds. Bernard A. Taylor, John A.L. Lee, Peter R. Burton, and Richard E. Whitaker (Grand Rapids: Eerdmans, 2004), 223-230; James Voelz, *What Does this Mean?* (St. Louis: Concordia, 1995), 183-196; Daniel B. Wallace, *Greek Grammar Beyond the Basics* (Grand Rapids: Zondervan, 1996), 112-121; Young, *Intermediate*, 29.

[30] Apollonius Dyscolus, *The Syntax of Apollonius Dyscolus*, trans. Fred W. Householder (Amsterdam: John Benjamins, 1981), 70.

[31] Daniel Donnet, *Le Traité de la Construction de la Phrase de Michel le Syncelle de Jérusalem* (Bruxelles: Institut historique belge de Rome, 1982), 221-223; R.H. Robins, *The Byzantine Grammarians* (New York: Mouton de Gruyter, 1993), 150-151.

Modern Foundations

Around a millennia passed before scholars made significant advancements concerning verbal genitives in Koine. Grammarians developed the concept of subjective and objective genitives by at least 1884.[32] A few decades later, Smyth and Hoffman independently identified suffixes within Greek that indicate words formed from other words. Importantly, they identified suffixes that, when attached to verbs, formed deverbal nouns. These suffixes indicate a subject or object of the verb (–της, –τηρ, –τωρ, –τριδ, –τρια, –τειρα, and –τιδ), the verbal action itself (–σις, –σια, –μος, –τι, and –ια), the outcome of that action (–ες and –ματ, which sometimes appears as –μα or –μη), or the instrument of the action (–τρον, –τρα, and –ρο).[33] Over time, many have agreed with these insights, and other suffixes have been added to this list of suffixes that form nouns when attached to verbs. These include –οσυνη (quality), –ος (quality/result), –εια and –μονη (abstract concepts), –τις (action), –ευς (subject/object),[34] and finally nouns with a null suffix such as ἀγάπη (usually an abstract concept).[35] Scholars identified many of these suffixes nearly a century ago. A.T. Robertson was potentially the foremost grammarian, and his work is typical of the period.

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[32] James Hadley, *Greek Grammar* (New York: D. Appleton and Company, 1884), 233. The concepts were likely in place before this.

[33] The suffixes in this paragraph may contain different accents depending on the lexeme with which they occur. For simplicity, they are presented without accents here. Smyth, *Greek*, 176-178; Hoffman, *Everyday*, 27-28.

[34] Greenlee, *Concise Exegetical Grammar*, 25-28; William Sanford LaSor, *Handbook of New Testament Greek* (Grand Rapids: Eerdmans, 1973), 122; Young, *Intermediate*, 29.

[35] Young, *Intermediate*, 29. See also Artemis Alexiadou and Jane Grimshaw, "Verbs, Nouns and Affixation," in *Working Papers of the SFB* (Stuttgart: Online Publikationsverbund der Universität Stuttgart, 2008), 11. Greenlee, *New Testament Greek Morpheme*, x, notes that semantic drift caused many of these suffixes to overlap in various ways.

Robertson, while not making any major advancements in the study of deverbal nouns in Greek, brought the scholarly thought of his day into one work. Many of his contemporaries agreed that only context could determine whether the genitive modifying a deverbal noun is subjective or objective.[36] He admitted that the choice between subjective and objective was often difficult because the same phrase can be a subjective genitive in one context and objective in another.[37] Robertson made some novel claims, like the idea that the objective genitive was common in the New Testament, and that some words lend themselves to one choice more readily than the other.[38] However, it is easy to find counter-examples to these claims, so these general statements are hardly helpful. [39] Little changed in the study of verbal genitives from Robertson until the 1990s.

Recent Insights

Modern linguistics, being a new field of study, contributed little to the discussion of deverbal nouns in Koine Greek until one short article suggesting that linguistics might be helpful. In 1975, G. Henry Waterman proposed that, when interpreting the construction of noun + genitive noun, Noam Chomsky's "transformational grammar" might be helpful. Chomsky's idea of grammar was that spoken sentences (the 'surface structure') were results of transformations from the meaningful semantic relationships behind them (the 'deep structure').

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[36] E.D. Burton, *A Critical and Exegetical Commentary on the Epistle to the Galatians* (Edinburgh: T&T Clark, 1921), 482; William Douglas Chamberlain, *An Exegetical Grammar of the Greek New Testament* (New York: The Macmillan Company, 1941), 31; Alson Hurd Chase and Henry Phillips Jr., *A New Introduction to Greek* (Cambridge: Harvard, 1941), 110; A.N. Jannaris, *A Historical Greek Grammar Chiefly of the Attic Dialect* (Hildesheim: Georg Olms Verlagsbuchhandlung, 1897), 333; Robertson, *Grammar*, 499.

[37] Robertson, *Grammar*, 499.

[38] Ibid., 499-500.

[39] Young, *Introduction*, 30.

This theory, were it true, could allow Greek grammarians to understand the transformations that led to the surface structure of subjective and objective genitives. Understanding the transformations would potentially allow grammarians to better recognize these genitive structures. Waterman provided no conclusions, only this suggestion.[40] Once other scholars acted on this suggestion around two decades later, they applied linguistic concepts from 1975 instead of 1995.

Richard Young

Once Waterman's suggestion caught on, scholars were able to discover new insights into Greek deverbal nouns. Young made the first attempt to integrate linguistics into a New Testament grammar. He claimed that the conventional approach to grammar was not the best approach because it did not get outside the sentence into the context.[41] To overcome this, he tried to combine new linguistic ideas on grammar with the traditional eye toward exegesis that New Testament grammars use.[42] However, he seemed to discard the linguistic concept that meaning encodes itself in grammar when he claimed that his work trained for exegesis and not grammar.[43] To ensure linguistic insights did not contradict his theological beliefs, he held authorial intent

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[40] G. Henry Waterman, "The Greek 'Verbal Genitive'," in *Current Issues in Biblical and Patristic Interpretation*, ed. Gerald F. Hawthorne (Grand Rapids: Eerdmans, 1975), 289-293.

[41] Young, *Introduction*, vii.

[42] Ibid., vii.

[43] Young, *Introduction*, xii. Contra Liesbet Heyvaert, *A Cognitive-Functional Approach to Nominalization in English* (Berlin; New York: Mouton de Gruyter, 2003), 7; Johannes P. Louw, *Semantics of New Testament Greek* (Philadelphia: Fortress, 1982), 77-80.

and context to be more important than linguistics.[44] With this foundation laid, he discussed deverbal nouns.

Young began by admitting the traditional distinction between subjective and objective genitives. He used this to explain that there is a kernel sentence behind each deverbal noun and its corresponding genitive.[45] However, the idea of a "kernel sentence" was already dated in linguistics, as the phrase "agnate clause" had begun to replace it two decades before Young wrote.[46] He claimed that a phrase with a deverbal noun and genitive modifier could represent a kernel sentence, but did not always represent a kernel sentence. Young then reiterated the common refrain that the subjective genitive represents the subject of the underlying/kernel sentence, and that the objective genitive represents the object. Going beyond this, he added new categories that were previously undefined. The first he titled "verbal genitive," which is when the deverbal noun is also the genitive noun in a phrase. The noun that the genitive noun modifies is either the subject or the object in the kernel sentence.[47] The second new category occurs when both the head noun (the one being modified) and the genitive noun are both deverbal nouns. These refer to two separate, but interconnected ideas.[48] Young provided many helpful insights, but did not explain in detail how to come to conclusions about meaning.

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[44] Young, *Introduction*, viii-xi.

[45] Ibid., 2004.

[46] Artemis Alexiadou, Liliane Haegeman, and Melita Stavrou, *Noun Phrase in the Generative Perspective* (Berlin, Mouton de Gruyter, 2007), 2-3; Maria Koptjevskaja-Tamm, *Nominalizations* (London: Routledge, 1993), 252; Graham Mallinson and Barry J. Blake, *Language Typology: Cross-Linguistic Studies in Syntax* (Oxford: North-Holland Publishing Co., 1981), 403; T. Venneman, "Explanation in Syntax," in *Syntax and Semantics*, vol. 2, ed. J.P. Kimball (New York: Seminar Press, 1973), 352-354.

[47] Young, *Introduction*, 31-32. This dissertation uses the phrase 'verbal genitives' as a reference to both subjective and objective genitives (and any other similar type of genitive that occurs in a phrase representing a verbal idea). This is quite different Young's use of the phrase.

[48] Ibid., 30-32.

Daniel B. Wallace

Wallace's *Greek Grammar* was another landmark work, and he took a slightly different approach than Young. He reiterated the common refrain concerning the semantic differences between subjective and objective genitives. Unlike Young, he did not consider his work primarily exegetical or grammatical, but "lexico-syntactic," aiming for the meaning of the words within the context. He added some other simple insights, such as the idea that the subjective genitive can occur with more verbal nouns (Wallace's phrase for deverbal nouns) than the objective genitive simply because not all verbs are transitive. Nonetheless, he later provided a counter-example. Like Young, Wallace mentioned kernel sentences, but they were not central to his thoughts like they were with Young. Wallace also argued for a category rejected by most: the plenary genitive. This exists when the genitive noun has a double meaning, representing both the subject and the object of the implied sentence(s). For example, "the love of God" likely refers to both God loving and God being loved. This is similar to double entendre.[49] Wallace, while adding nuance in some areas, also did not explain in detail how to come to conclusions about meaning.

James Voelz

Voelz used the concept of kernel sentences more than other scholars, and was very helpful in one important aspect, but he still did not go far enough. Voelz did not contribute directly to the subjective and objective genitive discussion, but to the concept of deverbal nouns. He referred to them as "event words."[50] When one encounters these words, Voelz suggested

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[49] Wallace, *Greek Grammar*, 112-121.

[50] Voelz took this phrase from Louw's 1982 work on *Semantics* (77-80), which pulled from linguistics.

recreating the sentence tied to the cognate verb. This included not only finding the verb tied to

the noun, but also the event(s) to which the noun referred, including the actors in the event

(subject, object, etc.). Sometimes the immediate context provided the actors, and some of the

time it did not. If the immediate context did not provide them, Voelz suggested searching

throughout the rest of the New Testament for actors. He provided multiple compelling examples

where he found the actors in another New Testament book.[51] Overall, Voelz provided a

compelling method to determine the reference of deverbal nouns. His method is grounded in

scholarly insights applied thoughtfully. There are no faults in his work, but he does not go far

enough. Additionally, the linguistic ideas he uses are over three decades old. There is much more

that can be done.

Current Discussion

The scholarly discussion since the mid-1990s has not added any noteworthy insights. The

πίστις Χριστοῦ debate rages on with few insights added.[52] Schliesser is the exception, arguing

that πιστις ("faith"), despite having a verbal cognate, should not necessarily be interpreted as a

verbal genitive.[53] Burk published an article on δικαιοσύνη θεοῦ in 2010, which applies Young's

ideas but goes no further.[54] The grammars published since then have changed the grammatical

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[51] Voelz, "External Entailment", 223-230; Voelz, *What Does*, 183-196.

[52] Michael F. Bird and Preston M. Sprinkle, eds, *The Faith of Jesus Christ* (Grand Rapids: Baker, 2010); Roy A. Harrisville, "Before Pistis Cristou: The Objective Genitive as Good Greek," *Novum Testamentum* XLVIII, 4 (2006); R. Barry Matlock, "Detheologizing the Pistis Cristou Debate: Cautionary Remarks from a Lexical Semantic Perspective," *Novum Testamentum* XLII, 1 (2006); G.W. Peterman, "Δικαιωθῆναι διὰ τῆς ἐκ Χριστοῦ πίστεως: Notes on a Neglected Greek Construction," *New Testament Studies* 56 (2009); Jermo van Nes, "'Faith(fulness) of the Son of God'? Galatians 2:20b Reconsidered," *Novum Testamentum* 55 (2013): 127-139.

[53] Schliesser, "Christ-Faith," 277.

[54] Denny Burk, "The Righteousness of God (δικαιοσύνη θεοῦ) and Verbal Genitives," *The Journal for the Study of the New Testament* 34.4 (2012).

goal from labelling cases with a specific category to describing what the case is doing. This has led to less space devoted to subjective and objective genitives, although there are exceptions.[55] This brief survey illustrates the pace of advancement concerning Greek deverbal nouns and subjective/objective genitives.

Conclusion of Koine Grammar Studies

Research of deverbal nouns in Koine Grammar is lacking. First, scholars have assumed that deverbal nouns are a normal subset of all Koine nouns. This is likely a safe assumption, but no one has investigated whether it is true or false. Second, Koine grammar has yet to explain how to distinguish between deverbal nouns that indicate processes and those that do not. While scholars have broadly classified certain suffixes, they have not provided helpful methods for making decisions on specific occurrences. Third, scholars have extensively discussed deverbal noun modifiers. However, their discussions explain only what to do, not how to do it. For these reasons, there is a noteworthy gap in the research, and one that would be helpful to fill. The next step in filling that gap is defining terms.

Deverbal Nouns in Linguistics

Linguistic research on *Deverbal Nouns* labels many complex concepts with helpful terms.[56] This section will provide those terms, and then illustrate them with a brief history of linguistic research concerning those terms.

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[55] Andreas J. Köstenberger, Benjamin L. Merkle, and Robert L. Plummer, *Going Deeper with New Testament Greek* (Nashville: Broadman & Holman, 2016), 96-97; David L. Mathewson and Elodie Ballantine Emig, *Intermediate Greek Grammar* (Grand Rapids: Baker, 2016), 14-17.

[56] For clarity, this dissertation capitalizes and italicizes technical terms in their first occurrence.

Definitions

This dissertation attempts to keep the linguistic terms at a minimum, but must employ quite a few in order to adequately cover the topic. The central term for this study concerns nouns formed from verbs. Most of these nouns can be classified as either representing the same process as the verb or not. Finally, there are some distinct differences between the verb and the noun formed from it. The following section will cover the linguistic terminology concerning deverbal nouns before adding some terms specific to this dissertation.

Deverbal nouns

The core term in this dissertation is *Deverbal Noun* (henceforth *DN),* which is simply a noun formed from a verb. The term indicates that the verb leaves behind its verbal properties (it is 'deverbalized') and the resulting word is a noun.[57] An example would be the English noun "runner," which is a deverbal noun from the verb "run." Further, Greek speakers often used DNs as part of a *Phrase*.[58] The most common phrase containing deverbal nouns is a *Noun Phrase*, which is a collection of words grammatically related to a *Head Noun*. Often the deverbal noun will be the head noun. An example of a noun phrase is "the resurrection of Jesus Christ." In this example, "resurrection" is the head noun, and it is also a DN. The other words in a noun phrase are mostly *Modifiers* that describe or specify the head noun; in this case "the" and "of Jesus

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[57] This process of changing the type of speech of a word is common. For example, when a noun is formed from an adjective, it is called a deadjectival noun.

[58] In this dissertation, the terms Koine Greek and Greek are synonymous. Some sources for this dissertation cover Modern Greek. Anytime this dissertation refers to Modern Greek, the adjective 'Modern' is included. If 'Greek' lacks any adjective, then it refers to Koine Greek.

Christ" are modifiers. A DN and its modifiers are considered a *Deverbal Noun Phrase* (*DNP*). A

DN by itself is also considered a DNP.[59]

Process/result DNs and modifiers

A deverbal noun can reference the process/action of the corresponding verb. When a

deverbal noun refers to the action implied in the noun, linguists call it a *Process DN*, *Process*

Noun or simply *Process*.[60] English examples of process DNs include fixation (from fixate) and

analysis (from analyze). Process DNs usually have an implied clause behind them. This implied

clause is called an *Agnate Clause*.[61] The agnate clause includes a subject, and when applicable,

an object or indirect object. These three (subject/object/indirect object), along with other parts of

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[59] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 506; Manfred Bierwisch, "Event Nominalizations: Proposals and Problems," *Linguistische Studien* 194, vol. 40 (1989), 58; Bierwisch, "Nominalization," 307-308; S.C. Dik, "Formal and Semantic Adjustment of Derived Constructions," in *Predicates and Terms in Functional Grammar*, ed. A.M. Bolkstein (Dordrecht; Cinnaminson: Foris, 1985), 21; Antonio Fabregas and Rafael Marin, "The Role of *Aktionsart* in Deverbal Nouns: State Nominalizations Across Languages," *Journal of Linguistics* 48 (2012), 36; Jane B. Grimshaw, *Argument Structure*, (Cambridge: Massachusettes Institute of Technology Press, 1990), 49; Jane Grimshaw, "Extended Projection," in *Words and Structure* (Stanford: CSLI, 2005), 67; Gianina Iordăchioaia, Lonneke van der Plas, and Glorianna Jadfeld, "The Grammar of English Deverbal Compounds and their Meaning," paper presented at the *Proceedings of the Workshop on Grammar and Lexicon: Interactions and Interfaces*, Osaka, Japan, December 11th 2016, 83; Chiara Melloni, "Action Nominals Inside: Lexical-Semantic Issues," in *The Semantics of Nominalizations across Languages and Frameworks*, ed. Monika Rathert (Berlin; New York: Mouton de Gruyter, 2010), 142, 145-146; Keir Moulton, "Simple Event Nominalizations," in *Cross-Linguistic Investigations of Nominalization Patterns*, ed. Ileana Paul (Amsterdam: John Benjamins, 2014), 122, 128, 130; Peter Sleeman and Ana Maria Brito, "Aspect and Argument Structure of Deverbal Nominalizations: A Split vP Analysis," paper presented at the "Nominalizations Across Languages" workshop, Stuttgart University, November 29th - December 1st, 2007, 1-5; John Taylor, *Possessives in English* (Oxford: Clarendon Press, 1996), 242-24.

[60] Some call it an Event Reading. For clarity, this dissertation limited itself to use one of those terms. As Greek lexicons include the word "process" in the definition of many verbs and process DNs, that choice seemed to be a smoother transition for Greek grammarians.

[61] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 2-3; Maria Koptjevskaja-Tamm, *Nominalizations* (London: Routledge, 1993), 252; Graham Mallinson and Barry J. Blake, *Language Typology: Cross-Linguistic Studies in Syntax* (Oxford: North-Holland Publishing Co., 1981), 403; T. Venneman, "Explanation in Syntax," in *Syntax and Semantics*, vol. 2, ed. J.P. Kimball (New York: Seminar Press, 1973), 352-354.

the agnate clause that are integral to the action, are called *Arguments*. Sometimes modifiers with process DNs represent these arguments.

A modifier with a process DN may represent the subject of the implied clause (hence the *Subjective* modifer), as in "the scientist's analysis." When the subject of a verb is a living organism (such as a scientist), linguists often call this the *Agent*. When the subject is a situation, it is termed the *Cause*. An example of a subjective modifier that is a cause is "pandemic" in "The pandemic's cessation of international travel." When the subjective modifier is an intermediary device (as is "sword" in "The sword's wound"), it is an *Instrument*.

A modifier with a process DN may also represent the object (*Objective* modifier), as in "The destruction of the city." An objective modifier is often the *Theme* (something affected by an action, i.e. "the city") or *Experiencer* (one who undergoes an experience). An experiencer that is an objective modifier is "Jill" in "Jill's fright." Experiencers can also appear as subjective modifiers, as in "Jack's fear of John." Finally, a modifier could represent an indirect object such as the *Source*, *Goal*, or *Location*. A source is where the action begins, a goal is where the action ends, and location may be any place that is part of the action. Examples of each appear in the phrases, "Don's departure from home," "Don's travel through the woods," and "Don's arrival at his grandmother's house." "Home" is the source, "woods" is the location, and "his grandmother's house" is the goal.

Unlike deverbal nouns that refer to the process, some deverbal nouns refer to a specific part of the action implied in the agnate clause. Linguists call this a *Result DN*, *Result Noun*, or *Result*.[62] A result DN could refer to any argument in the agnate clause. It might represent the

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[62] Some call this a *Referential DN*. This dissertation uses the phrase *Result DN* because the term has already been used in Greek grammars with roughly the same meaning.

agent of the action (lover), the theme (beloved), the experiencer (doubters), the goal (receiver),

the instrument (lawnmower), or others. In addition to arguments, a result might also be the item

created/modified by the action (creation), or even the *State* that results from the action

(knowledge).[63] At its core, a result DN signifies a part of the action while describing it in relation

to that action. Other possible result DNs exist, but this dissertation will not discuss them.[64]

Nominalization

The process the verb undergoes to become a deverbal noun is called *Nominalization*.

Nominalization is a great example of a deverbal noun, and can refer to the process or the result

of the process. For instance: "The nominalization 'nominalization' went through

nominalization." In this example, the first occurrence of 'nominalization' is a result DN (this use

is a synonym of 'deverbal noun'), and the last occurrence a process DN. Further, when a verb

undergoes nominalization and becomes a DN, it loses some verbal characteristics. For example,

verbs require at least one argument, whereas DNs do not. Further, deverbal noun phrases rarely

take adverbial modifiers, they lack tense and mood, and only sometimes do they include voice or

aspect.[65] This not only distinguishes DNs from verbs, but also from participles, infinitives, and

gerunds. In sum, when a verb becomes a deverbal noun, it loses its verbal features and adds

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[63] Also called a *Resultant State*.

[64] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 506; Bierwisch, "Event," 58; Bierwisch, "Nominalization," 307-308; Dik, "Formal and Semantic," 21; Simon C. Dik, *The Theory of Functional Grammar: Part 2,* ed. Kees Hengeveld (Berlin; New York: Mouton de Gruyter, 1997), 160; Grimshaw, *Argument Structure*, 49; Grimshaw, "Extended," 67; Fabregas and Marin, "Role," 36; Iordăchioaia, van der Plas, and Jadfeld, "Grammar," 83; Melloni, "Action," 142, 145-146; Moulton, "Simple Event," 122, 128, 130; Sleeman and Brito, "Aspect," 1-5; Taylor, *Possessives*, 242-24.

[65] In some languages deverbal nouns never take adverbial modifiers.

nominal features.[66] As both the verb and deverbal noun are in the same word family (a *Lexeme*), they are *Cognates*, and the verb that undergoes the process of nominalization is the *Cognate Verb* to the deverbal noun. The process of nominalization is a good summary of the definitions, because it encompasses the main three: deverbal noun, process DN, and result DN. These terms are at the core of linguistic research concerning deverbal nouns.

Linguistic Research on Deverbal Nouns[67]

Vendler, Lees, and Chomsky laid the foundation for the majority of work published after them. Grimshaw's book shook (and is still shaking) the entire field, and Alexiadou provides new content on DNs every few years. The various ideas they present, along with the ideas of other scholars, have provided many useful terms for complex concepts.

Foundational work

Many scholars have contributed to the discussion of deverbal nouns, but three in particular are foundational. Vendler's verbal classification system was important, but spoke little of DNs. From here, both Lees and Chomsky provided their ideas on DNs from two different points of view.

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[66] Steven Abney, "The English Noun Phrase in its Sentential Aspect," Ph.D. diss., Massachusettes Institute of Technology, 1987, 78ff, 119-120, ProQuest Dissertations & Theses Global; Alexiadou, Haegeman, Stavrou, *Noun Phrase*, 482, 515; Artemis Alexiadou, "Nominalizations: A Probe into the Architecture of Grammar, Part 1: The Nominalization Puzzle," *Language and Linguistics Compass* 4, issue 7 (2010), 497; Dik, "Formal and Semantic," 4, 11; Z.M. Dubrovina, *Infinitives in Finish* (Leningrad: LGU, 1972): 11; Alessandra Giorgi and Giuseppe Longobardi, *The Syntax of Noun Phrases*, (Cambridge: Cambridge, 1990), 129-130; Grimshaw, *Argument Structure*, 47; Heidi Harley, "The Morphology of Nominalizations and Syntax of vP," in *Quantification, Definiteness, and Nominalization*, eds. A. Giannakidou & M. Rathert (Oxford: Oxford, 2006), 27; Koptjovetska-Tamm, *Nominalizations*, 35; J. Lachlan Mackenzie, "Nominalization and Valency Reduction," in *Predicates and Terms in Functional Grammar*, ed. A.M. Bolkstein (Dordrecht; Cinnaminson: Foris, 1985), 29; Timothy Stowell, "Origins of Phrase Structure," Ph.D. diss., Massachusettes Institute of Technology, 1981, 109, ProQuest Dissertations & Theses Global.

[67] For a one-page summary of the first thirty years of linguistic research on nominalizations/deverbal nouns, see Dik, *Theory: Part 2*, 164-165.

Zeno Vendler. Vendler published *Linguistics in Philosophy* in 1967, and in it he focused on different types of verbs. He divided them based on their aspect and the state of the arguments. *Activity Verbs* are actions that occur over time, but do not have a distinct termination.[68] Examples include "run" or "work," as in "Kristen worked hard." Her action was not instantaneous, nor is there a reference to its end; it simply occurred. *Accomplishment Verbs* are actions that occur over time and progress to a logically necessary termination. They also result in a change of state for one of the arguments. "Build" and "draw" can be examples, as in "The workers built the house." It took time to build the house, and once it was constructed, the workers necessarily stopped building that particular house. The result was that a house now exists, whereas previously it did not. *Achievement Verbs* occur instantaneously and incur a change of state.[69] A linguist may provide examples of "break" and "finish." In "Jane broke her arm," the breaking did not occur over time, but happened at once (or over an infinitesimal period of time). It also involved her arm changing from being whole to being broken. Vendler's final category is for *State Verbs*, such as "know" or "is." "Philip knows the story" simply provides a description of an existing state without necessarily saying how it came to be or what may come of it.

Vendler's insights were instrumental in distinguishing what types of arguments a verb can have. For instance, a stative verb will not have a goal as the object, but it might have a theme. An accomplishment verb will not necessarily tell who is experiencing the situation, but

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[68] These are also called "processes". Due to the potential for confusion with the process DN (as opposed to an event reading), this dissertation avoids using both the phrase "process verb" and the term "processes" as a synonym for a "process DN."

[69] 'Semelfactive' verbs are similar to achievement verbs but have no change of state. See Carlota Smith, *The Parameter of Aspect* (Dordrecht: Kluwer Academic Publishers, 1997). This dissertation did not encounter any semelfactives during its research.

often includes a theme as the object.[70] As insightful as Vendler's approach was, it was not exhaustive. Others added to Vendler's work later on. *Experiencer Verbs* or *Psych Verbs* are those which focus on an experience that one undergoes, such as "frighten" or "calm." "Evie calmed down" describes the state Evie was in. However, unlike some state verbs, it explains the psychological mindset of the experiencer.[71]

With these categories of verbs in place, it is noteworthy that a single verb can (and often does) fall into different categories based on context. For example, "build" can be an accomplishment verb, as in "The workers built the house."[72] It can also be an activity, like in "Harrison was building his endurance by exercising." With these categories in place, linguistics was ready to notice the peculiarities of DNPs.

Robert Lees. A year later, Lees published his work on the similarities between DNPs and clauses. He claimed that verbs transform into DNs during grammatical construction (and they come from the same lexeme). While structurally DNPs and clauses are different, he was the first to notice that DNs and verbs work in parallel ways. DNs take modifiers similar to how verbs take arguments. To him, DNPs had less specific requirements. Modifiers can occur before or after the DN. Further, Lees considered a DN's nominal modifier to usually represent the object of the cognate verb. Lastly, the modifier required a preposition in cases where the cognate verb was

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[70] Bozena Rozwadowska, "Aspectual Properties of Polish Nominalizations," *Journal of Slavic Linguistics* 8 (2000), 245; Alexiadou, "Nominalizations: A Probe," 502; Zeno Vendler, *Linguistics in Philosophy* (Ithaca, NY: Cornell, 1967), 102-131.

[71] Rozwadowska, "Aspectual," 239, 256-257; Bozena Rozwadowska, "Event Structure, Argument Structure, and the 'by'-phrase in Polish Nominalizations," in *Lexical Specification and Insertion*, eds. Peter Coopmans, et al. (Amsterdam: John Benjamins, 2000), 341, 343-344; Grimshaw, *Argument Structure*, 28-29.

[72] Alexiadou, "Nominalizations: A Probe," 501; Artemis Alexiadou and Jane Grimshaw, "Verbs," 5.

transitive.[73] Due to these parallels, Lees held that DNPs were grammatical transformations from clauses, in effect making the suffix that marked deverbalization into a grammatical property (not a property of the word). Some of his ideas have been disproven, but his work still showed that verbs and DNs share some fundamental properties.[74]

Noam Chomsky. Just a couple years after Lees, Chomsky made some *Remarks on Nominalization*, and he was one of the first to disagree with Lees. Chomsky agreed with Lees that parallels exist between DNPs and clauses, but he claimed Lees was wrong about DNPs being grammatical transformations from a verb. He claimed that a DN and its cognate verb were two distinct lexemes, explaining the parallels based on their semantic overlap. He showed that DNs were very different from verbs and other verb-like nouns (such as gerunds), because they truly are grammatical nouns. In other words, DNs can be grammatically plural, cannot take an adverbial modifier (except in rare cases), and do not inherently have aspect. These statements do not apply to verbs. Further, while any verb can become a gerund, he agreed with Lees that not all verbs have a corresponding DN. He even pointed out that, when verbs have multiple denotations, some of those meanings may nominalize and others may not.[75] Another new contribution Chomsky made was claiming that, if the modifier occurred before the DN ("The barbarian's destruction …"), that was akin to an active agnate clause ("The barbarians destroyed …"). If the modifier occurred after the DN ("The destruction of the city …"), the DNP was akin to a passive

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[73] Robert B. Lees, *The Grammar of English Nominalizations* (Bloomington, IN: Mouton, 1968), xx-xxi, 33, 38, 66, 87-88.

[74] Abney, "English Noun Phrase," 23; Bierwisch, "Event Nominalizations", 19; Anastasia Giannakidou and Monika Rathert, "The Structure of Quantifiers and Nominalizations, and the Role of the Definite Article," in *Quantification, Definiteness, and Nominalization*, eds. Anastasia Giannakidou and Monika Rathert (Oxford: Oxford, 2009), 6.

[75] Chomsky also had some distinctions between verb types that were similar to Vendler's classifications, but he did not make any headway in that area compared to Vendler.

agnate clause ("The city was destroyed.").[76] At least one Greek grammarian has made similar

active and passive distinctions, although others disagree.[77] Regardless of his details, Chomsky

reinforced the idea that verbs and nouns share some fundamental properties, and he set up the

theoretical debate about where deverbal nouns are formed (in the lexicon or the grammar).[78]

Jane Grimshaw

Jane Grimshaw's work on DNPs has been quite influential. In 1990 she published

Argument Structure, which focused not on DNPs, but types of verbs and their arguments. The

thesis of that work is that verbs contain a hierarchy of *Arguments*. The types of arguments a verb

can take determines what kind of verb it is. Related to these concepts are some principles for

how to distinguish between deverbal nouns that represent processes, and those that represent

results. The highest argument in the hierarchy is the agent. The experiencer is second, followed

by the goal/source/location, and finally the theme. The higher arguments are more prominent,

and the lower ones less so. Different types of verbs can take different arguments. Like Vendler's

work, Grimshaw's created new categories of verbs.[79]

Grimshaw divided verbs according to the possible arguments they might have. She used

categories such as *Transitive Agentive* (verbs that have both agent and theme, as in 'Nancy read a

book'), *Ditransitive* (contains an agent, goal and theme, as in 'David threw Andrew the ball'),

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[76] Noam Chomsky, *Remarks on Nominalization* (Boston: Massachusettes Institute of Technology, 1968), 4-7, 10, 13, 23-24.

[77] The Greek grammarian is Smyth, *Greek Grammar*, 319. Those who disagree include Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 506; Grimshaw, *Argument Structure*, 82, 88, 105-106; 119-120, 150; and Young, *Intermediate*, 30.

[78] Giannakidou and Rathert, "Structure," 6.

[79] Grimshaw, *Argument Structure*, 4-8, 28-29, 34.

Unergative (an intransitive verb with an agent argument, such as 'I ran'), and *Unaccusative* (intransitive verb with only a theme and no agent, such as 'He died'). Verbs that occur within the mind are divided into *Psychological State* (*Psych State* for short, a mental state of being with an experiencer and a theme, 'Mom feels happy'), and *Psychological Agentive* (*Psych Agentive* for short, where an experiencer is in a mental state of being due to a living agent, as in 'Mark encouraged Mandy), and *Psychological Causative* (*Psych Causative* is an non-cognizant cause, usually an event or state, as in 'The war frightened Kay').[80] The most prominent verbal argument (according to her hierarchy) received the title of *External Argument*, and she labeled any others *Internal Arguments*. These categories of verbs, and mainly the hierarchy of arguments, allowed Grimshaw to examine the nuances of DNs and DNPs.

Grimshaw stated that, for DNs to be a process noun, certain verbal arguments were required. This went against the current thought of her day.[81] To show the required arguments, she first divided DNs into three categories: complex events, simple events, and results. This division was not completely original, but her subsequent insights were.[82] The basic distinction is that a complex event nominal must include a DN and almost always at least one internal argument. DNPs lost their external argument during nominalization, although it could be added back for clarity. If a deverbal noun did not include any arguments, it was either a simple event or a result (most likely a result). A simple event referred to a process, but did not have modifiers and did

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[80] Ibid., 7-8, 28-29, 41.

[81] Alexiadou, Haegeman, and Stavrou, *Noun Phrase* 490-500; M. Anderson, "Prenominal Genitive NPs," *Linguistic Review* 3 (1983–1984), 1-24; D.R. Dowty, "On the Semantic Content of the Notion 'Thematic Role'," in *Properties, Types, and Meaning*, eds. G. Chierchia, B.H. Partee, and R. Turner (Kluwer: Dordrecht, 1989); J. Higginbotham, "Logical Form, Bindings, and Nominals," *Linguistic Review* 14 (1983), 395-420; Grimshaw, *Argument Structure*, 45.

[82] Grimshaw, *Argument Structure*, 49.

not have argument structure (unlike complex events).[83] However, modifiers might not be

arguments, such as when they are possessors of the result. In "The professor gave the student's

examination a poor grade," the student creates the answers on the examination (result DN). On

the other hand, "The professor's examination of the students went poorly" contains a process DN

despite having a possessive immediately before the DN. In other words, modifiers alone do not

coerce a DNP to have a process DN. These three categories were the foundation of her work.[84]

     In order to distinguish between her three categories, Grimshaw posited nine guidelines.

Result Nominals	Simple Event Nominals	Complex Event Nominals
No obligatory arguments	No obligatory arguments	Obligatory arguments
No event reading	Event reading	Event reading
No agent-oriented modifiers	-	Agent-oriented modifiers
Subjects are possessives	Possessive is not agent	Subjects are arguments
by phrases are non-arguments	-	*by* phrases are arguments
No implicit argument control	-	Implicit argument control
No aspectual modifiers	Some aspectual modifiers	Aspectual modifiers

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[83] At first glance, it may appear that Grimshaw is using the presence/absence of modifiers to create an artificial division. After all, what's the difference between "The destruction continued for weeks" and "The barbarian's destruction of the city continued for weeks?" However, there are noteworthy differences in prominence, as the first of these phrases focuses on the actual destruction occurring, while the second one raises the prominence of the agent and the theme. More importantly, the presence/absence of modifiers can also indicate differences in denotation. Consider the verb "to run". The clauses "Mark ran" and "Mark ran copies" have the same verb. However, the action is different based solely on the number of arguments. The mere presence of an internal argument changes the meaning.

[84] Anderson, 1983-1984; P. Bottari, "On Derived Nominals Displaying a Predicate-Argument-Structure Level of Representation," M.S. Thesis, University of Venice, 1989, ProQuest Dissertations and Theses; Grimshaw, *Argument Structure*, 44-49, 51-52. Dik, *Theory: Part 2*, 157-168, comes from a Functional theory of grammar and (despite viewing grammar from a very different framework) agrees with many of Grimshaw's ideas. For instance, he agrees with the idea that internal arguments receive priority to appear in deverbal noun phrases over external arguments and he agreed with the process/result distinction.

Iterative modifiers w/ plural	Iterative modifiers w/ sing.	Iterative modifiers w/ sing.
May be plural	Must be singular	Must be singular

To briefly explain some of the guidelines, "implicit argument control" means that one of the arguments can be implied to be doing a certain action. "Pablo failed the interview" states that Pablo failed while also implying that Pablo interviewed. Second, "aspectual modifiers" might include adverbs, or much more commonly, prepositional phrases.[85] Third, "iterative modifiers" are modifiers that describe the event happening over and over again, such as *frequent* or *constant*.[86] Some linguists have found exceptions and/or added nuance to these thoughts. For instance, complex event nominals that have a specific situation as their referent (they are *Bounded*) and incur a change in the real world (they are *Telic*) can and do pluralize.[87] Nonetheless, most hold Grimshaw's distinctions as general principles.

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[85] Alexiadou, "Nominalizations: A Probe," 500; Regine Brandtner and Klaus von Heusinger, "Nominalizations in Content-Conflicting Readings and Predicate Transfer," in *The Semantics of Nominalizations across Languages and Frameworks* (Berlin; New York: Mouton de Gruyter, 2010), 27; Grimshaw, *Argument Structure*, 49-51, 58.

[86] Alexiadou and Grimshaw, "Verbs," 3; Grimshaw, *Argument Structure*, 50-56; Moulton, "Simple," 125. The discussion in Grimshaw (and the chart produced with Alexiadou) does not always state a position on the guidelines for simple event nominal, as her focus is on the distinction between complex event and result nominal. The chart above fills in the middle column based on her statements and the help of Moulton, with the null values representing a lack of her input. While a good guess as to her positions might help, the real distinction is between the process and result DN, so those guesses are unhelpful here.

[87] Artemis Alexiadou, *Functional Structure in Nominals* (Amsterdam: John Benjamins, 2001), 13-14, 42; Artemis Alexiadou, Gianina Iordăchioaia, and Elena Soare, "Plural Marking in Argument Supporting Nominalizations," paper presented at the Workshop on Nominal and Verbal Plurality, Paris, November 9th-10th 2007, 1,4-6,11,21; Artemis Alexiadou, "On the Role of Syntactic Locality in Morphological Processes: The Case of (Greek) Derived Nominals," in *Quantification, Definiteness, and Nominalization*, eds. Anastasia Giannakidou and Monika Rathert (Oxford: Oxford, 2009); Øivin Anderson, "Deverbal Nouns, Lexicalization and Syntactic Change," *Nordic Journal of Linguistics* 30, issue 1 (2007), 64; Fabregas and Marin, "Role", 44; Stella Markantonatou, "The Syntax of the Modern Greek Noun Phrases with a Deverbal Nominal Head," Ph.D. diss., University of Essex, 1992; Eric Mathieu, "Nominalizations in Ojibwe," in *Cross-Linguistic Investigations of Nominalization Patterns*, ed. Ileana Paul (Amsterdam: John Benjamins, 2014), 7; Moulton, "Simple," 42; Sleeman and Brito, "Aspect," 201.

Despite these differences, she admits that it can still be quite difficult to distinguish between event and result nominals. Her distinct characteristics exist at the theoretical level of grammar rather than the grammar of a real sentence. For instance, a genitive (the surface level grammar) could represent either an agnate clause argument or a possessor of the result DN. An examples comes from the word 'lawnmower'. To any native English speaker, this word is a result nominal. But analyzing the phrase might make it seem like a complex event nominal where the agnate clause is "(Someone) mowed the lawn."[88] These were not her only contributions.

Grimshaw presented other important insights beyond her argument hierarchy and her three categories of DNs. She disagreed that an objective genitive reading had a passive agnate clause. For instance, "Jack's murder" (with the meaning that Jack was murdered) seems to be passive on the surface. However, there is no active version (no one says 'John's murder of Jack'), so "Jack's murder" cannot be passive. Second, true passive nominalizations (those with a corresponding active idea) do not occur with aspectual phrases like 'in three weeks.' Third, some DNs require both a subject and object, while others require neither. Fourth, she readily admitted that some DNs are hard to distinguish as a process or a result, especially when the DN refers to a state of being rather than a process. Fifth, she observed that there is a correlation between verbs that can passivize and verbs that can nominalize, which makes sense because passivization and nominalization are, at their core, suppressing the external argument from its usual role.[89] Even

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[88] Alexiadou, "Functional Structure," 78-79; Grimshaw, *Argument Structure*, 56-57, 69.

[89] Alexiadou, Haegeman and Stavrou, *Noun Phrase*, 506; Grimshaw, *Argument Structure*, 82, 88, 105-106; 119-120, 150.

with all her new insights, at its core, Grimshaw's work agrees with Lees and Chomsky: nouns and verbs can have similar properties.[90]

After Grimshaw

Grimshaw's work in the field has sparked many other ideas about DNPs. Her process/result distinction has dominated research on DNs for three decades.[91] One prolific scholar has published alongside Grimshaw, and many others have also contributed their ideas.

Artemis Alexiadou. Artemis Alexiadou has published on DNPs frequently for the last two decades. She generally agrees with Grimshaw's list of distinctions between process and result nominal, but has added to and modified the list. Specifically, while some have mentioned exceptions to the idea that "only result DNs pluralize" (not process DNs), she and others have pointed out that process DNs can pluralize if they have a specific referent of a real-world event that causes change; in other words, they are telic and bounded.[92] Further, she holds that a DN must have a verbal cognate, and that other cognates besides the verb limit the semantic range of the DN. This is especially true when a group of cognates has multiple DNs.[93] The noun "Love" is a good example of this. It frequently refers to the process of love since people commonly use "lover" and "beloved" for results. However, language is not a mathematic formula, and a word can encroach on the semantic domain of another.[94] Nonetheless, her idea generally holds true.

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[90] Alexiadou & Grimshaw, "Verbs," 1; Grimshaw, *Argument Structure*, 105-106.

[91] Alexiadou and Grimshaw, "Verbs," 1; Harley, "Morphology," 27.

[92] Those who maintain exceptions include Anderson, "Deverbal," 64; and Fabregas and Marin, "Role," 44. Alexiadou's sources are Alexiadou, Iordăchioaia and Soare, "Plural Marking," 4-21; Alexiadou, "Functional," 41-42; and Alexiadou, "Role," 278.

[93] Alexiadou and Grimshaw, "Verbs," 4; Alexiadou, "Role," 253-254, 259.

[94] Greenlee, *New Testament Greek Morpheme*, x.

Fourth, she believes that a process nominal cannot appear as the predicate in a sentence. "This is an examination of the cat" is not a well-formed sentence (as a process DN), whereas "This is an examination" is (since it is more likely a result DN).[95] These are general principles; she provides some specific ones concerning Modern Greek.

Alexiadou's work commonly focuses on Modern Greek. While studying Modern Greek, she has pointed out that the genitive can modify the meaning of the deverbal noun.[96] Also, a DNP with two genitive modifiers is uncommon.[97] Third, Modern Greek allows unaccusative verbs to have DNs that are process nominals, but does not allow this for unergative verbs. By extension, DNs that are cognates to unergative verbs cannot have adverbial modifiers.[98] To summarize her thoughts on Modern Greek DNs, they can be separated into process nominal and result nominal based on manner and aspect.[99]

Alexiadou has also probed into the detailed differences between verbs and DNs. DNs rarely have tense and mood, although in some instances they do express it.[100] Further, others have pointed out that DNPs can have active and passive voice, as well as aspect.[101] Alexiadou has gone so far as to show that aspectual adverbs are related to aspect in DNs, and manner

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[95] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 501.

[96] Alexiadou, *Functional Structure*, 39-42.

[97] Ibid., 79.

[98] Ibid., 42, 48.

[99] Ibid., 46.

[100] Ibid., 59, 63.

[101] Anderson, "Deverbal Nouns," 65; Bierwisch, "Nominalization," 41; Fabregas and Marin, "Role," 35-37, 58; Elizabeth Ritter, "Nominalizing Inner Aspect: Evidence from Blackfoot," in *Cross-Linguistic Investigations of Nominalization Patterns*", ed. Ileana Paul (Amsterdam: John Benjamins, 2014), 25-47. This is contra Chomsky, *Remarks*, 13.

adverbs related to voice.[102] Others have shown that prepositional phrases can indicate aspect, or that aspect can depend on which nominalizing suffix the verb takes.[103] Alexiadou has also shown that not all adverbs are available for use in DNPs.[104] Fourth, she believes that DNPs do not have the exact same structure as their agnate clause.[105] Alexiadou has frequently published on DNs over the past two decades, and continually provides meaningful content.

 Others. Alexiadou has not produced the only new ideas since Grimshaw in 1990; others have contributed as well. Bozena Rozwadowska has published on aspect and voice in Polish DNPs, as well as how participants who are changed by the action of the verb influence the possible DNP formations.[106] Heidi Harley discussed the process of nominalization and the ways people use subjects in both verbal phrases and nominalizations.[107] Thomas Roeper has contributed many articles on the possibility of movement from an agnate clause to a DNP.[108] Simon Dik has noticed that some DNs have a change in *Valency* compared to their cognate verb, that is, their level of transitivity changes. For instance, "I eat cereal" can become "the eater" with

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[102] Alexiadou, *Functional Structure*, 49.

[103] Roberto Gomes Camacho, "The Argument Structure of Deverbal Nouns in Brazilian Portuguese," *Web Papers in Functional Grammar* 81 (March 2007), 23, discusses prepositional phrases. Rozwadowska, "Aspectual Properties," 239ff. discusses aspect.

[104] Alexiadou, *Functional Structure*, 56.

[105] Akexiadou, Haegeman, and Stavrou, *Noun Phrase*, 482.

[106] Rozwadowska, "Aspectual"; Rozwadowska, "Event Structure"; Bozena Rozwadowska, "Thematic Restrictions on Derived Nominals," *Syntax and Semantics* 21 (1988).

[107] Heidi Harley and Rolf Noyer, "Formal versus Encyclopedic Properties of Vocabulary: Evidence from Nominalizations," in *The Lexicon-Encyclopedia Interface*, ed. Bert Peters (Amsterdam: Elsevier Press, 2000); Harley, "The Morphology"; Harley, "Subjects."

[108] Thomas Roeper and Angeliek van Hout, "The Representation of Movement in –ability Nominalizations: Evidence for Covert Category Movement, Edge Phenomena, and Local LF," in *Quantification, Definiteness, and Nominalization*, eds. Anastasia Giannakidou and Monika Rathert (Oxford: Oxford, 2009); Thomas Roeper, "Inherent Binding and the Syntax-Lexicon Interface," in *Lexical Specification and Insertion* (Amsterdam: John Benjamins, 2000).

no mention of the food; this is a reduction in valency.[109] He also noted that some languages restrict verbs to either zero or one DN.[110] Suffice it to say that this dissertation presents less than half of the linguistic discoveries concerning DNs.

Conclusion of Deverbal Nouns in Linguistics

When linguistic research discusses the grammar of deverbal nouns, it focuses more on words that refer to a process. Further, it is rare to find a linguistic publication whose primary goal is distinguishing between a subjective and objective modifier. Many linguistic works on DNs and DNPs provide an example of determining the referent of a modifier, but they do not focus on it. Yet, despite these skews, recent studies in linguistics have provided many helpful terms and concepts that might help Greek grammarians.

Conclusion of Research

Due to the lack of specificity in Greek grammars and the insights into DNs from other languages, analyzing the –μός suffix has great potential to reveal new information. Greek grammars have properly highlighted the central concerns for Greek DNs: whether the DN represents a process or result, and how a process DN's modifiers match agnate clause arguments. However, grammarians have failed to explain how to do this. Research in other languages has revealed principles for how to do so, but little has been published in Koine to find principles

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[109] Dik, "Formal and Semantic", 4.

[110] Dik, "Formal and Semantic," 25. This is certainly not the case in Greek: ἐλεγμός and ἔλεγξις have the same meaning (BDAG, 314-315). BDAG henceforth refers to Walter Bauer, Frederick W. Danker, William F Arndt, and F. Wilbur Gingrich, *A Greek-English Lexicon of the New Testament and other early Christian Literature* (Chicago: University of Chicago, 2003).

specific to Koine DNs. At the very least, an analysis of the –μός suffix is lacking in Greek, and where there is a hole in the research, scholars like to fill it.[111]

Methodology

Up to this point the dissertation has explained the lack of research on the –μός suffix. This section will outline a method to overcome the lack of research. First, this section will cover the delimitations and assumptions that provide boundaries for this dissertation. This section will then outline the method itself, which consists of six steps:

1. Identifying nouns with the –μός suffix

2. Identifying the verbal cognates of those nouns

3. Identifying all occurrences of –μός nouns in the New Testament

4. Identifying the (mostly) objective aspects of these occurrences

5. Analyzing those occurrences for subjective aspects, mainly to discover principles

6. Synthesizing the results

Chapter 2 will focus on the first four steps, Chapter 3 will focus on the fifth, and Chapter 4 on the sixth. To make it feasible, this study imposes certain self-restrictions.

Delimitations

While the scope of this study is to determine the meaning of the –μός suffix, some helpful delimiters will make this study manageable. First, this dissertation only covers nouns that appear in the New Testament. Second, this dissertation does not aim to help translate –μός

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[111] This is the case in linguistics as well. Being such a new field, scholars frequently publish works with a new thesis that does not go against previous ideas, but is the first thesis on the matter. See Robert J. Podesva and Devyani Sharma, *Research Methods in Linguistics* (Cambridge: Cambridge, 2013), 401-402.

nouns. Although there will be some strong implications for translation, this paper focuses on the meaning/referent of the DN/DNP. Meaning aids translation, but that is not the goal of this dissertation. It is impossible to separate meaning from translation completely, especially when discussing the meaning of Greek nouns in a paper written in English. The third delimitation also relates to English. This paper will use English examples to introduce and illustrate linguistic ideas. These English examples are only used to aid understanding, with the end goal being to understand Greek –μός nouns. Fourth, the research does not analyze the differences between –μός and –σις (or other suffixes that indicate a deverbal noun). Since no in-depth analysis of these suffixes exists (yet), there is not a good way to do this. The research will compare –μός to its verbal cognate as is helpful, but not to other cognates. Fifth, it will not posit any underlying or universal grammar theories for Koine Greek. The final delimitation is related to the preceding one: unlike most research on nominalizations, this dissertation is not concerned with the "behind the scenes" grammar that goes on to create a DNP. [112] It is only concerned with the grammar of the text as it exists today. To put it in the terms of this dissertation, this approach is not concerned with the process of nominalization, but with the result.[113] Despite these self-inflicted constraints, the research can still accomplish its goal provided the reader grants some basic assumptions.

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[112] Liesbet Heyvaert, "A Cognitive-Functional Perspective on Deverbal Nominalizations in English: Descriptive Findings and Theoretical Ramifications," in *The Semantics of Nominalizations across Languages and Frameworks*, eds. Monika Rathert and Artemis Alexiadou (Boston: Walter de Gruyter, 2010), 60.

[113] One other point is noteworthy. If this dissertation were to attempt a theory of how DNPs come to be, it could easily be disproven within just a few years. Since this is the first lengthy study of Greek DNs, this dissertation aims to build a solid foundation for subsequent research to build upon.

Assumptions

There are two types of assumptions for this dissertation. The first type are assumptions that the researcher makes about the descriptive-analytic approach. The reader must be aware of these so she can keep a critical eye on these ideas. The second type concerns other impactful assumptions that the author holds. These assumptions may limit the following argument's explanatory power, or go against commonly-held assumptions.

Potential Challenges

While the goal is to observe and describe what is going on in the text, human bias can easily creep in and skew the results. To overcome the bias, this section lays out some assumptions. Knowledge of the writer's presuppositions enable the reader to watch out for bias themselves. The first point to look out for is that, although the present researcher attempts not to use any particular linguistic framework, the Generative approach to grammar has written more on DNs than other approaches, so it is probably more influential on this dissertation than other approaches. This is partially because it is a much older school of thought (in terms of how old the field is). In an attempt to overcome this bias, this dissertation employs ideas that are either widely attested, or more commonly, easily observable by any reader. One cannot completely avoid theories, but the aim is to base this dissertation on commonly held theories rather than any specific one.[114]

Second, the present researcher will have to make subjective decisions at times, but a strength of this dissertation's approach is that it makes these decisions as systematic as possible.

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[114] For example, Grimshaw's process/result distinction. See Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 506; Camacho, "The Argument Structure," 1, 20.

Where there are judgment calls, this approach first looks at objective data before subjective data, and at clearer examples before moving on to more difficult ones. The researcher will also seek the advice of other scholars.[115] In fact, many decisions will be subjective to some degree (due to the lack of precision in language), so the reader should be keenly aware of this potential to err.

Noteworthy Assumptions

There are other assumptions that the present writer holds that likely will not cause the writer to produce biased results, but are important because they either restrict or help explain the ideas herein. The first is that, since Koine Greek is a dead language, the present research is unable to determine what is considered *Ungrammatical* to a native speaker. The linguistic term *Ungrammatical* denotes a phrase or clause that, according to a native speaker, does not follow the rules of grammar. An example of an ungrammatical English clause might be, "They eats the pizza," where a plural noun is the subject of a singular verb. As there are no longer any native speakers, it would be very difficult for someone today to definitively state that "Koine Greek construction X is ungrammatical." At best, a scholar could research every extant text, but even that has potential issues.[116] This inability to determine what is ungrammatical may seem inconsequential, but much linguistic research on DNs is based on both what is grammatical and what is ungrammatical (according to native speakers). This is clear when reading linguistic articles and books. Ungrammatical examples are so common that there is a standard notation for

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[115] For a more in-depth explanation, see the Analysis section below.

[116] For instance, a scholar might not find the construction anywhere and conclude that it is ungrammatical, but it may have been a spoken construction and not a written one. On the other hand, if the scholar found a few examples of the construction, but those were actually ungrammatical, they might come to the conclusion that it is grammatical when it is not.

an ungrammatical example: the asterisk.[117] Therefore a restriction is that this dissertation will

have to rely on positive examples only. A benefit is that it is not responsible for explaining

ungrammatical examples.[118]

Similar to the previous assumption is that, since the New Testament only exists in written

form (and no one still speaks Koine Greek), the present research is unable to touch on the spoken

side of that language. While the New Testament certainly records direct speech, scholars have

shown the differences between written and spoken language. An important conclusion is that

written language is often more complex than spoken.[119] This should not affect the analysis, but it

means the researcher should not try and force spoken language principles upon the New

Testament. With these delimitations and assumptions in mind, the following section will present

the method itself, which can be summarized in a simple phrase.

Method Proper

This dissertation uses a Descriptive-Analytic approach.[120] First, it is descriptive because

it aims to simply observe and describe what is going on lexically and syntactically. Most

concepts this dissertation uses for analysis are ones that Greek grammarians can observe, even

those with little experience. For instance, even though 'accomplishment verb' is a technical term,

it is easy to observe its validity. To be an accomplishment verb, there are three requirements: the

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[117] For an example, see Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 482.

[118] Podesva and Sharma, *Research Methods*, 399.

[119] Mohammad Norouzi, Ali Akbar Khomeijani Farahani, and Davood Borzabadi Farahani, "Deverbal Nominalizations across Written-Spoken Dichotomy in the Language of Science," *Theory and Practice in Language Studies* 2, No. 11 (2012), 2259.

[120] A better term might be 'Observational', but 'Descriptive' is the common linguistic term for this type of approach. See Heyvaert, "A Cognitive-Functional," 73.

verb must refer to an action that occurs over time, have a logical point of termination, and result in a change (either material or immaterial). One can see that 'build' is frequently an accomplishment verb (because it can be used in a scenario where it meets all three requirements), and that 'think' is not (because it rarely meets the second criterion). This requires very little preexisting knowledge about language.[121] Simply put, this approach aims to observe and describe the language as it appears in the text.

Second, this approach is analytic because it analyzes the occurrences and uses basic statistics to come to conclusions. The level of statistics used will be minimal, as the goal is to find clearly valid patterns. Hopefully these patterns will enable scholars to better understand scripture, grammarians to better understand the meaning of –μός nouns, and potentially provide insight for all Greek DNs. If the statistics are overly complex, scholars and grammarians will not use them, making this dissertation less effective. Therefore the statistics are basic.

Description

The goal of this section is to lay out the methodology employed by the rest of this dissertation. The first four steps will provide the data for analysis by describing –μός nouns and their occurrences. The first step is identifying words with the –μός suffix. The research process begins by searching for possible –μός nouns in Accordance®.[122] The research continues by double-checking the results based on morphological rules and recent studies in morphology. The second step is identifying verbal cognates using recent morphological works along with lexicons. This is as simple as looking for verbs with the same root, or consulting the entries in

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[121] It requires that a reader understand what a verb is, as well as the definitions of the words in the current paragraph. This is a healthy (if not necessary) expectation for someone reading a dissertation.

[122] All searches mentioned used Accordance® 12.3.2. This specific search used NA28 3.6.

morphological works. After identifying the nouns and their verbal cognates, the researcher will investigate them for certain characteristics. For example, the research will see if the cognate verb can be a state, activity, accomplishment, achievement, or a psych verb (or a combination of them). After analyzing the verbal cognates, the researcher will search for instances of the –μός nouns in the New Testament. Yet again, Accordance® provides sufficient search capabilities. Once the research finds all occurrences of –μός nouns, it will investigate the occurrences for a variety of characteristics. This step will focus on the objective characteristics, such as the gender, case, and number of the noun, or the genitives modifying it.

Analysis

With all of this data, the research can begin to analyze occurrences for meaning. This is a much more subjective exercise, so the research will start with the occurrences which are clear, and on which scholars agree. Identifying patterns from those will allow the research to move from clear examples to less clear ones, applying the principles gleaned from the clear examples. This section will use principles from other languages, contextual information, and the work of other scholars to varying degrees depending on the situation.

Synthesis

After gathering all the evidence, the goal is to accurately determine the meaning of the DN. This includes both the specific meaning in each occurrence, and the semantic range (which is the sum of the meanings in each occurrence). This dissertation can divide the goals of meaning into two categories. The first is whether the DN is a process or result DN. The second category concerns process DNs. Specifically, it concerns how to determine the subject, object, and other arguments of the agnate clause. The researcher will observe the data to look for significant correlations that provide evidence for these two categories.

Conclusion

There is a gap in the research on –μός nouns in Koine Greek, specifically with the semantics of –μός nouns. This dissertation will fill that gap. It will do so by first describing the data concerning –μός nouns. It will then analyze that data to identify principles that indicate meaning. Finally, it will synthesize these principles, giving some examples of how to apply those findings to pertinent passages.

Chapter 2

Identification

There is a large amount of data concerning the –μός suffix. This chapter first identifies

New Testament words that contain the suffix before gathering data from those words. It will then

identify occurrences of those words in the New Testament. The final section will gather data

from those occurrences. This dissertation divides the data gathered into three data sets: lexical

information concerning –μός noun, the occurrences of –μός nouns, and the modifiers of those

noun. These are available in appendices A, B, and C, respectively. For clarity, the title of each

column in the appendices is capitalized and underlined. Lastly, when columns have a limited set

of options, those options are in bold.

The goal of this chapter is two-fold. First, these datasets will provide a means of making

decisions about meaning. A secondary goal is to show that –μός nouns and their verbal cognates

function generally the same as other Greek nouns. This will give the reader confidence that their

previous knowledge of Greek generally applies to the current study. This chapter accomplishes

its goals by surveying the objective data around –μός nouns, their verbal cognates, and their

occurrences.

Identifying –μός Nouns

The first step in analyzing any suffix is identifying the words within which it occurs. This

must start with morphological principles in order to determine the possible combinations of

letters the suffix can form. Following this, a proper search is in order. After searching, this

dissertation uses morphological rules and recent research to analyze each search result, the point

of which is to validate that those words are indeed nouns with the –μός suffix. At this point, the

final list of –μός nouns will emerge. Before discussing the relevant morphological principles, the following paragraph will mention another delimitation.

Since this is possibly the first in-depth foray into the –μός suffix, this study will be strict on which words warrant inclusion. If there is any reasonable doubt as to whether a word contains the –μός suffix, this study will exclude that word. This will allow scholarship to move forward on stable ground. With this in mind, adjectives that potentially include the –μός suffix are not included here since scholars predominantly claim that these adjectives have a different suffix.[1] Including words that do not clearly include the suffix at hand could easily skew the results, and a first study should take more precautions in skewing results since there is little to check it against.[2] Further, the results of this study will enable future studies to determine whether those unclear words actually contain the –μός suffix or not.[3] Fortunately, the results of searching and analyzing are conclusive aside from a few words.

Morphological Principles

There are several pertinent morphological principles, but the main one is that, in Koine Greek, a noun with the –μός suffix always ends in mu, omicron, sigma. A quick review of

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[1] Greenlee, *Concise Exegetical Grammar*, 28; Greenlee, *New Testament Greek Morpheme*, 292-293; Hoffman, *Everyday Greek*, 28-29; Young, *Intermediate*, 29.

Moulton, Howard, and Turner, *Grammar*, 350-351, mention adjectives. The more recent works claim that adjectives that end in –μός have a slightly different suffix, such as –ιμός.

[2] Ignoring these borderline words also has potential to skew the results, but the potential is much less. If one were to ignore all words that potentially contain the suffix but are unclear, and those words were numerous, one would probably be ignoring quite a few words that should be included. This could potentially skew the results. That is not the case with this study, as there are few borderline words.

[3] The reasoning behind this statement is that, if this dissertation finds patterns of meaning for the –μός suffix, and some borderline words clearly fit those patterns of meaning, they might then be considered –μός nouns. Further evidence might come from studies similar to this one that focus on the other potential suffixes that word contains. If the word in question matches the principles of the –μός suffix well, but matches the principles of the other potential words poorly, then the evidence would be strong that it is indeed a –μός noun.

Mounce's work on morphology shows some rules concerning the letter mu. First, when π, β, or φ

(labials), as well as ν, or ψ are followed by μ, they totally assimilate to μ, becoming μμ as in

ἐμμένω (ἐν and μένω). When μ follows κ, γ, or χ (velars), they become γμ, as in διωγμός (διώκ–

and –μός). When μ follows τ, δ, or θ (dentals), they become σμ, as in πεισμονή (πείθ– and –

μονή). Finally, when μ follows σ, the σ drops out (unless it's the result of another rule), as in

ἀξιομακάριστος (ἄξιος and μακάριος).[4] Not all situations are perfectly clear. Despite these

unclear situations, current Greek scholarship leads one to believe that the –μός suffix always

remains intact when it occurs in a word.[5] This makes identifying possible words simpler.

<div align="center">Searching for –μός Nouns</div>

Searching the 28th edition of Nestle-Aland in Accordance results in 96 potential words.

The research consisted of using "*μός @[NOUN]" as the search string.[6] This string located all

words that end with μός and are nouns. While this is a simple method of identifying nouns with

that ending, a fair amount of the words are false positives. A simple example is θανάσιμός

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[4] Mounce, *Morphology*, 34-35, 36-37, 300, 303.

First, when the preposition ἐκ precedes a word starting with μ (and other similar cases with κ and χ), the combination does not result in the usual γμ (instead, no change occurs). However, that does not impact this dissertation since ἐκ is a preposition (and not a verb that –μός would join onto).

Second, this paragraph does not mention the other rules concerning μ because they do not impact this dissertation.

Third, Mounce notes that, in Classical Greek (but not the New Testament), ν + μ can result in σμ or σμμ in addition to μμ (footnotes 2 and 6 on page 303). Due to this, and due to the common occurrence of σμ in the nouns already identified, this dissertation will look for σμ and σμμ.

[5] Some potential difficulties are assimilation, dissimilation, reduction, and metathesis, but Mounce does not state a rule with μ. His wording leaves open the possibility of μ + μ resulting in no μ at all, but this seems unlikely. The only rules where μ results in a change either involves adding μ or when μ precedes certain consonants. Mounce, *Morphology*, 26-31, 24-27. This, along with no known morphophonological variants, leads one to believe that that –μός, when added to the end of a word, will remain the same.

[6] This search used NA28 3.6.

("deadly"), which is incorrectly marked as a noun when it should be an adjective.[7] In its only New Testament occurrence (Mark 16:18), it is used as a substantival adjective, and often translated as such. That this is an adjective becomes even clearer when comparing it with other adjectives ending in –μός, as many of them end in –ιμός (or a similar variation), which is an adjectival suffix.[8] There are reasons to exclude other words as well.

<div align="center">Narrowing Down the List</div>

There are two main reasons to narrow down the list: either the word has no evidence that it contains the –μός suffix, or it does have evidence but there is a good reason to doubt that the word contains the suffix.

The first group of exclusions requires modifying the search to be "*μός @[NOUN proper]." This returns a list of 8 proper nouns, which are listed in Table 2.1. With the exception of Ἰουδαϊσμός, if they have a verbal cognate, their meaning has drifted so far from the verb's meaning that it is impossible to say what the cognate verb is. Including them would add confusion to this study instead of clarity. Ἰουδαϊσμός has a clear verbal cognate (ἰουδαΐζω) and retains a similar meaning, and therefore it is included.

Table 2.1

Word	Gloss
Δίδυμός	Didymos
Ἰουδαϊσμός	Judaism
Νικόδημός	Nicodemus
Ὀνήσιμός	Onesimus
Πάτμός	Patmos
Πέργαμός	Pergamum
Σάμός	Samos
Τρόφιμός	Trophimus

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[7] Adjectives are excluded from this study because they have a different semantic range than nouns, especially from deverbal nouns.

[8] Greenlee, *New Testament Greek Morpheme*, 284.

Five of the remaining words do not have a clear cognate verb.[9] While these words may have a cognate verb that does not appear in extant texts, there is no evidence of one. These could also potentially have a cognate verb used in PIE, or be the result of a loan word[10] plus –μός. However, in both cases the lack of evidence for a verbal cognate removes the word from this study. These words appear in Table 2.2.

Table 2.2

Word	Gloss
ἄγαμός	bachelor/bachelorette
ἄζυμός	unleavened bread
ὄψιμός	spring rain
πρόϊμός	early rain
ὦμός	shoulder

Four more words do not follow the usual morphological pattern when adding the –μός suffix. These words are listed in Table 2.3. They all derive from verbs whose stem ends in zeta (such as νομίζω). When –μός is combined with a stem ending in zeta, it normally combines to create –σμός. These four words do not follow that pattern. A reasonable objection might be that these follow a different pattern, and that pattern could be a different way of adding –μός onto a verb. While that is certainly plausible, there is a reason to doubt this. Many accepted –μός nouns have a verbal cognate ending in zeta (such as θερίζω/θερισμός), and almost all of those end up as –σμός. None form a similar pattern to the four nouns listed above in this paragraph, and therefore they are excluded.

Table 2.3

Word	Gloss
ἄνεμός	wind
ἁρμός	joint
κῶμός	excessive feasting
νόμός	law

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[9] Alexiadou, "On the Role", 253-254, claims that a cognate verb is required. James Pustejovsky, *The Generative Lexicon* (Cambridge: A Bradford Book. 1995), 158, 162, disagrees via the example that "Vietnam" can refer back to the event. While a cognate verb may not be required, it is at least the norm, and this dissertation limits itself to only those with a cognate for simplicity and to create a solid foundation for others to build upon.

[10] PIE stands for Proto-Indo-European, the theoretical language from which Greek evolved.

A loan word is a word taken from another language.

Nineteen of the remaining words have a second-declension suffix (–ος). They are in Table 2.4. These words all have a root that ends in mu. It is unclear at this time how to distinguish whether these words have a final suffix of –μός or –ος, the normal ending on second-declension nouns. Simply put, when using the stem γάμ–, adding –μός or –ος could both result in γάμός. If a researcher completed a morphological study showing μ + μ = μμ, then this dissertation could be revised to rule these nouns out completely. If a researcher completed a study showing μ + μ = μ (gemination[11]), that would leave the current study in the same situation of not knowing whether these words end

Table 2.4

Word	Gloss
ἀριθμός	number
γάμός	wedding/marriage
γόμός	freight
δῆμός	crowd
δρόμός	course/mission
θυμός	passion
κάλαμός	reed
κέραμός	clay
κληρονόμός	heir
κόσμός	world
λιμός	hunger
λοιμός	pestilence
μῶμός	blame/defect
οἰκοδόμός	builder
οἰκονόμός	steward
παρεπίδημός	sojourning
πόλεμός	battle
συνέκδημός	traveling companion
τρόμός	trembling

in –μός or –ος, as both would have the same result. In order to provide results that are as accurate as possible, this study excludes those words.

The final reason for eliminating some of these words is due to the work of Robert Beekes.[12] While some may claim that these words contain the suffix, Beekes'

Table 2.5

Word	Gloss
ἄμμός	sand
ὀφθαλμός	eye
στηριγμός	security
ὑπογραμμός	example

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[11] Mounce, *Morphology*, 24, refers to the process of the same letter ending one suffix and starting the next in the same word (thus putting the same letter back-to-back) as gemination, and the process of removing one of the double-letter pair he calls reduction. He mentions letters that undergo germination, and letters that undergo reduction, but μ falls into neither camp, leaving open both possibitilies.

[12] Robert Beekes, *Etymological Dictionary of Greek* (Leiden, the Netherlands: Brill, 2009).

work is the most up-to-date.[13] He claims that the words in Table 2.5 do not contain the –μός

suffix, either because they are either a root themselves (from which verbs and other parts of

speech derive) or they are derived from another noun instead of a verb.[14]

The Final List

This leaves the final list at 56 <u>Words</u>.[15] They appear in Table 2.6 as well as Appendix A.

Table 2.6

Word	Gloss	Verbal Cognate
ἁγιασμός	sanctification	ἁγιάζω
ἁγνισμός	purification	ἁγνίζω
ἀναβαθμός	flight of stairs	ἀναβαίνω
ἀπαρτισμός	completion	ἀπαρτίζω
ἀπελεγμός	refutation	ἀπελεγχω
ἁρπαγμός	seizure	ἁρπάζω
ἀσπασμός	greeting	ἀσπάζομαι
ἀφανισμός	destruction	ἀφανίζω
βαθμός	step/stage/grade	βαίνω
βαπτισμός	washing	βαπτίζω
βασανισμός	torture	βασανίζω
βρυγμός	gnashing	βρύχω
βωμός	raised platform, altar	βαίνω
γογγυσμός	murmur	γογγύζω
δεσμός	bond/fetter	δέω
διαλογισμός	thought	διαλογίζομαι
διαμερισμός	dissension	διαμερίζω
διωγμός	persecution	διώκω
ἐλεγμός	rebuke	ἐλέγχω
ἐμπαιγμός	scorn	ἐμπαίζω
ἐνταφιασμός	burial prep	ἐνταφιάζω
ἐπισιτισμός	provisions	ἐπισιτίσζω

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[13] See the discussion in Moulton, Howard, and Turner, *Grammar*, 350-351.

[14] Robert Beekes, *Etymological*, 89, 285-286, 1133-1134, 1404-1405. The first two words mentioned are roots themselves, and the second two are formed from nouns.

[15] As "<u>Word</u>" is the title of a column in Appendix A, it is capitalized and underlined.

θερισμός	harvest	θερίζω
ἱλασμός	expiation	ἱλάσκομαι
ἱματισμός	clothing	ἱματίζω
Ἰουδαϊσμός	Judaism	ἰουδαΐζω
καθαρισμός	purification	καθαρίζω
κατακλυσμός	flood	κατακλύζω
καταρτισμός	equipment	καταρτίζω
κλαυθμός	weeping	κλαίω
κυλισμός	wallowing	κυλίω
λογισμός	calculation/thought	λογίζομαι
μακαρισμός	blessing	μακαρίζω
μερισμός	division	μερίζω
μιασμός	defilement	μιαίνω
μολυσμός	defilement	μολύνω
ὀδυρμός	lamentation	ὀδύρομαι
οἰκτιρμός	pity/mercy	οἰκτίρω
ὀνειδισμός	disgrace/insult	ὀνειδίζω
παραπικρασμός	rebellion	παραπικραίνω
παροξυσμός	provoking	παροξύνω
παροργισμός	anger	παροργίζω
πειρασμός	test/temptation/trial	πειράζω
πορισμός	means of gain	πορίζω
ποταμός	river/stream	πίνω
ῥαντισμός	sprinkling	ῥαντίζω
σαββατισμός	sabbath rest	σαββατίζω
σεισμός	earthquake/storm	σείω
στεναγμός	sigh	στενάζω
σύνδεσμος	fastener	συνδέω
σωφρονίζω	self-control	σωφρονισμός
φραγμός	fence	φράσσω
φωτισμός	enlightenment	φωτίζω
χρηματισμός	divine statement/answer	χρηματίζω
ψαλμός	psalm	ψάλλω
ψιθυρισμός	gossip	ψιθυρίζω

This list corroborates with what scholars today claim. This list include some deverbal nouns that have hard to determine cognates (such as ποταμός, which might be a cognate of πίνω, ποτίζω, or πέτομαι), and some that the cognate potentially ends in mu (δεσμός, the cognate options being δέω or δεσμεύω). Further, a survey of the available Greek manuscripts shows that

the nouns included in this study occur for the first time after their cognate verb, or they both first appear in works by the same author. This doesn't rule out the possibility that the verb derived from the noun (i.e., a backformation occurred), but it makes it less likely. This fact, along with Beekes' work, evidence that these words include the –μός suffix. Beekes' work is the most up-to-date work in the field, but he does not provide an easily accessible list of words with the –μός suffix. Greenlee does, and his list includes 59 words that appear in the New Testament.[16] One (ὀφθαλμός) is a word that scholars previously thought ended in –μός, but Beekes claims it is a root, as it cannot be reasonably broken down into other morphemes.[17] A second (στηριγμός) is formed from a noun and not a verb.[18] The third word in Greenlee's list that this study excludes is ἁρμός. Yet again recent scholarship has shed new light, as Beekes believes that the verbal cognate is a backformation, where the verb was derived from the noun instead of the other way around.[19] Beekes lists the other 56 as having derived from a verb. With this list in hand, gathering data can begin.

Gathering Data from Verbal Cognates

The first step in mining verbal cognates is identifying them. From here, this section will cover five key areas: the verbal cognate of the –μός noun and its morphological construction, a diachronic survey of those two words, the semantics of the verbal cognates, the arguments those verbs take, and the syntactic construction of those verbs. These five areas will help meet the two

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[16] Greenlee, *New Testament Greek Morpheme*, 292-293.

[17] Beekes, *Etymological*, 1133-1134.

[18] Ibid., 1404-1405.

[19] Ibid., 135.

goals of this chapter: to show that the verbal cognates represent a normal subset of all Greek verbs, and to provide data for analysis in the following chapter. The data gathered in this section appears in full within Appendix A.

<div align="center">Verbal Cognates</div>

The research for this dissertation consulted and verified scholarly sources to determine the <u>Verbal Cognate</u> for each word listed above. These cognates are fairly easy to determine with the current lexicons and search tools. The research consulted Robert Beekes, BDAG, Greenlee, and LSJ for every word, as well as William J. Slater and Georg Autenrieth when they include the words.[20] If the research found disagreement, this study preferred the most up-to-date works, which is also the order listed above if Slater and LSJ are switched. One can find a full list of the verbal cognates in Appendix A, along with information on their morphology.

The morphological construction of –μός nouns and their verbal cognates are a normal subset of the Greek lexicon. Some of the words and their verbal cognates have a <u>Prepositional Prefix</u>, such as διαμερίζω/διαμερισμός and παροργίζω /παροργισμός.[21] The prepositional prefixes appear in Table 2.7. A few undergo a <u>Stem Change</u> such as ἀναβαίνω/ἀναβαθμός, which changes from βαίν– to βαθ–.

Table 2.7

Word	Gloss
ἀνά	between
ἀπό	from
διά	through
ἐν	in
ἐπί	on
κατά	against/according to
παρά	from/with/by
σύν	with

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[20] Georg Autenrieth, *A Homeric Dictionary* (New York: Harper & Brothers, 1883); BDAG, *Greek-English Lexicon*; Beekes, *Etymological*; Greenlee, *New Testament Greek Morpheme*; Henry George Liddell, Robert Scott, and Henry Stuart Jones, *Greek-English Lexicon* (Oxford: Clarendon Press, 1996); William J. Slater, *Lexicon to Pindar* (Berlin: Walter de Gruyter & Co.: 1969)/

[21] Anytime this dissertation mentions a deverbal noun and its verbal cognate together, the verbal cognate is presented first and the noun second, in order of historical appearance.

These words include a variety of morphological changes, many of which are due to known morphological rules. These are all a result of combining the verb stem's Ending Vowel and/or the Ending Consonant with –μός. One of the more common changes is when the stem ends in zeta and –μός is added, the zeta normally changes to sigma, resulting in –σμός (31x). If the verbal stem ends in a vowel, a sigma is added there as well (4x). In the four instances when a zeta does not turn into sigma, it turns into gamma, and chi turns into gamma as well. This is not a full description, but it does show that, just as the larger Greek lexicon undergoes many morphological changes, –μός nouns do as well. This answers how verbs became –μός nouns, but does not answer when.

<div align="center">Diachronic Survey</div>

The process of adding –μός to a verb was a normal part of Greek for centuries preceding the New Testament. Homer's two epic poems are the oldest extant Greek literature, and they contain both verbal cognates of –μός nouns (up to 18x) as well as some –μός nouns themselves (4x).[22] New words (both verbal cognates and –μός nouns) appear regularly in the half-millennium following Homer, and in a variety of works. A large number of new –μός nouns appear in the LXX (17x), while six verbal cognates first appear there. A few –μός nouns make their first appearance in the first century, and four first appear in the New Testament.[23] This data appears in the First Verbal Use and First Nominal Use columns in Appendix A. These pairs corroborate the nominalization process, as the verb always appears either before the noun, in the

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[22] In some cases, the exact word Homer used might be a –μός noun, or it might not be.

[23] No verbal cognates of New Testament –μός nouns make their first appearance in the New Testament. While there may be verbal cognates of post-New Testament –μός nouns making their first appearance in the New Testament, this study did not look at –μός nouns that make their first appearance after the New Testament.

same work as the noun, or in works by the same author. Therefore nominalization with the –μός

suffix was a normal and regular process.[24]

Verbal Semantics

Verbs have different characteristics, and these characteristics allow scholars to classify

them in different ways. Characteristics determine the realm in which the verb occurs, the length

of time for which it occurs, how it ends, and whether it involves a change of state. An action can

either occur in one of two <u>Realms</u>: **physical** (run/move/play) or **mental** (psychological, i.e. a

"psych" verb, such as think/feel/fear).[25] Forty-eight of the fifty-six involve physical action (such

as θερίζω, "I harvest"), six are psych verbs (such as πειράζω, "I test/tempt"), one (διαλογίζομαι,

"I think" or "I discuss") can be in **either** realm depending on the context, and another (βασανίζω,

"I torture") can be in **both** at the same time. Another characteristic is whether the verb is

<u>Durative</u>.[26] An instantaneous verb occurs all at once, such as "break" or "poke." A durative verb

happens over time, such as "consider" or "drive." Fifty-one of the verbs in this study have

duration (such as σείω, "I shake"), four are instantaneous (such as ἁρπάζω, "I seize"), and one

(καθαρίζω, "I cleanse") can have either characteristic depending on the context. Verbs can also

have a logical point of termination, after which the action is necessarily finished

(create/cease/build). Verbs with this characteristic are <u>Telic</u>. Alternatively, atelic verbs

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[24] Even if, when new texts are discovered, scholars find an occurrence of a –μός noun before the first appearance of the verbal cognate, that would only evidence the amount of texts lost. Extant texts are a fraction of a fraction of a fraction of the linguistic utterances in the ancient world. In order to disprove this normal process, one would need to find enough clear counter-examples to outweigh the known examples.

[25] See Chapter 1 for a more in-depth discussion of verb types. This dissertation classifies psych verbs and state verbs together since all verbs in this study that could be in either are better classified as psych verbs due to their mental characteristics. In other words, there are no pure state verbs in this study.

[26] This is different than verbal aspect in that aspect (perfective, imperfective, or stative) can vary between occurrences of the root depending on the tense of each occurrence.

(walk/fear/talk) lack this logical termination.[27] Twenty-five in this study are telic (as in φράσσω, "I cease/stop"), thirty are atelic (such as στεναζω, "I sigh"), and one can be either depending on context (πειρασμός, "I test/tempt"). Finally, some verbs cause a <u>Change of State</u>, such as **creating** (build/make), **modifying** (change/break), **representing** (reflect/draw), or **annihilating** (destroy/kill). The *theme* of the action (usually the object) usually undergoes the change of state. Forty-four of the fifty-six verbs can and usually do cause a change of state (such as παροξύνομαι, "I am angered," where the person changes their emotional state). Most of the time the change is some sort of modification of the theme, but it can also involve creation, destruction, or representation. With all of these characteristics, context reigns supreme.

These characteristics allow scholars to classify them into <u>Types of Verbs</u>. Twenty-four of the verbal cognates are **activity** verbs, which describe a physical action that occurs over time and has no logical termination. ψάλλω (I sing) is an example. Seventeen are **accomplishment** verbs, which occur over time, have a logical termination, and involve a change of state. A good example of this is δέω (I bind). Six are **achievement** verbs, which are instantaneous and involve a change of state, such as ἀφανίζω (I destroy). Two of these are **psych state**, which are verbs occurring in one's mind without indication of the cause, such as σωφρονέω (I think soundly). Three of these are **psych agentive** verbs, which involves a person or animal (an agent) doing something that leads someone to experience a certain psychological state. [28] A good example of

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[27] A good way to distinguish between telic and atelic verbs is to ask if there is a logical point of termination. For instance, if someone goes on a walk for exercise, they could continue indefinitely. Some might say that they could only continue until they were physically unable, but that is not what people mean when they say, "I'm going for a walk." On the other hand, if someone builds a house, they could not continue indefinitely because there is a logical point of termination. Once the house is built, they cannot continue building (at least, they cannot continue building that house). An additional wrinkle is that, when someone walks to a destination, there is a logical point of termination. When they arrive at their destination, they have completed their action. Therefore some words can vary in their telicity depending on the meaning it takes in context.

[28] Psych agentive verbs can also have a supernatural being as the agent.

this is παροργίζω (I make angry). There are other types of verbs, but they are not pertinent to this study.[29]

A few other words warrant special mention. One is another verb that is normally psychological, πειράζω (I tempt/test). It can be either **psych agentive or psych causative**, which is the same as psych agentive except an event or circumstance causes the psychological state instead of a person (see Gal 6:1). There are two others that have multiple verbal types. καθαρίζω (I clean) is normally **accomplishment**, but is **achievement** when Jesus instantaneously heals a leper (Mark 1:44; Luke 5:14). διαλογίζομαι (I think/I discuss) can be **psych state** (when it takes the meaning "I think"), or **activity** (when it means "I discuss"). The final word is a special case. βασανίζω (I torture) can involve both a **physical activity** (inflicting pain) and a **psychological state** (mental anguish). This double meaning is less common, but some occurrences of βασανίζω make it clear that both ideas can be present (Matt 8:6; Rev 9:5; 12:2).

Some additional notes are in order. Many of the verbal cognates in this dissertation can vary in their verb type depending on the context, but this dissertation is only concerned with the meanings that the verbal cognates have in common with their corresponding –μός noun. For example, BDAG assigns four definitions to the verb δέω, the third of which is "to constrain by law and duty."[30] Since this definition is unrelated to the meaning of δεσμός, this dissertation does not mention that definition beyond this paragraph. Second, the types of verbs do not fully encompass all of the characteristics. Classifying a verb as a "psych state" verb does not tell

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[29] Semalfactives and state verbs are other types.

[30] BDAG, Greek-English Lexicon, 221.

whether it is telic or atelic. Finally, this section and the three before it discussed only the words themselves; the following sections will cover how they work with other words.[31]

<div align="center">Verbal Arguments</div>

This section presents three noteworthy aspects of how the pertinent verbs take arguments. The first subsection covers how many arguments the verbs can take, and classifies the argument slots available. The second discusses the different types of arguments the verbs can take. A short survey of ways these verbs can denote passive agents will finish the section.

Valency and Argument Slots

These verbs vary in the amount of arguments (<u>Valency</u>) they can take, as well as the kinds of arguments they take (their argument slots). Verbs can be **intransitive**, taking one argument (the subject), **transitive** (taking two arguments, the subject and object), or **ditransitive** (taking three arguments, subject, object, and indirect object). About a fifth of the verbal cognates in this dissertation are normally intransitive. Most, if not all of these are **unergative**, taking only an agent as an argument.[32] An example is στενάζω, "I sigh." These verbs communicate someone doing an action, and the action does not necessarily affect anyone or anything else. Some of these can take additional arguments depending on the context, becoming transitive.

A little over half of the verbal cognates are commonly transitive. All of these can take an agent as the subject, but some may take a cause instead. A good example here is πειράζω, "I

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[31] Appendix A lists another column in this section concerning whether the lexical meaning of the –μός noun points toward a process or result. That column is covered in the <u>Set 1: The Basis for Initial Decisions</u> section below.

[32] One possible exception is ἀφανίζω ("I destroy"), which can be **unaccusative** (taking a theme as the only argument). However, the verb is more commonly transitive, and the only occurrence of the cognate DN (ἀφανισμός) is probably related to the transitive meaning rather than the intransitive meaning.

tempt/test," as the devil (agent) might tempt someone, or the love of money (cause) might tempt them. The objects of transitive verbs are usually themes or experiencers. For an example with σείω, "I shake," the object being shaken is the theme since it undergoes movement or change. With the figurative sense of φωτίζω, "I enlighten," the object is the one experiencing enlightenment. ἁρπάζω, "I seize," can take a proposition as an argument, as in the phrase, "the devil siezes what was sown in one's heart, (Matt 13:19)" i.e. the devil takes the gospel message from the man. Some of these can lose an argument and become intransitive, and others can gain an argument and become ditransitive.

About a fifth are commonly ditransitive, taking three arguments. The most prominent argument in these verbs are all agents, and none have a cause in the subject position. Themes and propositions frequently take the second argument slot, and the third argument can indicate an instrument or goal/location/source. διαλογίζομαι, "I discuss ideas with others," takes an agent (I), a proposition (the ideas being discussed), and a goal (others) to which the ideas are sent.[33] δέω, ""I bind the prisoner with chains," takes an agent (I), a theme (the prisoner), and an instrument "(the chains). As with the other verbs, there are many examples of ditransitive verbs losing an argument and becoming transitive or even gaining an argument and become tritransitive.[34] One difficulty of determining valency (how many arguments a verb can take) is that arguments can often be implied.[35] "I sprinkled blood on the altar" can easily become "I sprinkled blood" or "I sprinkled the altar." As always, context is king, but since some of the verbs appear only a few

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[33] Here the agent ("I") and the goal ("others") are interchangeable as the action ("discuss") is reciprocal.

[34] Mark 6:17 says "Herod bound John (with chains) in prison", taking an agent (Herod), theme (John), an implied instrument (chains), and a goal (prison).

[35] Technically an argument that becomes implied is an adjunct and no longer an argument, but they are still a part of the action. For instance, no one could tie a donkey without a rope or some instrument that can be tied.

times in the extant literature, it is hard to determine all the possibilities. For this reason,

approximate fractions are a better representation than exact numbers.

Classifications of Arguments

This section is fairly simple: the <u>Possible Arguments</u> for these verbs fall into many

different classes. Different classifications include **people**, **supernatural beings**, **places**, **animals**,

physical objects, **ideas**, and **states/events**. There are other more specific options as well, but

these are less common. Further, the different classifications can appear as many different types

of arguments. Luke 2:26 recalls that the Holy Spirit revealed to Simeon he would not die until

seeing the Messiah. In that verse, the agent of χρηματίζω (I warn/reveal) is the Holy Spirit, the

theme is an idea (that he would see the Messiah), and the destination is a man (Simeon). In Rev

9:5, βασανίζω (I torture) has animals (scorpions) as agents, while in Mark 4:7 ἀναβαίνω (I go

up/grow) takes a physical item (thorns) as a theme.[36] In Matt 16:7, the disciples argue

(διαλογίζομαι) among themselves about their current state of having no bread. The variety in the

number, types, and categories of arguments that these verbs can take show that –μός combines

with many kinds of verbs.

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[36] Despite being the subject of the verb, the thorns are the theme (and not the agent). Themes undergo change, while subjects can undergo change but often do not. Also, themes do not do the action themselves, as in this case (natural causes, i.e. the ones God set in place, make the plants grow).

Passive Agents[37]

When an objective genitive is attached to any deverbal noun (including a –μός noun), some grammarians give it the title of "passive."[38] A good method to determine whether this is valid starts with passive instances of the cognate verbs. Yet again, the subset of cognate verbs pertinent to this study proves to be a fairly normal subset of the larger lexicon. A

Table 2.8

Word	Gloss
ἀπό	from
διά	through
ἐκ	out
ἐν	in
ἐπί	on
κατά	against/according to
ὑπό	by/under

brief survey reveals that a little over a quarter of these verbs appear in the passive form. More often than not these verbs have at least one instance of **ὑπό** ("by/under") denoting the Passive Agent. A full list of prepositions that denote a passive agent appears in Table 2.8. Additionally the **dative** case can represent a passive agent as well. Leaving the passive agent unstated is slightly more common than the other prepositions. With that said, these prepositions can do more than just denote passive actors, so the appearance of these prepositions is not enough to confirm passive agency.

<div align="center">Syntactic Constructions</div>

These verbs are also a fair representation of all Greek verbs when it comes to syntax. The cases of their arguments are standard, and they use many of the common prepositions.

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[37] The object in a passive verb can be an agent, cause, or instrument. This dissertation uses "passive agents" to summarize all three.

[38] Smyth, *Greek Grammar*, 319.

Cases of Arguments

The cognate verbs in this study take arguments in the same way that other Greek verbs take them. The nominative case represents the subject, where applicable the accusative represents the object, and the dative the indirect object. Rom 12:3 represents each of these three. ἐκάστῳ ὡς ὁ θεὸς ἐμέρισεν μέτρον πίστεως ("… God distributed a measure of faith to each"). "God" is the nominative subject, "a measure" is the accusative object, and "each" is the dative indirect object. One of these verbs (ἐμπαίζω) can take a <u>Direct Object</u> in the **dative** case, as in Mark 10:34. ἐμπαίξουσιν αὐτῷ ("They will mock him"), but most take direct objects in the **accusative** case. Further, while most of the ditransitive verbs take an <u>Indirect Object</u> in the **dative** case, one can take it in the **accusative** case. This shows that the verbal cognates of –μός nouns even succumb to the normal exceptions of Greek verbs.

The cases of arguments also correspond to the kinds of arguments. A nominative argument can be an agent or experiencer. It could also be an instrument or cause, but not with the New Testament occurrences of the verbal cognates pertinent to this study. An example of a nominative agent is Heb 3:9, with the nominative (fathers) tempting God. Luke 1:29 shows the nominative (she) experiencing the action of the verb (wondered). A theme can be nominative when the verb is passive, as in Mark 1:9, when Jesus (nominative theme) is baptized by John (prepositional agent), but this is less common.[39] An argument in the accusative case often represents an experiencer or theme. In Rom 10:19 Moses is quoted as saying God will provoke the people (accusative experiencer) to anger. In Acts 7:54, the Sanhedrin ground their teeth (accusative theme). A dative argument can be an instrument, source, goal, location, or theme.

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[39] A theme can also be nominative when the verb is unaccusative (an intransitive verb that has a theme as the subject). None of the verbs in this study are unaccusative.

Returning to Rom 7:2, the law is the dative instrument that binds. In Heb 7:2 Abraham assigns a tithe to Melchizedek, the dative goal of the action. In Luke 22:63 the guards mock Jesus, the dative theme. Although less common, some arguments can also appear in prepositional phrases.

Common Prepositions

In the extant literature, prepositions modify about half of these verbal cognates. Common Prepositions appear in Table 2.9. These are a fair representation of the larger corpus as well, although perhaps a slightly smaller representation than one might expect. These prepositions can represent the agent, instrument, or the goal/source/location. Luke 3:19 shows Herod being rebuked by a prepositional agent (John). Rev 6:13 shows the prepositional instrument (the wind) shaking a tree. Matt 21:16 shows the prepositional source (the mouths of children and infants) of the action.

Table 2.9

Word	Gloss
ἀπό	from
διά	through
εἰς	into
ἐκ	out
ἐν	in
ἐπί	on
κατά	against/according to
μετά	with/behind
περί	about
πρὸ	before
πρός	to
ὑπό	by/under

Conclusion of Gathering Data on Cognates

This data gathering section has laid the foundation in two different ways. First, the verbal cognates of –μός nouns are a small slice of the larger pie of all Greek verbs, and "taste the same" as the whole pie, i.e. they are a fair representation of the larger group. Second, the section above provides a good amount of data for this study to analyze for patterns. However, this is less than a third of the data, as the occurrences of –μός nouns remain to be seen and are much more complex. The first step in mining the occurrences of –μός nouns for patterns is finding them.

Identifying Occurrences

Identifying occurrences in the New Testament is a simple exercise with one exception. The research process involved searching for each individual –μός nouns. This search for each word resulted in 247 occurrences. However, there are three false positives, as Accordance has δεσμός tagged incorrectly. Searching for "δεσμός" returns three verses (Luke 8:29, Acts 16:26, and Acts 20:23) that contain the word δέσμα instead. This is clear from the fact that these are the only three words in the search that are neuter.[40] Further corroboration comes from the fact that Liddell, Scott, and Jones list δέσμα as a separate word from δεσμός.[41] Perhaps the root of the problem in Accordance is that the latest edition of BDAG only lists δεσμός and not δέσμα.[42] Regardless, this dissertation ignores those three instances, leaving the total number of occurrences at 244. These occurrences are ripe with data to analyze.

Gathering Data from Occurrences

This section will gather data on the occurrences of each –μός noun to accrue as much objective data from them as is helpful. The current section will finish laying a foundation of data before analyzing this data in Chapter 3. The section at hand has three parts. The first concerns the morphological construction of the –μός noun, i.e. the declension. The second concerns the syntactic construction of the context. The third concerns the semantic context. These three subsections will provide a large amount of data to mine for patterns.

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[40] This calls into question Acts 23:29; 26:29, 31; Col 4:18; 2 Tim 2:9; and Heb 11:36 as well, since the plural genitive of δεσμός and δέσμα would have the same form. However, a brief survey of ancient literature in Perseus (http://www.perseus.tufts.edu/hopper/searchresults?all_words=de/sma&all_words_expand=yes&la=greek) shows that the occurrences of δέσμα in the plural are rare (if they even exist), whereas plural instances of δεσμός are quite common.

[41] Liddell, Scott, and Jones, *Greek-English*, 380.

[42] BDAG, 219.

Declension

The declension of each –μός noun is determined like any other noun: by identifying the gender, number, and case. The <u>Gender</u> is simple, as every –μός noun is **masculine**. As far as <u>Number</u>, 173 of these occurrences are **singular** (71%), and 71 are **plural** (29%). This compares with 79% of New Testament nouns in general being singular, and 21% being plural. Concerning <u>Case</u>, 73 are **nominative** (29%), 60 are **genitive** (25%), 40 **dative** (16%), 71 **accusative** (29%), and none are vocative. This distribution is very close to the overall percentages (29% for nominative, 25% for genitive, 16% for dative, 31% for accusative, and 2% for vocative).[43] Breaking it down even further, in the singular, there are 59 nominatives, 36 genitives, 20 datives, and 56 accusatives. In the plural there are 13 nominatives, 24 genitives, 20 datives, and 14 accusatives. This reveals a correlation between nominative/accusative cases and singular, and a slight correlation of the genitive/dative cases with plural.

Syntactic Construction

The goal of this section is gathering syntactic data on –μός nouns. This consists of a few binary categories (generally yes/no), such as whether it has the article. Further, in many cases these nouns modify other words. That subsection will capture what and how it modifies. The third part of this section covers the various ways –μός nouns are modified.

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[43] These add up to 101% due to rounding nominative, genitive, and accusative up a few tenths of a percentage, but only rounding dative and vocative down a slight amount.

Binary Categories

Four binary categories are the first step in painting the syntactic picture. The first is whether or not the –μός noun has the <u>Article</u>. 109 occurrence have the article, 134 do not, and one (παροργισμός in Eph 4:26) contains the article in some manuscripts but not all. The second category is whether the word is <u>In a List</u>. 92 appear in a list of some sort. 42 of those lists are only a pair of words (a –μός noun with one other word). This leaves 152 that do not appear in any kind of list. The third category is whether or not it appears <u>In a Prepositional Phrase</u>. 94 occurrences are in a prepositional phrase. However, 13 of these are not the <u>Object of the Preposition</u> (they are usually genitives modifying the object of the preposition). Table 2.10 lists these prepositions. The fourth category is whether the –μός noun occurs before or after the verb (<u>Pre-</u> or <u>Post-Verbal</u>). There are two parts to this. The first is whether it appears before (**pre**) or after (**post**) the main verb in

Table 2.10

Word	Gloss
ἄνευ	without
ἀπό	from
ἄχρι	until
διά	through
εἰς	into
ἐκ	out
ἐν	in
ἐπί	on
ἕως	until
κατά	against/according to
μετά	with/behind
μέχρι	until
παρὰ	from/with/by
παρεκτὸς	besides
περί	about
πρὸ	before
πρός	to
σὺν	with
χωρὶς	apart

the sentence. The second is whether it appears before or after the verb in the same clause. If the –μός noun appears in the same clause as the main verb, the two data points will be the same. For instance, in Rom 12:1, οἰκτιρμός ("mercy") comes after the sentence's main verb (παρακαλέω, "urge"), but the verb in the same clause (παρίστημι, "present"). In 44 of the 244 occurrences, the –μός noun occurs before the main verb in the sentence. 178 times it occurs after the main verb. 21 times it occurs in a sentence with an implied verb. In one unique instance (Luke 17:27)

κατακλυσμὸς ("flood") occurs after one of the main verbs and before the other. In this instance κατακλυσμὸς is in the same clause as the main verbs. Concerning clauses, 57 –μός nouns occur before their clausal verb, 162 after the clausal verb, and 24 times the clausal verb is implied. These show only a few aspects of how the New Testament authors used –μός nouns.

What It Modifies

Another aspect concerns what <u>Type of Speech</u> –μός nouns modify. 198 are directly related to verbs. 143 of these 198 are verbal arguments. For example, some verbal arguments are the subject of the action, as in Matt 7:25, when the floods came (ἦλθον οἱ ποταμοὶ). 55 are adverbial. An example comes from συνταφέντες αὐτῷ ἐν τῷ βαπτισμῷ ("buried with him in baptism") in Col 2:12, where βαπτισμός denotes the method of burying. 46 modify another type of speech. When they modify **nouns** (36-38x), they frequently appear in the genitive case, such as τὸν φόβον τοῦ βασανισμοῦ ("the fear of torment") in Rev 18:10, 15.[44] They also modify **adjectives** (6-8x), and one time each they modify an **article** (Luke 7:25) and a couple **adverbs** (Rev 22:2).[45] In all of the instances where one can decline the modified word (45x), the breakdown is as follows. Concerning <u>Gender</u>, 16 are **masculine**, 22 are feminine, and 10 are **neuter**. Some of the occurrences modify more than one word (ἁγιασμός, "sanctification" in 1 Pet 1:2 and διωγμός, "persecution" in Mark 10:30), and therefore fit into both categories. Concerning <u>Number</u>, 14 of the 53 instances modify **plural** words, and 32 modify words in the **singular**. Continuing with the <u>Case</u> of these modified words, 13 of these words modify nouns in the **nominative** case, 3 in the **genitive** case, 10 in the **dative**, and 20 in the **accusative**. There are

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[44] In 1 Pet 1:2, one can make a case that ῥαντισμὸν and ἁγιασμῷ modify either ἐκλεκτοῖς (adjective) or παρεπιδήμοις (noun).

[45] Ibid.

none modifying a vocative noun. Moving on from what is modified, the next logical question asks what modifies the –μός nouns.

Modifiers

This section discusses the modifiers of –μός nouns in two different ways. The first concerns the type of speech of those modifiers, such as nouns, pronouns, etc. The second concerns syntactic features of the modifiers. This section concerns itself with how the modifier is grammatically connected to the –μός noun. All in all, 207 of the 244 occurrences have some sort of modifier, and many have more than 1. There are 386 modifiers in total.[46]

The Part of Speech of Modifiers

The modifiers of –μός nouns can take the form of many different types of speech. 207 of the occurrences of –μός nouns in the New Testament have some kind of modifier, many have multiple modifiers, and 37 have none at all. Some of these modifiers (37) are known only from context, and do not modify the –μός noun grammatically.[47] This section does not discuss contextual modifiers; it focuses on the remaining 349 grammatical modifiers. The grammatical modifiers appear as nouns, pronouns, adjectives, prepositions, adverbs, conjunctions, particles, and verbs.

In the New Testament, there are 88 <u>Nominal</u> modifiers spread across 69 instances of –μός nouns. 51 of these modifiers are <u>Articular</u>, and the modifiers vary greatly. A simple example is 2

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[46] Appendix C shows 387 modifiers. In Heb 12:24, the –μός noun (ῥαντισμός) modifies the head noun (αἵματι), but the head noun represents an agnate clause argument. This is an uncommon situation, but should not be discounted.

[47] See The Constructions of Modifiers section below.

Cor 7:1, which talks about defilement (μολυσμός), and describes it as "defilement of body and spirit" (σαρκὸς καὶ πνεύματος).

Pronouns are slightly more common as there are 98 pronouns modifying –μός nouns. These occur in 89 different instances. These are distributed among the various types of pronouns, such as personal, demonstrative, correlative, definite relative, and interrogative. As expected, **personal** pronouns are the most common Pronoun Type, comprising 77 of those 98.[48] Yet again 2 Cor 7 provides a good example, this time in verse 7. Here Paul mentions "your mourning" (τὸν ὑμῶν ὀδυρμόν) in reference to the Corinthian church's mourning over Paul's imprisonment.

The next most common type of speech is Adjectives, of which there are 44 in 43 instances. μέγας ("large") makes up 11 of these occurrences and πολύς 4 of them. These usually appear in the common adjectival constructions, such as in Matt 15:19. There Jesus mentions "evil ideas" (διαλογισμοὶ πονηροί) as the introductory item in a list of vices.

Prepositions are slightly more common than adjectives, and occur 47 times in 42 instances. **ἐν** ("in") is by far the most popular, occurring 21 times. **ἐπὶ** ("on") is the next most common at 6 occurrences, but no other preposition modifies a –μός noun more than 4 times.[49] Staying in Matthew's gospel, verse 8:24 describes a storm (σεισμὸς) arising, and the preposition indicates the location, "in the sea" (ἐν τῇ θαλάσσῃ).

Adverbs are next, modifying –μός nouns 16 times across 7 verses. However, this is misleading, as all but two occur in a single, repeated phrase. 7 times ἐκεῖ ("there") appears in the phrase "… where there will be weeping and gnashing of teeth" (ἐκεῖ ἔσται ὁ κλαυθμὸς καὶ ὁ

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[48] Other Pronoun Types include **correlative**, **definite relative**, **demonstrative**, **indefinite**, **interrogative**, **reciprocal**, and **reflexive**.

[49] Other prepositions include **διὰ** ("through"), **εἰς** ("into"), **ἐκ** ("out"), **κατὰ** ("against/according to"), **μετὰ** ("with/behind"), **περὶ** ("about"), **πρὸς** ("to"), and **ὑπὲρ** ("for/beyond").

βρυγμὸς τῶν ὀδόντων), a formulaic expression in the Synoptic Gospels. Each time the phrase

occurs, ἐκεῖ modifies two –μός nouns (κλαυθμὸς καὶ ὁ βρυγμὸς). The two other adverbs express

a physical item's location in relation to the –μός noun (Acts 16:13 and Rev 22:2).

Moving along, <u>Conjunctions</u> modify –μός nouns 6 times. In Acts 6:1, a complaint

(γογγυσμός) arose, and the conjunction (ὅτι, "that") indicates the reason/content of the

complaint: the Hellenistic widows were being overlooked when the believers distributed food.

<u>Particles</u> occur with –μός nouns only thrice. In 2 Tim 2:9, Paul is describing the chains

(δεσμός) attached to him in prison, as (ὡς) if he were a criminal.

<u>Clauses</u> modify –μός nouns 11 times as well. Eight of these are based on participles, one

is an infinitive, one is indicative, and one is optative. In Rev 3:10, Jesus talks about the testing

(πειρασμός) that is about to come (μελλούσης ἔρχεσθαι). In this case, the participle (μελλούσης,

"is about") directly modifies the –μός noun, and an infinitive (ἔρχεσθαι, "to come")

complements the participle. Rev 22:1 has a participle modifying a –μός noun. There is also an

interesting case in Phil 2:6 when an infinitive describes the modifier. These various types of

speech can all modify –μός nouns, and show yet again that –μός nouns follow the normal rules

of Greek.

The Constructions of Modifiers

Along with appearing as a variety of types of speech, modifiers appear in various

constructions and cases, but some constructions are more common than others. The constructions

include genitives, copulas (mainly as subject complements), datives, and constructions where

another word has in the same number and case as the –μός noun (appositional modifiers).

<u>Prepositional</u> phrases, <u>adjectives</u>, and <u>clauses</u> are other types of modifying constructions, but as

they overlap perfectly with the corresponding part of speech, the above section covered them.

One classification supersedes the others. This dissertation classifies the different <u>Types</u> of modifiers as **direct**, **implicit**, **contextual**, or in one special case, a word modified by the –μός noun acts as a **modifier**. Direct is common and easily recognized. If a genitive immediately follows a DN, as in the phrase καθαρισμός σοῦ, it is a direct modifier. Other direct modifiers include prepositional phrases that immediately follow a DN, an adjective that appears in a common adjectival structure with a DN, an appositional noun with a DN, or a word on the opposite side of a copula from a DN. This dissertation found 201 direct modifiers. Implicit modifiers do not directly modify the –μός noun, but are indirectly connected to the DN grammatically. One simple example comes from Luke 4:13. That verse says συντελέσας πάντα πειρασμὸν ὁ διάβολος ("when the devil completed every temptation"). διάβολος ("devil") does not directly modify πειρασμὸν ("temptation"), but it implicitly modifies it. One would have trouble reading the verse if they did not understand that διάβολος has some relationship to πειρασμὸν. This dissertation found 111 occurrences of implicit modifiers that the researcher determined were clear. In all of these instances, the implicit modifier is grammatically tied to the –μός noun through a verb. [50] There are also a number of contextual modifiers. These are implied, but not through any known grammatical structure. They are implied due to the knowledge that the reader already has before coming to the –μός noun. An example of this comes from Matt 24:38, where Jesus uses the word κατακλυσμός in reference to the Noahic flood. The reader knows that God flooded the earth without anyone stating it. There are 37 occurrences of contextual modifiers.[51] Finally, there is one instance of the DN grammatically modifying another

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[50] See the two subsections in Chapter 3 titled <u>Implicit Argument Control</u> and <u>Arguments with Process-Argument Verbs</u> .

[51] This can happen by referring to <u>Common Knowledge Events</u> or using <u>Contextual Agnate Clauses</u>.

word, but semantically the other word modifies the DN. The modifier and modified are tied

together grammatically, but are the inverse of the "direct" classification above. This occurs in

Heb 12:24, which uses the phrase αἵματι ῥαντισμοῦ ("the blood of sprinkling"). There the head

noun is modified by a genitive –μός noun. Therefore words can modify a –μός noun in four

ways: as a direct, implicit, or contextual modifier, or as the word modified by the –μός noun.

Although there are four classifications of modifiers, the rest of this section is mainly

concerned with direct modifiers, only partially concerned with implicit modifiers, and not at all

concerned with the other two classifications. Direct modifiers are grammatically tied directly to

the –μός noun, and thus have the features listed below. Implicit modifiers are tied to the –μός

noun indirectly, and thus only some of the grammatical features apply to them. As contextual

modifiers are not grammatically tied to the –μός noun (at least not in any known way), there is

no data on how they are grammatically tied to the –μός noun. The case with the modified word

in Heb 12:24 is simple enough that it was covered above. With this in mind, the dissertation

turns to how modifiers are grammatically connected –μός nouns.

A direct modifier can be in a <u>Position</u> before or after the noun it modifies. Normally, a

modifier is **postnominal** (164 times), occurring after the noun it modifies. There are 36

prenominal modifiers with –μός nouns in the New Testament. If the modifier is implicit or

contextual, whether it appears before or after the –μός noun is irrelevant, as the modifier is tied

to another word (for implicit modifiers) or not at all (for contextual modifiers).

Implicit modifiers are tied to –μός nouns 111 times in the New Testament, and every time

they are tied to the –μός noun through a verb (i.e., they are <u>Verbal</u> modifiers). Direct modifiers

can be tied to a –μός noun through a verb, but it is always through a copula, equating the two.

Implicit modifiers are passed from one action to another, and as actions are commonly verbs, it makes sense that implicit modifiers are always verbal in some sense.

Genitives are by far the most common New Testament structure for tying direct modifiers to a –μός noun. This makes sense as it is the only construction that Greek Grammars frequently associate with Deverbal Nouns.[52] The New Testament authors modify a –μός noun with a genitive 79 times across 74 –μός nouns. 47 times the modifier is a noun; 25 times the modifier has the article, and 22 times it does not. 30 times the modifier is a personal pronoun. Once the genitive modifier is a substantival adjective (Acts 20:27), and once it is a substantival participle (Rom 15:3). A typical example is in Matt 8:12, when Matthew mentions the gnashing of teeth (ὁ βρυγμὸς τῶν ὀδόντων). As a final note, once when it is not articular (Acts 20:37) the modifier is a substantival adjective.

The next most common construction is the copula or another Equative phrase tying a modifier to a –μός noun. With the copula, a being verb equates the –μός noun with another word or phrase. The being verb in these constructions is usually εἰμί, but can also be γίνομαι, or it might be implied. –μός nouns occur inside an equative phrase 39 time. Some of the time the modifier is the subject of a copula, other times it is the complement. It might also be part of an implied equative phrase, using a demonstrative pronoun or an implied being verb. The most common construction is the phrase "… where there will be weeping and gnashing of teeth" (ἐκεῖ ἔσται ὁ κλαυθμὸς καὶ ὁ βρυγμὸς τῶν ὀδόντων), occurring 7 times in Matthew's Gospel. The phrase has two –μός nouns. The type of speech being equated with the –μός noun is quite varied, as it can be an adverb (14x in the "weeping and gnashing" verses), an unarticular adjective (8x),

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[52] As an overview: Brooks and Winbery, *Syntax*, 14; Greenlee, *Concise Exegetical Grammar*, 25-28; Hoffman, *Everyday Greek*, 27-28; Vaughan and Gideon, *Greek Grammar*, 34; Young, *Intermediate*, 29.

a pronoun (7x), an unarticlar noun (4x), an articular noun (3x), and a participle (1x). A

straightforward example is when John describes Jesus (αὐτὸς) as the atoning sacrifice (ἱλασμός)

in 1 John 2:2.

Dative nouns can also modify –μός nouns, as this occurs 15 times in the New Testament.

10 times this happens implicitly through a verb, and 5 times a dative noun modifies a –μός noun

directly. 8 times the modifier is a pronoun, 6 times the modifier is an articular noun, and once it

is an unarticular noun. The most common dative modifier is the phrase "with my hand" (τῇ ἐμῇ

χειρὶ). This phrase occurs 3 times (1 Cor 16:21; Col 4:18; 2 Thess 3:17) where Paul describes the

greeting (ἀσπασμὸς) he writes as with his own hand.

Appositional modifiers (such as epexegetical and double accusatives) are the last

construction in this section. This occurs 23 times. An example of an epexegetical modifier comes

from Rev 9:14, where the river (ποταμός) is specified to be the Euphrates (Εὐφράτης). A double

accusative is in Phil 1:13, where Paul's imprisonment (δεσμός) is known (φανερος).[53]

Yet again this dissertation has shown that –μός nouns follow the normal rules of Greek

when it comes to modifiers. The modifiers can appear as genitives, in copulas, as datives, as

appositions, and as prepositions. This leaves one last piece in the foundation for analysis.

Semantic Context

The semantic context is a little more difficult to determine, and often moves into the

subjective realm. However, these can still be fruitful as they are more objective than they are

subjective. The questions to answer here often have fairly straightforward answers. The first asks

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[53] This does not include adjectives, which commonly take the same number and case as the noun they
modify. It also does not include subject complements, which also take the same number and case. The distinctive
features of appositional modifiers are the very fact that they take the same number and case.

in what literary style the –μός noun occurs. The second asks whether or not the –μός noun is modified by a process-argument verb. The third indicates if there is a contextual indicator that the DN represents a physical item. The fourth is a bridge to chapter three, and it concerns whether or not the word has an agnate clause appearing within the same context.

Literary Style

This paragraph will survey the <u>Literary Style</u> in which –μός nouns occur. From a high-level overview, 114 of the 244 (47%) appear in the **narratives** (the Gospels and Acts). Canonically, the second main category of New Testament literature is **Epistles**, which contain 106 occurrences (43%). The third is **Apocalypse** (Revelation), which has 24 (10%).[54] These have roughly the same splits as the distribution of all New Testament nouns. Overall, there are 28,503 nouns in the New Testament. The narratives contain 15,898 of these (56%), the Epistles contain 10,262 (36%), and Revelation 2,344 (8%).

Further, one can break the occurrences down from another perspective, such as **direct discourse** or **quotations**. 88 occurrences (36%) fall into this category. Most of those occur in a narrative context (85), with one in the epistles (quotation) and two in Revelation (both are direct discourse). Of these quotations that occur in the Gospels and Acts, 7 are in **parables**, and one in the **explanation of a parable**. 4 are quotes, and the other 73 are in general direct discourse.

Process-Argument Verbs

The next question concerns whether the –μός noun is modified by a <u>Process-Argument Verb</u>. First, however, it is necessary to discuss what a process-argument verb is, and why it

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[54] There is a –μός noun in the letters to the seven churches in Revelation 1-3, which could be counted as apocalyptic or epistolary. The totals presented here count it as apocalyptic.

matters. Process-argument verbs are verbs that can take a process/event/action as an argument.

For instance, take the sentence "The destruction of the Temple occurred in the year 70." The

verb "occurred" takes an argument ("destruction") that represents a process. Therefore

"occurred" is a process-argument verb. Other examples might include "resist" in "resist

temptation," or "consider" in "consider your actions," as both "temptation" and "actions" denote

a process. This is significant to the present study because it might show whether the deverbal

noun takes a process meaning or a resultant state meaning.

With this in mind, process-argument verbs are commonplace with –μός nouns. 88 of the 244 occurrences (36%) occur with a verb that could potentially fall into the process-argument verb category, with most of those occurring with verbs that certainly fall into the process-argument verb category. 8 of these have an implied process-argument verb, as in Heb 12:14, which says "Pursue peace with everyone, and holiness" (Εἰρήνην διώκετε μετὰ πάντων καὶ τὸν ἁγιασμόν). The syntax clearly implies that the audience is to also pursue holiness (ἁγιασμός) although that is not explicitly stated. Potential process-argument verbs in Koine Greek appear in Table 2.11. Some of these are more likely to be process-argument verbs than others. However, many of these are widely accepted as process-argument verbs. For instance, see BDAG's entry for εἰσέρχομαι,

Table 2.11

Word	Gloss
ἀναβαίνω	enter one's mind
ἀνέχω	undergo
γίνομαι	happen
δίδωμι	cause/produce
εἰμί	is/take place
εἰσέρχομαι	happen
εἰσφέρω	bring in
ἐκπορεύομαι	proceed
ἐμπίπτω	experience
ἐπάγω	bring on
ἐπεγείρω	cause
ἐπιπίπτω	happen
ἔρχομαι	take place
θεατρίζω	expose
λαμβάνω	experience
περιπίπτω	encounter
ποιέω	do
συμβαίνω	happen
συντελέω	finish
ὑποφέρω	endure
φέρω	bear

which indicates that it can mean "to move into a space," "to enter into an event," or "to happen."[55] The second and third definitions would classify as process-argument verbs.

Physical Nature Indicator

The third feature of context concerns whether or not there is a contextual indicator that the DN represents a physical item. For instance, if a noun is described as ἐν ᾧ ἐπεγέγραπτο ("with the inscription"), then it would likely refer to an item that has words upon it. An item with an inscription would be tangible. Commonly, Physical Nature Indicators describe the appearance of an item, or how other physical items relate to it. This dissertation only found twelve New Testament occurrences of a –μός noun with a physical nature indicator, but those twelve will prove useful.[56]

Agnate Clauses

The final piece of data this chapter discusses is an Agnate Clause. As a reminder, an agnate clause is a clause that describes the same action as the deverbal noun, but in a clause with a main verb that has the same meaning as the deverbal noun. While finding a matching agnate clause can be a subjective exercise, this chapter limits the analysis in two ways as an aim toward objectivity. The first is to only allow agnate clauses with cognate verbs. A deverbal noun might have a cognate verb that has a different root, such as in Luke 24:37-38. There the verb δοκέω states that those present were thinking. But when Jesus describes the content of those thoughts, he uses διαλογισμοὶ, which has a different root. The totals in this section do not count that and similar examples, no matter how clear they might be. Further, only examples in close proximity

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[55] BDAG, Greek-English Lexicon, 294-295.

[56] See below in the Physical Nature Modifiers section.

count toward the totals. If a potential agnate clause occurs in another book, it does not count. If it is in the same book, but is not clearly a reference to the same event, that is not counted either. With that in mind, 43 of the 244 occurrences meet these criteria, showing, at a minimum, that agnate clauses are not rare. When adding in the non-contextual and non-cognate agnate clauses, that number could only go up. Chapter three will discuss these in more depth, and discuss some principles for determining the agnate clause when it is not directly stated.

Conclusion

The present chapter has laid forth some objective data on New Testament nouns containing the –μός suffix. The first step involved using up-to-date morphological resources to determine nouns that contained the –μός suffix. The second step identified the cognate verb of each –μός noun. This research project then analyzed the cognate verbs to find various characteristics, such as the type of verb it was, its valency, and the rough timeline of the verb developing into the deverbal noun. After this, the researcher searched for every New Testament occurrence of –μός nouns, weeding out a few false positives. Finally, the researcher analyzed those occurrences for a number of objective characteristics, such as the morphological and syntactic construction of each occurrence, as well as some of the more objective semantic data. This chapter has shown that –μός nouns follow the normal patterns of Greek. It has also laid a foundation upon which this dissertation can analyze each occurrence to look for patterns.

The goal of this dissertation is to find and reveal patterns for the –μός suffix in the New Testament. In order to find patterns, one must have data to analyze. This chapter has worked toward that goal by laying out the objective data surrounding the –μός suffix. From here, Chapter 3 will delve into the subjective data, proceeding along the spectrum of objective to subjective. The most subjective data in chapter three will be the principles for determining meaning.

Chapter 3

Analysis

The goals of this chapter are at the core of the goals for the dissertation. The first goal of this chapter is to identify principles that allow grammarians to distinguish whether a –μός noun refers to the process indicated by its cognate verb or to a result of that process. Second, for occurrences that refer to a process and have a modifier, this chapter hopes to identify patterns for modifiers. If this dissertation accomplishes both goals, the principles drawn from those patterns will provide more tools for exegesis. In order to reach those goals, this chapter first discusses the method used to gather information. Second, it presents an overview of the data found during that process (which can be found primarily in Appendices B and C). Third, it provides many of the patterns evaluated during this process, as well as whether those patterns indicate valid principles for New Testament –μός nouns.

Method

The research for this chapter involved searching for the subjective elements surrounding occurrences of –μός nouns. This research corresponds to the fifth part of the methodology outlined in chapter one: analyzing occurrences for subjective aspects.[1] The first step for this part was surveying the current state of Koine Greek grammar. The data points that this step gathered, along with those covered in chapter 2, formed a foundation for making decisions in the second step. The second step evaluated deverbal noun (DN) patterns to see if they correlated with any specific meaning. Those meanings concerned whether the DN indicated a process or a result, and

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[1] See the Methodology section above.

whether modifiers of process DNs were subjective or objective. The third step involved re-evaluating the initial set of decisions based on patterns found to be valid. Finally, the researcher looped through the second and third steps multiple times to evaluate patterns and determine which ones were applicable to Koine Greek. First, this dissertation will finish laying the foundation of data.

<center>Step 1: The Current State of Research</center>

As this study moves toward evaluating potential principles, it will do so on the basis of current scholarship. This includes both the objective data laid out in chapter 2 as well as the current state of grammatical studies in Koine. Being able to build on the current state of research in any field is quite helpful. This study evaluates potential principles via a loop; or, more precisely, a spiral, and the current state of research is a good place to begin that spiral. The research uses conclusions from one round of analysis as the basis of the next round of analysis. The goal of this is to spiral closer and closer toward the precise principles that govern–μός nouns in Koine Greek. One could enter into the spiral at random, attempting to find patterns without any indication of whether each occurrence is process or result, subjective or objective. This is terribly inefficient, especially in a field that has so much research already. Even though the current state of research has flaws (every form of human knowledge does), those flaws will eventually come out if scholars continue spiraling toward the principles that govern this suffix.[2] The starting point for this project is the current state of Koine Greek research. This is a firm foundation on which to begin due to the amount of work already done in this field.

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[2] This sentence is a statement about scholarly research as a whole. The present research project will almost certainly not reveal all the exegetical flaws concerning–μός nouns. However, it will hopefully reveal some and help other scholars to find more.

Additionally, starting here allows the reader to see the benefits of this study. A reader can compare the initial decisions to the final conclusions in order to see what changed. If nothing changed, then this method provided little additional insight. If there are noteworthy changes, the reader will be able to clearly see the benefits of this method and where Greek grammar needs to change. In either case, this method allows the readers to come to their own conclusions.

<div align="center">Step 2: Evaluating Patterns</div>

After finishing data collection, the research process began evaluating potential patterns to see if they indicate valid principles for New Testament –μός nouns. This dissertation defines *Patterns* as lexico-grammatical constructs. A familiar pattern is the deverbal noun + genitive modifier pattern. The research involved finding these patterns and checking if they correlated with one or more *Meanings*. These meanings are the end goal of exegesis, i.e. what the original author intended for the original audience to understand.[3] A meaning might be that the DN is a process DN, or a result DN. It could also be that a modifier represents the subject, object, or another part of the implied action. When a pattern correlates to a specific meaning (or meanings), this research drew a *Principle* from that pattern. The principles follow the formula of "pattern X indicates meaning Y." This process relied upon the data found in chapter 2.

Each iteration of step 2 required using the available data. Chapter 2 presented the bulk of the available data, which remains unchanged throughout the entire loop.[4] The first iteration of the loop also relied heavily on the current state of research. As the research found valid principles, it

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[3] Grant Osborne, *The Hermeneutical Spiral* (Downers Grove: InterVarsity Press, 2006), 24ff.

[4] This study did find errors in the data presented in chapter 2 while looping through steps 2 and 3. However, the vast majority remained unchanged.

applied those principles to the current state of research for each occurrence.[5] Therefore, the current state of this study's research evolved during the research process, leading to stronger and stronger conclusions over time. This also improved the foundation for evaluating principles in subsequent iterations of the loop. For example, take the principle concerning plurality in DNs (the pattern), which usually indicates that the DN refers to a result (the meaning). The first loop left this principle unclear because it found that a significant number of plural DNs referring to processes. As the data grew, it became clear that New Testament –μός nouns follow a similar principle, but not the exact same one. For this reason, some principles were evaluated during multiple iterations of the loop, especially those that remained unclear after their initial evaluation. This continued until the researcher considered the mine of information exhausted. This process did not lead to a clear conclusion on every occurrence of–μός nouns, but that is not the goal of this project. The goal is to find principles that any scholar can apply for exegesis.

Step 3: Applying Principles

After each round of evaluations, the researcher then applied valid principles to the pertinent passages. The point of this continual re-evaluation was to spiral toward a better understanding of the passages, to further strengthen the foundation of evaluations, and ultimately, to better understand the –μός suffix. Often these principles had little impact on the data. Valid principles became clear only when a pattern commonly pointed to the same meaning(s). Therefore, when the research yielded a valid principle, it was because a minority of pattern occurrences had a different meaning. The research then re-evaluated those minority occurrences based on the newfound principle. If the newfound principle provided stronger

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[5] See Step 3: Applying Principles below.

evidence than the previous evidence for an occurrence, the researcher changed his conclusion about that occurrence. If not, his conclusion remained the same. Every round of evaluation required slight alterations to his previous conclusions, but they generally remained the same. These conclusions added to the foundation for evaluation during the next iteration of the loop.

Conclusion of the Method

This three-step process of laying out the current state of Koine studies, evaluating potential principles, and integrating valid principles is a strong one. The current state of Greek grammar studies is a good place to begin. Further, since patterns found to be valid in one iteration of the loop helped evaluate potential patterns in subsequent loops, the conclusions led to a stronger and stronger foundation for evaluation over time. Once the researcher found no additional patterns, he looped through an additional time to ensure his conclusions were solid, and then concluded the research process.

This chapter presents the findings in a different order than the steps above. In order to simplify the structure, this chapter first presents the data for each occurrence. The data includes both the initial set of findings (step 1) as well as the final conclusions reached for each occurrence (step 3). After that, this chapter discusses patterns that the researcher evaluated (step 2), ranging from those that do not apply to those that do. The order of presentation is different from the order of research for another reason. The goal of research is not to provide definitive answers on each and every occurrence of a –μός noun. Rather, it is to provide principles that other scholars should evaluate and, if accepted, integrate into their exegesis. If a few of the conclusions concerning individual occurrences are incorrect, that should not invalidate the

principles reached herein.[6] Presenting the conclusions on each occurrence at the end of this chapter could make them seem like the goal. Therefore this chapter first presents the remaining data points before taking aim at the goal itself.

Data Points

Before determining patterns, one must review the data. Much of that was done in the previous chapter; however, a few data points remain. The reason the previous chapter did not include them is because these are more subjective elements, and some changed throughout the course of this research project.[7] The columns presented below are divided into four sets. These four sets apply to both the process/result distinction, as well as the subjective/objective distinction. Thus they appear in both Appendix B and C.

The first two sets of columns, along with the data presented in chapter 2, complete the foundation for analysis. The first set of columns provides an overview of current scholarship concerning the passage based on a selected list of commentaries. The second set presents the researcher's initial decisions for each passage. This second set of columns is based on the first set as well as the columns presented in chapter 2. These first two sets represent the current state of Koine grammar concerning the –μός suffix (step 1). Together these two sets of columns create an initial foundation for evaluating potential principles (step 2).

The third and fourth sets of columns present the data for applying valid principles (step 3). The third set of columns represents the decisions reached for each passage. This set concerns

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[6] Although it might very well impact how those principles are applied.

[7] "Subjective" in this sentence refers to the fact that the data is determined by a subjective decision. It has nothing to do with being the subject of an agnate clause.

whether the –μός noun represents a process or a result, and whether the modifiers are subjective or objective. Finally, a fourth set of columns gives the context for reaching this decision. Mainly this involves the principle(s) that led to this decision.

To make identification easy and clear, as this chapter discusses the columns, the title of each column is capitalized and underlined. Further, many of these columns have a limited set of options. When this is the case, those options are presented in bold.

Set 1: The Basis for Initial Decisions

It is helpful to have a base set of data to begin this spiral toward the principles. This base set of data is the columns covered in chapter 2, plus an additional four columns in Appendix B and two in Appendix C. The first additional column presents the lexical meaning of the word. The second column contains any verse-specific notes on an individual occurrence within the lexicons. These two columns appear in Appendix B only because they relate to the lexical meaning of the –μός noun, and thus only apply to the process/result distinction. The third (or, in Appendix C, the first) additional column contains a one-word overview of other scholars' thoughts on the matter. A final column contains any notes that do not fit elsewhere.

The first column shows the <u>Lexical Meaning</u> of the word. The column contains whether the definitions of the word contained in the major lexicons point toward it denoting **process** or **result**.[8] It may also be **mixed** if some definitions point toward process while others toward result, or it may be **unclear** if the lexicons did not provide enough clarity. The situation can also indicate **disagreement** among lexicons. As an example, the only meaning of ἀναβαθμός that

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[8] The process emphasized BDAG, Greek-English Lexicon, and Johannes P. Louw and Eugene A. Nida, *Greek-English Lexicon of the New Testmanet: Based on Semantic Domains* (Minneapolis: Fortress Press, 1988). When helpful, the researcher also consulted Liddell, Scott, and Jones, *Greek-English Lexicon*.

lexicons provide is "a flight of stairs." Therefore, the lexicon points toward result. As Appendix

A is concerned with lexical information, this column would fit better there. Since this

dissertation presents the idea alongside information in Appendix B, both Appendix A and B

contain the column. The information is the same in each, but Appendix B lists it with every New

Testament occurrence. It is also convenient to list it beside the next column in this set.

Some lexicons are prone to list occurrences under specific definitions, further clarifying

what the authors think that occurrence means. For instance, BDAG's entry for διαλογισμός

("thought/reasoning") classifies Rom 1:21 as a process, and Luke 2:35 as a result.[9] This leads to

the second column in this set, <u>Lexical Examples</u>, which points out any references to specific

occurrences. The options include four of the previous column's five: **process**, **result**, **unclear**, or

disagreement.

The third column (the first one also in Appendix C) concerns the current <u>Scholarly</u>

<u>Opinion</u>. This is similar to the previous two columns, except that it is gleaned from a select list of

commentaries, grammars, and other pertinent works instead of lexicons.[10] The contents are

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[9] BDAG, Greek-English Lexicon, 58.

[10] Commentary sets include Graham Davies and Christopher Tuckett, eds., *International Critical Commentary* (London: T&T Clark, 1895-2014); Donald A. Hagner and I. Howard Marshall, eds., *New International Greek Testament Commentary* (Grand Rapids: Eerdmans, 1978-2016); Andreas J. Köstenberger and Robert W. Yarbrough, eds., *Exegetical Guide to the Greek New Testament* (Nashville: B&H, 2010-present); Bruce M. Metgzer, Glenn W. Barker, and David Allan Hubbard, eds., *Word Biblical Commentary* (Nashville: Thomas Nelson, 1982-2014); Lidija Novakovic, ed., *A Handbook on the Greek Text* (Waco: Baylor, 2003-present); Cleon Rogers III and Cleon Rogers Jr., *The New Linguistic and Exegetical Key to the Greek New Testament* (Grand Rapids: Zondervan, 1998).

Additionally, the research consulted two commentaries for individual works that are not part of a set. These were Daniel Patte, *The Gospel According to Matthew: A Structural Commentary on Matthew's Faith* (Norcross, GA: Trinity International Press, 1996); Stanley E. Porter, *The Letter to the Romans: A Linguistic and Literary Commentary* (Sheffield: Sheffield Phoenix Press, 2015).

As grammars mentioned texts, the researcher took note of this. The main grammars that gave examples were Wallace, *Greek Grammar*, and Young, *Intermediate*, but ideas came from many grammars mentioned throughout this study.

similar, as it can be one of a multiple options: Appendix B can contain **process** or **result**, Appendix C can contain **subjective**, **objective**, or **other**, and either Appendix can contain **mixed, unclear**, **disagreement**, **figurative**, or **null**. Uniformity (or near uniformity) leads to a value of **process** or **result**, **subjective** or **objective**. Uniformity that a modifier is neither subjective nor objective leads to a value of **other**. **Mixed** is rare, and indicates that scholars generally admit multiple options are possible. A value of **unclear** indicates unclear comments on the matter, and disagreement among scholars leads to a value of **disagreement**. **Figurative** denotes that commentators think the word is used figuratively. This column might also have a **null** value, indicating the commentaries in this study did not comment on the matter.

The final column contains any Notes. If one of the previous columns needs an explanation, or if there is an important point that is not communicated by one of the other columns, the notes column will contain it. The goal of this column is to allow the reader to better understand the researcher. As the researcher deems it appropriate, this column will tie together the first set of columns into one logical thought. Together, this set of columns forms a foundation that allows the researcher to make an initial decision for each occurrence.

Set 2: Initial Exegetical Decisions

The most important data points concern whether each occurrence is a process or result DN, and whether each modifier is subjective or objective. That is, after all, what this dissertation aims to accomplish. This set will contain a column for each of the two options pertinent to each appendix (process and result or subjective and objective), another column indicating whether the occurrence is figurative, a few columns for the specific sub-type(s), a column indicting whether or not this will be used in the first iteration of the loop, and a notes column.

The columns in this set (<u>Process</u> or <u>Result</u> and <u>Subjective</u>, or <u>Objective</u>) indicate the conclusion to which current biblical scholarship leads. These decisions are based on two sets of data. First, the researcher consulted current scholarly opinion, which is represented by the first set of columns.[11] The researcher used the major lexicons and a survey of commentaries focused on Greek to ensure he took a healthy amount of evidence into account. Second, the research applied current exegetical practices. Since this project is more focused on making the process/result and subjective/objective distinctions, and since other works are only sometimes focused on these decisions, the present research project frequently carries more weight than other sources.[12] For example, commentaries are mixed about whether the phrase ὁ βρυγμὸς τῶν ὀδόντων ("gnashing of teeth") is a subjective or objective genitive. However, the researcher double checked this to see if ὀδόντας appears as the subject or object of the cognate verb βρύχω. In the lone New Testament instance of the two words appearing together (Acts 7:54), ὀδόντας is the object/theme of the action, not the subject. For this reason, it seems more likely that ὀδόντων is an objective genitive. Simply put, these columns represent the strength of the evidence from current biblical scholarship. This study uses a Likert scale to convey the weight of that evidence.

Each of these four columns uses a **1 to 5 Likert scale**. 1 means it is very unlikely, although there is evidence for the position. 2 represents that it is unlikely, and 3 that it is possible. 4 indicates it is likely, and 5 that it is very likely. If the column is null, that means there is nothing indicating this is possible, the evidence is so shaky that it should not be considered, or it is not applicable. The example of ἁγιασμὸς ("sanctification") in 1 Cor 1:30 illustrates both

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[11] See the <u>Set 1: The Basis for Initial Decisions</u> section above.

[12] Sometimes commentaries and lexicons do not take into account all of the evidence, sometimes they provide no comment on these topics, and other times those comments are unclear. Commenting on these topics is not the goal of their work, and the lack thereof does not detract from them.

columns in Appendix B. In this case, the word may refer to a process or a result. The process column contains a value of 3 because there is slightly more evidence that it is a process, and the result column contains a 2 because it seems unlikely. The same concepts apply to the subjective/objective pair of columns in Appendix C, although that will not apply to result DNs or to modifiers that are definitely not subjective or objective. In these cases they will be null. Further, there are cases where the Likert scale for a pair of columns will not add up to 5. If the two columns add up to less than 5, that indicates a lack of evidence. If they add up to more, then there is a surplus of evidence. Deciding between process and result or between subjective and objective is not the only decision to make.

Each DN can also be marked as <u>Figurative</u> if (and only if) the denotation refers to process or result and the connotation refers to the other option. A word could denote a process while figuratively connoting a result. The inverse could also be true. For example, δεσμός refers to the chains used to bind someone in prison. In Acts 23, verses 29 and 31, this is the meaning, but it figuratively represents imprisonment. The complex situation is as follows: δεσμός is a noun derived from a process that represents the instrument of that process which figuratively (through synecdoche) represents the entire process. The previous sentence is unwieldy because the situation is unwieldy. The complexity of this example shows how important it is to note when the DN is figurative, and this is a clearer example among the occurrences that contain figures of speech. The purpose of this column is to show that the research for this dissertation will tread lightly when it comes to figurative occurrences. The less clear a figurative occurrence is, the less weight that occurrence will receive when evaluating potential patterns. It is important to emphasize that not all figures of speech will be marked as such here. The appendix only lists

something as figurative if the figure of speech blurs the process/result distinction.[13] This column also uses a **Likert scale**.

The modifiers listed in Appendix C have sub-categories. Specifically, one might describe subjective and objective genitives by means of their corresponding verbal argument. The terms "subjective" and "objective" in this context are at well over a century old.[14] Since that time linguistics has led to further distinctions between verbal arguments. The argument of the agnate clause with which a subjective or objective modifier corresponds appears in the <u>Corresponding Argument</u> column. As mentioned previously in this dissertation, verbal arguments include **agent**, **cause**, **instrument**, **theme**, **experiencer**, **goal**, **source**, and **location**. Some of these can be the subject of the agnate clause, some can be the object, and others do not fit cleanly in either category.[15]

For clarity, here are a few examples of how corresponding arguments work. The agent is frequently the subject of the verb, as is "Roy" in "Roy left home." In the previous example "home" is the source, which is commonly the object. However, an experiencer might be either subject or object. "Liz" is the subject and experiencer in "Liz enjoys Andrew." In "Andrew

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[13] BDAG, *Greek-English Lexicon*, 453, hint that some process DNs can figuratively represent when that action occurs. However, they astutely note that the focus is still on the action. As such, these occurrences as not marked as figurative, because they are not figurative in the sense that they blur the distinction between process and result. This situation occurs in Luke 8:13; 22:8; Heb 3:8, 15. Additionally, Matthew uses the concept of "weeping and gnashing of teeth" to represent many types of pain certain people will experience. As this does not blur the line between process and result (it clearly refers to a process), it is not marked as figurative in the appendix.

This column also applies to the subjective/objective distinction. That is not mentioned here as every instance of a modifier being figurative is in the phrase δεσμοῖς μου ("my chains"), which Paul used in Philippians and Colossians. In each case, it literally refers to the chains attached to Paul's hands, but figuratively the reference is to Paul being imprisoned.

[14] The earliest use of these terms that the researcher found was in Hadley, *Greek Grammar* (1884), 233. Hadley does not indicate that he came up with these terms, meaning the probably existed before 1884. Regardless of exactly when they were coined, the points still stand.

[15] See the <u>Either/Or and Indirective</u> section below for a more thorough discussion of these.

surprised Liz," she is still the experiencer, but is now the object. In both cases Liz experienced an

emotion, but different verbs put the person experiencing those emotions in different slots. Other

modifiers may represent the cause, the result, or another aspect of an action, but that is outside

the scope of this dissertation. To tie this paragraph together, take two examples:

1. Using a deverbal noun: "The barbarian's destruction of the city occurred in the year

    410."

2. Using a verb: "The barbarians destroyed the city in the year 410"

In the first example "of the city" is objective and corresponds to the object/theme ("the city") of

the second example. In the first "barbarian's" is subjective and corresponds to the subject/agent

("The barbarians") in the second. Due to the potentially confusing nature of the

subjective/objective distinction, an additional sub-type is very helpful.[16]

Lexicons, grammars, commentaries, and the researcher of this dissertation may agree or

disagree with this dissertation's initial decision on process/result or subjective/objective, and that

factors into the Strong Corroboration column within each section. If the scholars surveyed agree

with the author (implicitly or explicitly), and if the evidence is strong, then this column will have

a **yes** in it. If there is disagreement between sources, but one side of the argument is much

stronger than the other, that situation will also lead to a **yes** in this column. If the evidence is not

strong or if there is no scholarly consensus, then the column will probably be **null**.[17] The strong

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[16] This paragraph and the examples assume the verb is in the active voice when it comes to defining the subject and object. The possibility of passive voice can lead to further confusion, as the modifier might be classified as subject when it is really the theme. That is the case with βασανισμός ("torture") in Rev 14:11, where the verb in the agnate clause is passive (Rev 14:10), and thus the modifier (αὐτῶν, "their") is clearly the subject and theme of the agnate clause. Since this is exceedingly rare, the current project lists this as an objective modifier.

[17] Using the yes/null pair is easier for the human eye to identify than the yes/no pair.

corroboration can point toward process or result, objective or subjective. This column exists for two reasons.

The <u>Strong Corroboration</u> column exists for ease of use and for clarity. Since the process/result and subjective/objective pairs of columns are two columns (not one), this column allows easy filtering Appendices B and C for all initially clear occurrences. Rather than filtering on one column, then clearing the filter and filtering another column, the reader can easily see all occurrences with strong corroboration by filtering this one column. Additionally, the research for this dissertation values occurrences with strong corroboration more than those without. Defining which columns have greater influence on decisions allows the reader to better understand the researcher's process.

As with most of the column sets, a <u>Notes</u> column is included here. It contains any reasoning that the researcher thinks needs to be clarified concerning the other columns in this set. The goal of this, as with all the notes columns, is to add any miscellaneous details that do not fit in the other columns but do not warrant their own column. If the columns in set 1 do not match with the decisions recorded in this set, the reader should expect a note clarifying the difference.[18]

Set 3: Final Decisions

While applying valid principles to each occurrence (step 3), the author may change or retain his initial decisions. Therefore, this set of columns is mostly the same as Set 2. Whereas that set represents the initial decision made before trying to evaluate and apply principles, this set contains the researcher's final decisions on the matter. The columns replicated from the above section show how likely each occurrence is <u>Process</u> and <u>Result</u> or <u>Subjective</u>, <u>Indirective</u>, and

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[18] "Set 1" refers to <u>Set 1: The Basis for Initial Decisions</u>.

Objective, shown by the **1 to 5 Likert scale** above.[19] For all modifiers that are subjective, indirective, or objective, they will also have a value in the Corresponding Argument column that denotes whether they represent the **agent**, **cause**, **instrument**, **theme**, **experiencer**, **source**, **goal**, or **location** of the action. Another set of columns illustrates how the researcher came to these conclusions.

Set 4: Context for Conclusions

This set of columns provides the context for reaching the conclusions presented in the third set of columns. There are only two. The first indicates which principles led the researcher to come to the final decisions. As with most sets, a Notes column will fill in the gaps.

The first column in this set is the Principles column, which shows the principle(s) that led to the final decisions. This chapter will present those principles in due time.[20] Some columns may have only one, some may have multiple, while others may have none. Every instance of a –μός noun has a principle that applies to it. If a column lists no principles, it means there are no noteworthy principles. For example, Luke 20:42 talks about the book of Psalms (ψαλμος). The initial conclusion is that this was surely a result DN, and this conclusion remained the same throughout. The principle stating that a word must mean something within its semantic range applies always applies.[21] To avoid a meaningless repetition of that principle in every row of this column, the appendix only lists the principle when it impacts the decision in an uncommon way.

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[19] The Either/Or and Indirective section below explains the "Indirective" column.

[20] See the section below on Valid principles for distinguishing between process and result DNs, and the one on Valid principles for determining the argument to which a modifier corresponds.

[21] See the second on Semantic Limitations below.

In a few cases, a principle might seem to apply, but does not. Those principles are not listed in this column, but are explained by the <u>Notes</u>.

The <u>Notes</u> column will flesh out any gaps as it does in the other sets. The explanations in this column will often be longer than other similar columns. The notes column in this section will tie up all the loose ends that the other sections may have left. This column will commonly explain how a principle was applied to a particular passage. Additionally, if there are principles that seem to apply but do not, the column will explain the reasoning for deciding against them. The point of this is to wrap up any gaps left in the other data points so the reader can see how the researcher came to his conclusions.

<div align="center">Conclusion of Data Points</div>

The data points above record the researcher's thoughts at pertinent times during the research process. In particular, they display the initial decisions on each occurrence and the reasoning behind them, as well as the final decisions and their reasoning. However, even though the reasoning for decisions is included, the purpose of all these data points is not to provide context for coming to those decisions, but to provide context for evaluating the potential principles.

<div align="center">**Evaluating Principles**</div>

The time has come to present and evaluate what principles apply to –μός nouns in Greek. This chapter divides the potential principles into two groups. The first group of principles concerns ones that would impact the decision between whether the DN refers to a process or a result of that process. The second group of principles pertains to making a decision concerning modifiers, and their relationship to the agnate clause. Specifically, the second group concerns whether a modifier is subjective, objective, or something else. Within each group, this chapter

arranges the principles from least applicable to most. The principles are arranged by ones that are invalid, probably invalid, unclear, potentially valid, and valid.

Before covering these principles, it is important for the reader to have the proper perspective on applying principles from other languages. The principles discovered vary greatly from language to language. Some principles are nearly universal, and apply to almost any language. Other principles apply to only one language, or only one language group. Most principles fall somewhere between those two ends of the spectrum. For instance, some languages require objects that are affected by the action to appear after the deverbal noun.[22] In English, the phrase "the knowledge of algebra" is valid but "algebra's knowledge" is not. However, in Modern Greek, that is not the case.[23] Since many of the principles found in the research for this dissertation are language-specific, one should expect that many principles do not apply to Greek.

The discussion of each principle contains at least two parts. First, each section presents the potential principle. The principle roughly claims that "pattern X denotes meaning Y." For instance, if a deverbal noun is plural, it is often a result of the corresponding action. Second, the section will indicate what led to the decision. This might include reasons, an example, or both. The sections covering valid principles will have additional parts. With those ideas in mind, the first group to cover concerns principles for distinguishing process from result.

<div style="text-align:center">Principles for Distinguishing Process from Result</div>

For distinguishing process and result DNs, principles from other languages vary in their degree of application to Koine Greek. In addition to principles from other languages, Greek has

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[22] Roeper, 2005, 126.

[23] Alexiadou, 2001, 95.

its own unique principles that allow easier identification. This section of the chapter presents an evaluation of principles ranging from those that are clearly invalid to those that are clearly valid.

Invalid Principles

The first set of principles to discuss are ones that the researcher found to be invalid. Based on the New Testament occurrences of the –μός suffix, the principles behind these patterns do not apply to words with said suffix. These principles are negative statements about what can occur. Since this study surveys a small subset of Koine Greek and finds counter-examples, these patterns are not applicable. This section covers three patterns, which concern definiteness, possessive adjectives, and verb phrase adjuncts.

Definiteness

In English, result DNs can have an indefinite article and complex event nouns cannot; this is not the case in Greek.[24] This does not apply because Koine has no indefinite article, and the Greek article works differently than the English definite article. This is an open and shut case; other potential principles require more work.

Possessive Adjectives

Some languages lack possessive adjectives, meaning their appearance with a DN tends to be process, but Greek does not lack them. More specifically, Koine Greek does not lack possessive adjectives.[25] A possessive adjective is a possessive pronoun that appears in an adjectival position related to the word it modifies. An example is Matt 12:50, which contains the

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[24] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 500; Dik, "Formal and Semantic," 27; Grimshaw, *Argument Structure*, 54.

[25] Modern Greek does. See Alexiadou, *Functional Structure*, 94.

phrase μου ἀδελφὸς ("my brother"). The pattern, in this case, is a possessive pronoun (a genitive in Greek) followed by a deverbal noun. The principle says that, in languages lacking possessive adjectives, this pattern cannot indicate an object that someone possesses. Hence, it usually indicates process. In Koine Greek, possessive adjectives are allowed. In addition to the example above, Rom 1:21 contains the phrase αὐτῶν καρδία ("their heart"). This means that the principle does not apply to Koine. This principle being invalid means that the pattern should not play any factor in determining whether the occurrence is process or result.

Verb Phrase Adjuncts

Some languages do not allow speakers to modify a DN with a clause, but Koine did not restrict speakers in this way.[26] These clauses are called "verb phrase adjuncts", and they are often related via time or causality, such as "Before Ellie went home" in the sentence, "Before Ellie went home she said goodbye." In languages that retain this principle, a verb phrase adjunct appearing with a DN indicates that the DN is a result. However, Acts 6:1 shows that this does not apply to Greek. Ἐν δὲ ταῖς ἡμέραις … ἐγένετο γογγυσμὸς … ("In those days … a complaint arose …") has a temporal clause. ἡμέραις ("days") indicates a timespan, and Ἐν ("In") further confirms that as the New Testament authors commonly used it to denote time. Further, in this verse γογγυσμὸς ("complaint") is almost certainly a process DN. Even more evidence comes from the fact that this is probably a process DN, showing a strong connection to the verbal meaning. Therefore this principle, along with the others in this section, is invalid.

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[26] Chomsky, "Remarks", 11.

Probably Invalid Principles

Quite a few potential principles are probably inapplicable to Koine because there are too few occurrences of these patterns. Some of them might be overturned with a larger language study due to the small sample size of this one. However, for the purposes of this study, they do not apply. Patterns in this section include the DN being in the predicate, having a demonstrative pronoun modifier, cognates of certain types of verbs, and DNs with certain types of modifiers. None of these came to fruition as patterns that point to a valid principle.

Predicate DNs

Some languages restrict DNs in the predicate by only allowing them to be result DNs, but Koine is probably not among them. For example, if a professor says, "This is your assignment," the reference is not to the act of assigning, but to the project assigned.[27] However, Koine Greek does not seem to have this same restriction. In δότε αὐτῇ βασανισμὸν ("give her torment," Rev 18:7), βασανισμὸς ("torment") likely refers to the process, not a result of the process, due to the lack of a clear result meaning and the parallelism to another process DN πένθος ("mourning"). As it is certainly in the predicate (it is accusative), it seems likely that Greek DNs in the predicate are not restricted to being result nouns. The same is true of other patterns as well.

Demonstrative Pronoun Modifier

Sometimes the presence of a demonstrative pronoun modifier indicates that the DN is a result, but not in Koine. A demonstrative pronoun, it is claimed, appears more commonly with result DNs instead of process DNs.[28] "This building …" and other similar phrases like "this

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[27] Alexiadou Haegeman and Stavrou, *Noun Phrase*, 500.

[28] Abney, "English Noun Phrase," 75; Grimshaw, *Argument Structure*, 54.

physical item …" are grammatical, whereas "this destruction of the city …" sounds awkward. A clear exception is when the concept of the process has been established, the demonstrative pronoun + DN combination refers back to the concept. In "The destruction of the city was complete, and this destruction dispersed the people therein," "this destruction" is a process DN because it refers back to a previous DN that was also a process.

With those ideas in mind, New Testament –μός nouns with demonstrative pronoun modifiers sometimes refer to a process, and other times to a result. Acts 26:29 contains the phrase παρεκτὸς τῶν δεσμῶν τούτων ("except for these chains"), and it is a result (as δεσμός, "chains," always denotes a result DN). Other instances of demonstrative pronouns with DNs also indicate result, some are unclear, and some indicate process. Luke 1:29's use of ἀσπασμός ("greeting"), Rev 16:18's use of σεισμός ("earthquake"), and Rev 18:7's used of βασανισμός ("torture") all indicate process. One might quickly point out that these three instances all refer back to a process already established in the context, which would imply the principle is valid when properly understood. However, in this small sample size, it shows that the principle is unhelpful at best. The principle states that the demonstrative pronoun + DN pattern often indicates result, with some clear exceptions. However, if an exception appears as many times as the rule, it is no longer an exception. In addition to this, 1 Thess 4:3 has a demonstrative pronoun (indirectly) modifying a –μός noun that is probably a process. This, in addition to the fact that the exception appears as often as the rule itself, led the researcher to conclude that this principle is probably untrue.

Patterns from Verbal Cognates

The researcher also explored possible patterns concerning different categories of the DN's verbal cognate, but found no correlation between them. This included checking whether

DNs derived from achievement verbs indicated result more often than process. "Break" is an example of an English achievement verb, indicating an action that occurs instantaneously and results in a change of state. The inspiration behind this potential principle was that, since achievement verbs result in a change of state, their DNs might commonly refer to the theme that changed. However, this is not the case in Koine Greek. DN cognates to achievement verbs are process DNs as often as they are result DNs. After checking into this, the research also checked the DNs of other verb types (accomplishment, activity, psych verbs), but none proved helpful. There was either no correlation or there were too few occurrences to draw a valid conclusion. In addition, the research also checked on the DNs that have a telic verbal cognate, as well as DNs with a bounded verbal cognate, but found no correlation for either.

Modifier Patterns

Modifiers can also be divided into sub-categories, but most of the ones this study checked did not reveal any correlation to process or result.[29] This study checked whether there was a degree modifier, such as σεισμὸς μέγας (great earthquake) in Matt 8:24. Occurrences of a –μός noun with a degree modifier are more often process, but not enough to influence exegesis. It also checked on instances with a modifier that indicated the kind of action or kind of object. An example comes from οἱ διαλογισμοὶ οἱ κακοὶ ("evil ideas") in Mark 7:21. This also provided no firm correlation, as those occurrences are equally divided between process and result. Finally, it checked on instances that refer to something well-known, such as the τῷ ποταμῷ τῷ μεγάλῳ Εὐφράτῃ ("the great Euphrates river") in Rev 9:14, or the κατακλυσμός ("flood") in 2 Pet 2:5.

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[29] For an exception, see the Physical Nature Modifiers section below.

Yet again, there was no correlation to either process or result. For these reasons, the study moved on to other principles.

Patterns that Require another Study

The patterns presented below require a larger study of Greek than the present study. Most of these make a negative statement, such as "pattern X cannot mean result so it must mean process." The present study was unable to find an instance of a –μός noun that invalidated the following principles. However, validating these principles would require a different study of DNPs in Koine, often a much larger study. The principles that fall into this category concern aspectual modifiers with unaccusative cognates, adjectival modifiers, complex event nominals with prenominal temporal genitives, double objects, the phrase "do so," repetitive modifiers, frequency of the suffix, age of the word, and adverbial modifiers.

Unaccusatives and Aspectual Modifiers

The presence of aspectual modifiers with DNs usually indicates a process, especially with DNs derived from unaccusative verbs, but the present study cannot confirm this principle. An unaccusative verb is an intransitive verb (and thus has no object) whose subject fits the argument slot of theme.[30] For instance, "The dog died." The dog is not actively performing or causing the action. "The gift came" is another example. This principle is certainly possible, but the present study found only one New Testament –μός noun derived from an unaccusative verb (ἀφανισμός, "destruction"), and that word only occurs once. Therefore, the present study leaves this principle alone.

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[30] Alexiadou, *Functional Structure*, 41

Adjectival Modifiers

Sometimes adjectival modifiers point toward a result DN, but they all require a more extensive study. For instance if a DN has a numeric modifier, it is more commonly result. This is potentially due to the fact that results are more often counted than actions.[31] This study only found one occurrence of the pattern (Acts 13:33, τῷ ψαλμῷ … τῷ δευτέρῳ, "the second psalm"), which is result. So it is possibly correct, but one occurrence is certainly not enough to instill confidence. Another type of adjectival modifier that could point toward result is the distributive adjective ("such as," "any," "each," "few," "many," or "several"). There are a few more occurrences of these, but they are fairly evenly split between result and process. Perhaps a larger study will reveal a principle for these as well. Interrogative modifiers (such as "which") do not fall into the adjectival category, but they are in the same situation as distributive modifiers. They have less occurrences and are equally unclear. The next principle is a bit more complex than these have been.

CENs and PTGs

Temporality is a grammatical feature of actions more often than objects. However, in some languages, a temporal expression that is genitive and before the DN (prenominal) is called a prenominal temporal genitive (PTG). In these languages PTGs often indicate a result, and never appear with a complex event nominal (CEN).[32] The present study was unable to determine if that principle applies to Koine because no PTG occurs with a –μός noun. The present study found four prenominal genitives (see Table 3.1), but none of these are temporal. In order to

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[31] Abney, "English Noun Phrase," 75; Grimshaw, *Argument Structure*, 1986

[32] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 500.

evaluate this principle, one would need to find multiple instances of prenominal temporal

genitive modifiers with DNs and then determine if the DN was process or result in each case.

Table 3.1

−μός noun	Gloss	Verse	Prenominal Genitive	Prenominal Gloss
δεσμός	bond	Col 4:18	μου	my
θερισμός	harvest	Luke 10:2b	κυρίου	Lord
μερισμός	division	Heb 2:4	πνεύματος ἁγίου	Holy Spirit
ὀδυρμός	lamentation	2 Cor 7:7	ὑμῶν	your

Double Objects

English nominalizations with double objects indicate that the DN is a result, but in Greek,

more evidence is needed.[33] A double object occurs when a verb takes two grammatical objects,

usually one direct and one indirect object. For example, ἐκεῖνος ὑμᾶς διδάξει πάντα ("he will

teach you all things"), where ὑμᾶς and πάντα are both objects. It is not very common for an

English DNP to contain two objects, but when this construction occurs, it indicates that the DN is

a result. With Greek −μός nouns, however, there are too few examples of this.[34] Another pattern

is common in English, but uncommon in Greek.

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[33] Artemis Alexiadou, Mariangeles Cano, Gianina Iordăchioaia, Fabienne Martin and Florian Schäfer, "Direct Participation Effects in Derived Nominals," paper presented at the *48th Annual Meeting of the Chicago Linguistic Society*, 2012, 2; Stowell, "Origins," 310.

[34] Smith, *A Greek Grammar*, 252-254 provides examples of double accusatives in Greek where both objects are physical items, and examples where one is a physical item and one is an action. None of them concern −μός nouns, so this dissertation does not take them into account. Wallace, *Greek Grammar*, 181-189, shows that some of the time one of the words in a double accusative construction is an infinitive. Whether one word can be a DN is unclear, and more research should be done.

"Do So"

The phrase "do so" in English reiterates a specific action, but this study found no Greek equivalent that occurs with –μός nouns.[35] For example, "Hattie passed the ball behind her head, and did so with the knowledge that her teammate was unguarded." In that sentence "did so" refers to the entire verbal phrase that comes before it; not the act alone, nor any argument of the action, but to the entirety of the action. "Do so" can also occur with DNs. In Greek, the same could easily be true, but this dissertation could not verify that. τοῦτο ποιῆσαι ("do this") in Matt 9:28 could likely be a parallel to the English phrase. However, as that phrase refers to a verb (not a –μός noun), researching it was outside the scope of this dissertation.

Repetitive Modifiers

Modifiers that indicate repetition more commonly modify process DNs, but they are not helpful for this study. Examples of repetitive modifiers include διαφόροις ("various"), ποικίλοις ("diverse"), πολὺς ("many"), and πᾶς ("all"). These usually occur with process DNs in the New Testament occurrences, such as βαπτισμός ("baptism") in Heb 9:10 and πειρασμός ("trials") in Jas 1:2. However, it is unclear because there are also examples where they occur with result DNs (θερισμός, "harvest," in Luke 10:2 and ψαλμός, "psalm," in Acts 13:33), and there is no good way to distinguish between them. More precisely, the way to distinguish between them requires first deciding if the DN is a result or process, and that determines if the repetitive modifier is counting multiple objects or actions. For this reason, a broader study is needed to make a decision on repetitive modifiers. To be clear, many of the other patterns that need a different

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[35] Jingqi Fu, et al. (2001), "The VP within Process Nominals: Evidence from Adverbs and the VP Anaphor *do-so*," *Natural Language and Linguistic Theory* 19 (2001), 571, 573.

study require a study with more occurrences. That might help make a decision for this pattern, but it might not. Another researcher could determine whether this is valid from the occurrences found in this study if they were able to find a way to distinguish between repetitive modifiers that count events and those that count results. The present study was unable to find a distinguishing feature, therefore another study is needed.

Suffix Occurrences

As a general rule, the more times a DN suffix occurs, the more likely it is to retain verbal characteristics, but that is outside the scope of this study. Many of the other patterns mentioned are grammatical patterns. This is a much broader pattern, one that looks at the full scope of linguistic utterances. Across all languages, it appears that, for suffixes that attach to a verb's stem and create a deverbal noun, the more a suffix occurs, the more likely it is that the DNs with that suffix indicate the process instead of a result.[36] There are two reasons that pattern lies outside the scope of this study. First, one would need to study all the other DN suffixes in Greek to see if this applies to Greek. Second, even if it did apply, it is unclear how to apply a very broad truth in one specific occurrence. There would need to be clear rules for when it does and does not apply to a passage. Potentially this could be used as a last resort when nothing else clearly indicates either way, but that is rarely the case in the New Testament. For these reasons, the present study does not account for occurrences of the morpheme. The principle for the number of occurrences is similar to the principle concerning the age of a word.

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[36] Anderson, "Deverbal Nouns," 66.

Age of the Word

The older a word is, the more its meaning varies, but again, that is outside the scope of this study.[37] The present study contains a few words from Homer's writings. However, these 1,000 year old words are no more semantically varied than the words that appear for the first time in the New Testament. For example, ποταμός often indicates a river, or sometimes a flood, and has held that meaning since at least the time of Homer. The semantics of the word are relatively stable. To be fair, this is but one counter-example, and there are more Greek DNs not included in this study than ones that are included. For this reason, it is better to say that the scope of this study is too small. Two steps should be taken before this principle should be applied to Greek. First, one would need to study all DNs, and then one would need to show how it should be applied. For these reasons, this principle is outside the scope of the present study.

Adverbial Modifiers

Some languages allow select subclasses of adverbs to modify DNs, and this points to a process; with Koine Greek –μός nouns the situation is much less clear. Modern Greek allows manner and aspectual adverbs, but disallows modal and speaker-oriented ones. In most cases, this points to a complex event noun.[38] In Koine, adverbs are rarely direct DN modifiers. When they are in the same context and seem to be modifiers, they are often modifying a verb governing the DN. Take Matthew's repeated phrase ἐκεῖ ἔσται ὁ κλαυθμὸς καὶ ὁ βρυγμὸς τῶν ὀδόντων ("There will be weeping and gnashing of teeth"). ἐκεῖ ("there") is an adverb, and modifies ἔσται ("will be"). κλαυθμὸς ("weeping") and βρυγμὸς ("gnashing") are arguments of ἔσται, so the

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[37] Anderson, "Deverbal Nouns," 62, 69, 79; Camacho, "Argument Structure," 21.

[38] Alexiadou, Haegeman, and Stavrou, "Noun Phrase," 529.

adverb is modifying the action around those DNs, and not the DNs directly. There are some cases where adverbs directly modify a DN, such as in Acts 16:13. There οὗ ("where") modifies ποταμός ("river"), indicating the location of ποταμός. ποταμός is a result DN. This could mean that locative adverbs indicate result DNs, but such a conclusion would be rash. If another study found two instances of a locative adverb with a DN where the DN indicates a process, it would overturn this study's findings. Therefore, yet again, a much larger study is needed to determine this. On the other hand, there are some patterns that do lend themselves toward more confident decisions.

Potentially Valid

Some principles seem to be true, but for various reasons, this study does not use them. This dissertation might not use them for one of a few reasons. Perhaps there are too few occurrences to form a strong opinion, perhaps the modifier has multiple meanings but only one fits the pattern, or perhaps it is unclear how this principle helps. Future researchers are encouraged to glean from this section as these seem to be the most promising ideas outside of those that are valid for –μός nouns. Patterns covered here include unaffected objects, aspectual modifiers, manner modifiers, stative cognate verbs, and implicit argument control.

Unaffected Objects

Unaffected objects cannot be pre-posed. In this paragraph "pre-posed" means that a modifier comes immediately before the word it modifies. In this study, since the modifier is attached to a nominal, it can also be called "pre-nominal". "Affected objects" are arguments in a verbal phrase that receive the action, and are affected by the action itself (not by subsequent actions). Unaffected objects are not affected by the action. The grammatical pattern is a pre-nominal modifier (often a genitive) that appears immediately before the DN it modifies, as is

"George" in "George's affection". The principle states that a pre-posed object must refer to an argument other than the unaffected object, such as the subject or an affected object. In English, the phrase "algebra's knowledge" makes no sense because algebra remains the same whether someone knows it or not. On the other hand, "John's murder" could represent the idea that John was murdered because the action changed him.[39] If true, this would clarify ambiguous verbs such as "John's love". John cannot be the object of love since he would be unaffected by the verbal action, but he could be the subject.[40] This principle is often called the *Affectedness* constraint.[41]

In Koine (though not in Modern Greek), the affectedness constraint seems to hold true, but there are too few examples to adopt it for this study.[42] There are three instances of a genitive modifier occurring immediately before the DN, and one of a preposition that could also be considered an argumentative modifier.[43] Table 3.2 lists four prenominal modifiers, all of which refer to either the subject or the affected object of the implied action. Four instances could be enough to tentatively verify it as true, but two reasons hold it back. First, this principle is often stated in the negative (unaffected objects cannot be pre-posed), which is unverifiable without a

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[39] On another note, these two examples emphasize the helpfulness of distinguishing verbs according to their semantic classifications (state, activity, accomplishment, achievement, etc.) Without a way to distinguish between the clauses "Sue knows algebra" and "Sue murders John", the difference in the possible DNP structures of their cognate DNs is left without explanation. The fact that "know" is a state verb and "murder" falls into the achievement category distinguishes them. Therefore, in general, DNs formed from achievement (and accomplishment) verbs allow object pre-posing while state verbs do not.

[40] This principle, even if it is true, would not impact on the exegesis of the phrase ἀγάπη τοῦ θεοῦ since in that phrase the modifier comes after the DN.

[41] Alexiadou, 2001, 93-96, 100; Thomas Roeper, "Chomsky's Remarks and the Transformationalist Hypothesis," in *The Handbook of Word Formation*, Pavol Stekauer and Rochelle Lieber, eds. (Dordrecht: Kluwer, 2005), 126.

[42] Alexiadou, 2001, 95.

[43] This study found other prenominal modifiers, but they are likely not arguments, such as Ἰορδάνῃ ποταμῷ ("Jordan river") in Matt 3:6. See the Appendices for further study.

much larger study. Second, Heb 6:2 is an instance where the –μός noun is potentially a pre-posed

unaffected object.[44] For these two reasons, the present study is only able to point other

researchers in the right direction, and is unable to draw a firm conclusion on the matter.

Table 3.2

–μός noun	Gloss	Verse	Prenominal Modifier	Prenominal Gloss
ἁγιασμός	sanctification	1 Thess 4:3	θέλημα τοῦ θεοῦ	will of God
διαλογισμός	thought	Luke 2:35	ἐκ πολλῶν καρδιῶν	from many hearts
μερισμός	division	Heb 2:4	πνεύματος ἁγίου	Holy Spirit
ὀδυρμός	abuse	2 Cor 7:7	ὑμῶν	your

Aspectual Modifiers

DNs with an aspect-indicating modifier are usually process DNs, and this might indicate

a valid principle in Koine, but more examples are needed. These modifiers are carried over from

the agnate clause. For instance, adverbs usually do not modify nouns, but they can modify DNs

that indicate a process. Aspectual modifiers include adverbs, lengths of time, and prepositional

phrases that indicate aspect.[45] Greek examples are ἄφνω δὲ σεισμὸς ἐγένετο μέγας ("Suddenly a

great earthquake occurred," Acts 16:26), and εἰς κρίσιν μεγάλης ἡμέρας δεσμοῖς ἀϊδίοις ("in

eternal chains until the day of great judgment," Jude 6).[46] This principle seems to be true

because, semantically, events can have aspect but results do not. For instance, "Construction

took two months," fits semantically, but, "The Empire State Building took two months," does

not. The second sentence grammatically expects a verb (such as "to construct"), but by itself the

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[44] The phrase in Heb 6:2 centers on διδαχή, and is therefore outside the scope of this study.

[45] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 498-499, 502; Alexiadou, *Functional Structure,* 10-12, 41, 55; Giannakidou and Rathert, "Structure", 7; Grimshaw, *Argument Structure*, 50-51, 58; Vendler, *Linguistics*.

[46] δεσμός ("bond") denotes a result DN, but is used figuratively in Jude 6 to refer to a process.

second sentence is incomplete. An important note is that these modifiers may or may not directly modify the DN, and they can modify a verb that indicates an action. Since there are only a few clear aspectual modifiers with –μός nouns, there are not enough for a firm conclusion.

Manner Modifiers

When a modifier indicating the manner of an action occurs with a DN it often indicates a process, but it is hard to determine what qualifies as a "manner modifier" in Koine.[47] Specifically, a manner modifier indicates how an action is done. The issue in Greek is that some modifiers could indicate how the action is done, but those same modifiers could indicate the content, extent, or another aspect of the action. For instance, μέγας modifies σεισμὸς nine out of the fourteen times that σεισμὸς appears in the New Testament, such as in Acts 16:26. It seems to indicate the violent nature of the earthquake ("great earthquake"), but it could indicate how far-reaching the earthquake was ("large earthquake"). The first translation indicates manner, while the second could indicate manner, extent, or location. Similar words and phrases describe some other –μός nouns, such as the list in Table 3.3. These words vary as to whether or not they indicate manner, and that is precisely the point; it is hard to tell. If there were a method for distinguishing between occurrences of these words that indicate manner and those that do not, and if that method were separate from whether or not there is a DN in the sentence, manner modifiers would potentially be a clear and helpful pattern. However, since there is not a known way to distinguish between instances of these modifiers that are manner and those that are not, this pattern is unhelpful for the present study.

Table 3.3

Word	Gloss
ἱκανὸς	sufficient
πολύς	much
πονηρός	evil
κακός	bad

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[47] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 529.

Indirect Participants

In some languages, when indirect participants of the action modify a DN, it indicates result.[48] While this is promising in Koine, it is not certain. Direct participants of an action are present in the time and space in which the action occurs, such as when a batter hits a baseball. The batter (agent), the bat (instrument), and the ball (theme) are all present (in both space and time) when the hit occurred. Indirect participants are not present. If someone watching sports on TV is excited, the sporting event is an indirect participant and the person watching TV is a direct participant in the excitement. It is common for people and physical objects to be direct participants, while indirect participants are more commonly events, ideas, or natural causes. When a modifier of a DN refers to an indirect participant in the agnate clause, this pattern indicates the DN refers to a result of the action. σύνδεσμος ("bond") is often modified by an abstract concept that seems to be the cause of σύνδεσμος, and σύνδεσμος refers to a result of the corresponding action (the bond itself). An example of a process DN occurring with an indirect participant is in 2 Cor 7:7, where the Corinthians mourned (ὀδυρμός) for Paul, who was not present. This counter-example is one where the theme (Paul) is not present. Therefore, the principle in Greek might only apply in certain cases. The sample size in this dissertation is far too small to tell. This dissertation leaves it to other scholars to research the topic.

Stative Cognate Verb

In some languages, *Stative* verbs only yield result nominals.[49] A *Stative* verb is a verb that indicates a state of being. The "being verb" in each language ("be" in English) is the most

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[48] Alexiadou, *Functional Structure*, 48.

[49] Abney, "English Noun Phrase," 81.

common example, but most of the verbs refer to actions that occur in the mind, such as "believe," or "love." In languages where this pattern applies, DNs formed from stative verbs refer to results of the verbal action, and not the process. For an English example, "belief" normally refers to the proposition one holds as true.[50]

In Greek, all of the DNs with a stative cognate verb are either definitely result or possibly result. In this study, the only type of stative verb is a psych state, of which there are three words: διαλογισμός ("thought"), οἰκτιρμός ("mercy"), and σωφρονισμός ("self-control"). The last two (οἰκτιρμός, and σωφρονισμός) are always cognates to a psych state verb, whereas διαλογισμός varies depending on the passage. According to BDAG, its cognate (διαλογίζομαι) can refer to considering a topic by oneself (psych state), or discussing it with others (activity), and διαλογισμός has meanings that draw from both of the cognate verb's meanings. For this reason, only some of the instances of διαλογισμός fall into the "stative cognate verb" pattern. This leaves 13 occurrences. Of these, the initial conclusions showed that four were definitely result, and the other 9 were possibly result, although they were not clear. Therefore, this pattern seems to apply to Greek, but the conclusion is fairly weak.

Implicit Argument Control

If a DN has implicit argument control, then it commonly points to a process DN, but it is unclear whether this also applies to Greek –μός nouns. This is a common principle that holds true for many languages.[51] Implicit argument control is the technical way of saying that an argument is implicitly part of an action other than the verb to which it is grammatically

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[50] Ibid.

[51] Alexiadou. *Functional Structure*, 111; Alexiadou, "On the Role," 54; Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 500.

connected. The sentence "The professor assigned easy problems in order to pass the students" implies that the professor assigning the easy problems will also perform the action of passing the students. In general, implicit argument control can apply to both verbs and process DNs. The issue when applying it to Greek –μός nouns is the lack of clarity. Mark 1:44 and Luke 5:14 imply that the leper cleansing himself also testifies. Heb 3:8 implies that, in rebelling, the Israelites tested God, and the following verse confirms this. However, there are many examples of this structure occurring with result DNs, such as ψαλμός in Col 3:16. Studying this further would be a difficult (but worthy) task to take up.[52]

Valid Principles

Thankfully, there are some valid principles for determining whether a –μός noun is process or result. These principles represent a large enough percentage (based on the survey of 244 occurrences), have no noticeable skews in the data (such as being restricted to one word), and the grammatical pattern behind the principle strongly correlates to the process/result distinction. These fall into four groups. There is one overarching principle that guides all the others. The second group concerns principles indicating result DNs. These include DNs formed from unergative verbs and modifiers indicating physical nature. The third is for principles indicating either result or process depending on the context. These include when the DN appears in a list and the number (singular or plural) of the DN. The fourth is for those indicating process DNs. Patterns that indicate process include a DN that is the nominative subject of a process-argument verb, and the contextual presence of an agnate clause.

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[52] To be clear, this study found many instances of implicit argument control when the DN had arguments passed down from another action word. The instances mentioned in this paragraph are instances where the DN passes arguments to another action word.

This section will cover patterns more thoroughly than previous sections because these are the crux of this dissertation. First, as above, each subsection below will explain the principle. This includes both the principle and the means of identifying it in context. Second, it will show the pattern in a few passages. Third, it will survey how pervasive the principle is, as some instances of the pattern might not fit the principle. This section, along with the examples, helps the reader see the reasoning behind the decision. Before getting into the newfound valid principles, there is one principle that scholars already know, and it governs the rest.

Semantic Limitations[53]

Every word has a limited semantic range, and –μός nouns are no exception. Greek grammarians already understand and apply this principle, and the research project at hand found little reason to overturn it. The principle is that, if the lexicons limit a –μός noun to only be a process DN, then occurrences of that word are almost certainly process DNs. The same is true for result DNs.

The pattern to identify is a familiar one. First, one should survey a word's entries in the major lexicons. In particular, look for entries where Louw and Nida list a –μός noun in the same subdomain as its cognate verb, or verbs with the same meaning as the cognate verb.[54] When this

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[53] There is a risk that this principle will be (incorrectly) used to shut down arguments indicating that the lexicon needs to change, but that risk exists in stating any idea, and does not invalidate it in any way.

[54] Louw and Nida, *Greek-English Lexicon*. A word does not necessarily need to appear with or have the same definition as its cognate verb. Suppose the cognate verb has been replaced by another verb, and functionally the language works as if the DN and the replacement verb are cognates. With this in mind, consider that languages change slowly over time. Therefore it is just as likely that a language is in the middle of this process, and that both verbs are still in use. This happens due to semantic drift, where one word encroaches upon the semantic range of another word. To see an example, consider that Louw and Nida place πειρασμός ("temptation") alongside both πειράζω ("tempt") and ἐκπειράζω ("tempt") in two different subdomains (Greek English Lexicon, 27.46, 88.308). Thankfully, these cases are the exception, and not the norm. Nonetheless, one should be aware of them. For an introduction to the concept of semantic drift, see Ashwini Deo, "Diachronic Semantics," in *Annual Review of Linguistics* 2015.1, 179-197.

happens, it indicates that the –μός noun has a process DN meaning. Second, if all those entries

clearly refer to either a process or a result, but not both, then it fits the pattern. One can be

confident that the occurrences of that word will correspond to the lexical meaning. The reader

can find whether this applies to any New Testament –μός noun in Appendix B under the column

titled <u>Lexical Meaning</u>.

Two examples will show the ends of the spectrum for this principle. First at hand is a

very clear example of a result DN: ἀναβαθμός in Acts 21:35-40. The word ἀναβαθμός refers to

steps, or one step if it is singular. The major lexicons agree.[55] Further, context confirms this

because ἀναβαθμός is what Paul came to (v.35) and what he stood upon (v.40). Although these

verbs in those verses (γίνομαι, "become," and ἵστημι, "stand") can take a figurative meaning,

there is no indication of that here. The verbs commonly take a physical object to denote

destination and location, and that makes good sense contextually. Therefore there is no reason to

overturn the lexical meaning.

In Matt 2:18, there is some evidence to overturn the lexical meaning of κλαυθμὸς from a

process DN to a result DN, but the evidence to retain the lexical meaning is far greater. The

major lexicons provide the meaning of "weeping" and/or "crying." Louw and Nida even lists it

in the same semantic subdomain as its verb, indicating that it is a process DN.[56] Since this is the

only entry, it is limited to being a process DN. However, at first glance one might think that Matt

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On the other hand, a –μός noun being listed with its cognate verb does not necessarily mean that it has the same exact meaning as the verb (although it almost always does).

[55] BDAG, *Greek-English Lexicon*, 58; Liddell, Scott, and Jones, *Greek-English Lexicon*, 345. Louw and Nida, *Greek-English Lexicon*, 7.52.

[56] BDAG, *Greek-English Lexicon*, 546; Liddell, Scott, and Jones, *Greek-English Lexicon*, 2159. Louw and Nida, *Greek-English Lexicon*, 25.138.

2:18 uses κλαυθμὸς as a result DN. In that verse, κλαυθμὸς refers to the same idea as φωνὴ ("sound").[57] One might think this means the exact same idea, but that need not be the case since this is poetic. Further, even if they did refer to the exact same idea, it could be a form of synechdoche, where κλαυθμὸς literally means the whole act of weeping, but figuratively means a specific part of that weeping (the sound produced). The same could be true for φωνὴ with the opposite sense of synechdoche, where φωνὴ literally means part of the weeping (the sound) but figuratively refers to the whole action. Since scholarship has not had a reason to create a lexical entry for κλαυθμὸς where it means the sound produced by the action, this lone situation is not strong enough to overturn consensus. Therefore κλαυθμὸς in Matt 2:18 is a process DN even though there is evidence for it being a result.

This applies to every instance of a –μός noun, and is commonly the lone principle needed. When the lexicons point only to process or only to result for that word, one can be confident that it takes that meaning in context. As the examples above showed, there is a possibility that context can overturn the lexical entries, but it is very unlikely. This principle governs all of the other principles listed in the rest of this section.

Result

Result DNs are derived from cognate verbs and succumb to certain patterns. Some suffixes almost always indicate that the DN is a result, others that the DN is a process, and still others can allow both.[58] Words with the –μός suffix can be either. In some languages, words with

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[57] It could be epexegetical, in which case it explains what type of sound φωνὴ is. It might also be parallel, being that it is poetic. If so, it is the subject of an implied being verb. In either case, κλαυθμὸς refers to roughly the same idea as φωνὴ.

[58] See the Modern Foundations section above for a list of these Greek suffixes.

this type of suffix are initially process DNs, but over time drift toward a result meaning.[59] There are two patterns that indicate a –μός noun is a result DN. The first pattern concerns DNs that have an unergative cognate verb. The second is when the DN has a modifier indicating its physical nature.

Unergative cognate verb. In many languages, DNs derived from unergative verbs are result nouns. An unergative verb is an intransitive verb that has an agent as the only argument. Take this simple sentence: "He ran." The verb "ran" (in this instance) only takes the argument "he". This argument is a living being, and is actively performing the action. The principle, in languages where it applies, indicates that the derived nominal refers to a result of the action and not to the action itself. In English, "runner" is a DN referring to a result of the action (after one runs, they become a "runner"), whereas there is no DN that indicates process.[60] Therefore, in languages where this applies, DNs derived from unergative verbs are result nouns.

It can be difficult to identify this pattern, as verbs that can be unergative are not always unergative. Intransitive verbs can be transitive in certain contexts. The verb "walk" usually occurs intransitively as in "He walked," but can occur transitively as in "He walked the dog." The question in these cases becomes from which meaning the DN derived.[61] In these cases, a few

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[59] "This type of suffix" meaning a DN suffix that some of the time indicates a process and some of the time indicates a result. For an introduction to how words change over time, see Deo, "Diachronic Semantics," 179-197.

[60] Alexiadou, *Functional Structure*, 42; Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 498.

The gerund "running" is not considered a verbal noun because it does not always grammatically act like a noun, whereas deverbal nouns always act like nouns. See Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 2007, 481ff. Further, as is applicable in Greek as well, an unergative verb can take non-unergative meanings (see the next paragraph), but the action behind a result DN is the unergative meaning. In English, the verb "run" can be used as an accomplishment verb ("He ran home") that indicates a goal/destination, or a simple activity ("He ran copies") with a theme. However, those actions does not make one a "runner," which denotes someone who runs frequently.

[61] Massachusettes Institute of Technology, https://web.mit.edu/norvin/www/24.902/unaccusatives.html.

guidelines can help. First, some verbs have a dominant meaning, and the other meanings are uncommon. An example of this is "walk" a few sentences ago. In this case, DNs derived from this verb likely come from the dominant meaning. A second way to distinguish these words is when a DN appears in the same context as its verbal cognate. If the unergative verb occurs in the same context as the DN, and the DN clearly refers to that action in some way, the DN would therefore be a cognate to the unergative meaning. A third way is when context clearly indicates the cognate meaning. The second and third methods of distinguishing provide stronger evidence than the first (and should overrule the first when there is disagreement), but are less common than the first.

This pattern is clear for –μός nouns cognate to verbs that only take unergative meanings, such as the DNs in Table 3.4. For instance, in Acts 17:23, βωμος clearly refers to a physical object (an altar) due to Paul finding it and seeing an inscription on it. A physical object cannot be a process DN, and must be result. A strong but slightly less clear example comes from

Table 3.4

Word	Gloss
βαθμός	step
βωμος	altar
ἐπισιτισμός	provisions
ἱματισμός	clothing
Ἰουδαϊσμός	Judaism
σαββατισμός	sabbath rest

ἐπισιτισμός in Luke 9:12. Here it is the object of εὑρίσκω ("find") and is parallel with a participle, seemingly indicating a process. However, that participle (καταλύω, "lodge") refers not to the action, but the location of the action. Therefore, ἐπισιτισμός refers to the provisions, not the process of accruing them. These two examples are fairly clear, and the same is true for the six –μός nouns with a cognate verb that is always unergative. This is not so much the case for words lacking solely unergative cognates.

This principle does not seem to hold true for words that have a cognate which is sometimes unergative, such as those in Table 3.5. More often than not in the New Testament, κλαυθμός appears with βρυγμὸς, and their context indicates a

process. κλαίω, the cognate verb, is sometimes unergative, but not always (as in Matt 2:18). γογγυσμός has a cognate verb (γογγύζω) that is usually not unergative, but it can be. γογγυσμός also seems to refer to a process more often than not. These four seem to be more closely related to the meaning(s) of the verb that are not unergative. Therefore, this principle is limited to Greek DNs that are related to the unergative meaning of the cognate verb.

Table 3.5

Word	Gloss
γογγυσμός	murmur
κλαυθμός	weeping
στεναγμός	sigh
σωφρονισμός	self-control

Physical nature modifiers. Physical nature modifiers commonly point toward result. As with manner modifiers, they are not always perfectly clear, but unlike manner modifiers, they are distinguishable with a little effort. Physical nature modifiers highlight a physical aspect of the DN, such as how λευκὸς ("white") indicates the color of the DN ἱματισμὸς ("clothes").[62] There are some modifiers that indicate physicality, but not necessarily that the DN is physical. A modifier indicating a physical location could indicate the location of a physical object or an action. ἀσπασμὸς ("greeting") in Luke 20:46 indicates the location of the action (i.e. it is a process DN), and not a result of it. When a –μός noun has a location modifier in the New Testament, it is commonly a process DN. For this reason, the general principle that physical modifiers indicate result does not apply in Greek.

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[62] Brandtner & von Heusinger, 2010, 27.

However, modifiers that indicate the physical nature of a DN do indicate that it is a result DN. These modifiers include the appearance of an object, an instrument by which it was created, or some sort of physical interaction between objects. This dissertation calls these modifiers "physical nature" modifiers. They are not always immediately clear, but those that are initially unclear will become clear with some diligent study. For instance, Acts 16:13 says that people went παρὰ ποταμὸν ("beside the river"). This seems to be a location, which could indicate a process. However, upon further study, παρὰ + accusative noun does not indicate proximity to an event, but it often indicates one object beside another.[63] Therefore, the principle for Greek is that physical nature modifiers indicate result DNs.

There are two verses that represent these modifiers well. The first is ἱματισμός ("clothing") in Luke 9:29. There, the ἱματισμός is described as λευκός ("white"). While colors can be figurative ("whitewashed" means cleaned, not necessarily that the object is now white), there is no evidence that this occurrence is figurative. The fact that it is white indicates that ἱματισμός refers to a result. The second is ποταμός ("river") in Rev 16:12. In that verse, an angel pours (ἐκχέω) out the contents of a bowl onto ποταμός. While ἐκχέω can have figurative meaning, there is nothing indicating a figure of speech. Actually, quite the opposite; a φιάλη ("bowl") indicates that the pouring is literal. For this reason, the object receiving the action of ἐκχέω must be something physical. These two verses give two examples of the different ways a physical nature modifier can appear.

This principle always applies when the pattern appears. Anytime a DN has some sort of physical nature to it, it must be an object. Actions often have a physical nature to them (as many

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[63] παρὰ can also govern an idea such as ἐλπίς ("hope") or ἡμέρα ("day"), but there is not an instance of it governing a DN that indicates a process, and ποταμός cannot refer to an abstract idea.

actions involve physical movement in the real world). However, aside from location, their

physical characteristics are distinct. Objects inherently have color and shape, while actions have

movement. Therefore, if a DN has a physical nature modifier, one can be fairly certain that the

DN is a result of the corresponding action.

Either/Or

There are two grammatical structures that can indicate either process or result. The first is

whether or not the DN appears in a list. Whether this pattern points toward a process or a result

depends heavily on the other items in the list. The second is the number of the DN. Plural DNs

can be process or result, but the options are limited by the agnate clause.

Lists. When a –μός noun occurs in a list, whether it is a process or result DN corresponds

to the other items in the list. Simply put, lists commonly contain similar items. If most of the

items in a list are physical objects, but the referent of one word is unclear, that unclear word is

likely also a physical object. "Silver, gold, or clothing" is a list of possessions; were another item

added it would also likely be an item someone normally possesses. If it is a list with mostly

concepts, the unclear items are probably concepts. The same holds true for process DNs. Thus, if

a DN is in a list, it can help the reader determine whether the DN is a process or a result.

A few examples are helpful. Eph 5:19 says ψαλμοῖς καὶ ὕμνοις καὶ ᾠδαῖς πνευματικαῖς

("psalms and hymns and spiritual songs"), which indicates three different types of songs. ψαλμός

refers to penned lyrics for singing, similar to a hymn or a song, and as such ψαλμοῖς is a result

DN. 2 Tim 3:16 says πρὸς διδασκαλίαν, πρὸς ἐλεγμόν, πρὸς ἐπανόρθωσιν, πρὸς παιδείαν ("for

teaching, for reproof, for correction, for training"). This is a list of processes. Ἐλεγμός refers to

the process of exposing sin with the goal of correction, in line with the duties of church

leadership. These are two clear examples of a –μός noun in a list.

Identifying this pattern is easy, but determining whether or not it points to process or result is not always clear from this principle alone. Lists are denoted by καὶ, ἢ, or the same structure repeated over and over. The same structure can be the same (or similar) preposition(s) back-to-back, multiple nouns in the same case, or repeated phrases. This is fairly straightforward, and the above sentences are likely unnecessary for the reader. The second part or this pattern requires determining whether the other items in the list are process or result DNs. This may be straightforward, but it may not. The examples in the previous paragraph are clear. However, take a list of natural events such as Rev 8:5, which says βρονταὶ καὶ φωναὶ καὶ ἀστραπαὶ καὶ σεισμός ("thunder and sounds and lightning and an earthquake"). The first three items in the list are the results of natural events. However, the last item is quite different. σεισμός ("earthquake") is usually a process DN, and it is singular while the other items are plural. Further, there are some lists that clearly contain a mixture, such as physical items, states, and some actions in Rom 8:35. Therefore, it seems better to place this principle lower on the hierarchy than other principles, one of which is the number of the DN.

Number. Plurality can limit a DN to either process or result depending on the agnate clause. Specifically, DNs can be plural only if the corresponding element in the agnate clause(s) is plural, or if they have no matching element in the agnate clause. A plural process DN must have an agnate clause where the process occurs multiple times. In other words, a one-time event cannot have a corresponding plural process DN. The following sentence is illogical: "I walked home once, and my walks took too long." It is grammatically correct, but semantically nonsense. Process DNs that refer to a repeated event, whether done by many different people all at once or the same person over and over, can be plural. The following sentence makes sense semantically: "I walked home daily, and my walks took too long." Some plural result DNs also need to have a

corresponding plural element, such as agents. In the sentence, "100 participants ran to raise money for a cure, and the runners wore purple." "Runners" can be plural only because multiple people ran. Other result DNs, such as a physical item created from the process, can easily be plural even if the action in the agnate clause is singular. "After building, the buildings littered the skyline." There was a singular process of building, but it resulted in many separate buildings. "Buildings" can be plural or singular, as the agnate clause does not indicate how many buildings were built. Therefore, the principle can be stated as having two parts. First, plural DNs usually have a corresponding plural element in the agnate clause. Second, if there is no element matching a plural DN, then the DN is result. There is another less important exception.

An important note to make concerning this principle is that one can often reconstruct most of the agnate clause even if it is not readily available. An example of a clear agnate clause is πειρασμός ("trial/temptation") in Jam 1:12, which has an agnate clause in 1:14. More often it is the case that the reader will need to reconstruct the agnate clause from the literary and historical context. Matt 23:7 contains the phrase τοὺς ἀσπασμοὺς ἐν ταῖς ἀγοραῖς ("the greetings in the marketplaces"). From the literary context, the reader can see that the scribes and Pharisees were involved in these greetings. From the historical context, one can find that those of lower rank were to greet those of higher rank.[64] This means the scribes and Pharisees loved it when others greeted them, i.e. they are the theme of the action. Historical context also provides that these were customary and repeated greetings, which makes sense of the plural in Matt 23:7. Therefore the only unclear element in the agnate clause is the agent, and even that is somewhat

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[64] Craig A. Evans, *Mark 8:27-16:20*, Word Biblical Commentary, vol. 34b (Nashville: Thomas Nelson, 2001), 278.

clear (those of a lower rank). When the reader must construct the agnate clause, this principle can help distinguish between process and result.

Three examples are as follows. Col 4:18 is an example of a plural DN that indicates a result. It contains the phrase μου τῶν δεσμῶν ("my chains"). There is no real reason to consider a meaning for δεσμῶν other than "chains", and thus it provides a clear example.[65] A likely agnate clause appears in Col 4:3, although it is incomplete as it does not refer to who imprisoned Paul. Acts 21 says that it was the Jews and a Roman officer responsible for Paul's imprisonment. Further, historical context shows that imprisonment often involved physical chains. Therefore the agnate clause is something like "The Jews and a Roman officer imprisoned Paul in chains because of the mystery of Christ." The only plural elements in the agnate clause are the agent (the Jews) and the instrument (the chains). The Jews do not fit the context in Col 4:18 (Paul is not telling the Colossians to remember those who imprisoned him). The other plural element (the chains) fits the context well. Therefore the literal meaning of δεσμῶν is "chains".[66]

Mark 7:4 is an example of a plural DN that indicates a repeated process. It contains the phrase βαπτισμοὺς ποτηρίων ("washing of cups"). From literary context, one can infer that the Pharisees are the agent (they are the agent of παρέλαβον, "observe"), the actions in the list are repeated (παρέλαβον κρατεῖν, often rendered "traditions they observe"), and the cups are the theme (dishes do not wash other items). βαπτισμοὺς, therefore, refers to the repeated action, and the fact that the action is repeated allows βαπτισμοὺς to be plural.

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[65] Constantine Campbell, *Colossians and Philemon*. A Handbook on the Greek Text (Waco: Baylor, 2013), 76-78; Murray J. Harris, *Colossians and Philemon*, Exegetical Guide to the Greek New Testament (Nashville: B&H, 2010), 185; Rogers and Rogers, *New Linguistic*, 470.

[66] The literal meaning is chains, but the chains figuratively refer to the imprisonment Paul is undergoing.

Jas 2:4 shows the limits of this principle, as it is an example where this principle does not lead to a conclusion. That verse contains the phrase ἐγένεσθε κριταὶ διαλογισμῶν πονηρῶν ("you have become judges with evil motives"). The agent of the agnate clause would be the audience of the letter ("Jews in the diaspora), and the process refers to their internal thoughts. Additionally, that process leads to specific propositions/motives that those people have. In the agnate clause, the agent (Jews), the process (thinking), and the product (ideas) are all plural. Therefore, although other principles might limit whether διαλογισμῶν is a result or process DN, this principle does not limit the options at all.

This principle applies to most plural –μός nouns. This rarely applies to singular DNs, as a singular DN can correspond to both a singular and plural element. Going back to an example above, it makes sense to say "100 participants ran to raise money for a cure, and a runner wore purple." In this case "runner" can be singular or plural because it is true that both one person ran and that multiple people ran. Therefore this principle normally only applies to plural DNs.[67] The reason this applies to "most" and not "all" plural –μός nouns is due to the Semitic influence upon New Testament Greek. Greek abstract nouns can take the plural form when the singular is more appropriate.[68] This exception applies most clearly to οἰκτιρμός. Therefore this principle applies

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[67] βασανισμός ("torture") in Rev 9:5 is an exception; see the notes on that verse in appendix B. In Mark 7:35 and Luke 13:16, this principle possibly applies.

[68] Blass and DeBrunner, *Greek Grammar*, §142; C.E.B. Cranfield, *Romans 9-16*, International Critical Commentary (New York: T&T Clark, 2004), 596; James D.G. Dunn, *Romans*, Word Biblical Commentary, vol. 38a, (Nashville, Thomas Nelson, 1988), 708; John D. Harvey, *Romans*, Exegetical Guide to the Greek New Testament (Nashville: B&H, 2017), 294; Rogers and Rogers, *New Linguistic*, 338. Based on the research done for this dissertation, these plural abstract nouns might be better explained as process DNs that refer back to the multiple instances of the action occurring. This seems less than likely, as it'd mean that the audience understood that the Greek DN referred back to the corresponding Hebrew DN which referred to the agnate clause behind the Hebrew DN. Much research would need to be done to determine if this is the case for plural abstract concept nouns taken from Hebrew; therefore this dissertation assumes scholarly consensus is correct until proven otherwise.

to all non-abstract plural –μός nouns, and possibly to some abstract plural –μός nouns. When this principle does not lead to a conclusion, others can help.

Process

Some patterns can indicate that the DN refers to a process. The research for this project identified two specific patterns that have a high correlation with process DNs. The first, and one of the more intriguing discoveries of this project, is the pattern of nominative subject with a process-argument verb. The second is the presence of an agnate clause in the context. Both patterns have a high correlation with process DNs, but it is not always clear when they apply.

Nominative subject of process-argument verb. When a –μός noun is the nominative subject of a *Process-Argument Verb*, it indicates that the –μός noun is a likely a process.[69] First, the DN must be in the nominative case. Some process-argument verbs take a DN in the accusative, but those verbs frequently have multiple meanings, and it is difficult to determine the meaning of the verb without first determining the meaning of the DN. Infinitives can take subjects in the accusative case, and genitive absolutes take subject in the genitives. While this principle may hold true for those patterns as well, there were not enough examples in this study to warrant a conclusion.[70] Second, it must be the subject. If it is an epexegetical nominative or any other kind of nominative, then this pattern does not necessarily apply. Third, the verb must

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[69] This was inspired from the linguistic principle that the phrase "do so" must refer to a process. See the "Do So" section above. Fu, et al., "The VP", 571-573.

[70] See Matt 13:21 and Mark 4:17 for two examples. To be clear, these are two examples of a process-argument verb taking a process as an accusative. The pattern certainly occurs. However, in the small New Testament sample of process-argument verbs + accusative –μός nouns, too many –μός nouns represented results due to the process-argument verb taking one of its non-process meanings.

be a process-argument verb. While the first two parts of this pattern ("nominative" and "subject") are usually easy to decide, whether the verb is a process-argument verb is not as clear.

This dissertation defines *Process-Argument Verb* as verbs that take an action/event/process as an argument. BDAG often includes the word "process" in the definition, where "process" refers to an event external to the word's own denotation.[71] With this in mind, a simple example in English might be "Fear came over me." In this sentence, "came" does not mean that fear physically moved nearer to the speaker, but that the speaker began to experience fear because something scary just happened. The agnate clause might be "She feared the intruder." Other English examples include "occur" and "happen." One important note in Greek is, while εἰμί can be a process-argument verb, the implied being verb (as in ὁ θερισμὸς πολύς, "the harvest (is) plentiful") is not a process-argument verb for the purposes of this study.[72]

A simple example of this is Luke 17:27, where it says ἦλθεν ὁ κατακλυσμὸς ("The flood came"). The reference to Noah in the verse shows this is the Noahic flood. It refers to a specific event in history where water inundated the earth. Another example comes from Acts 6:1, which says ἐγένετο γογγυσμὸς ("a complaint arose"). More specifically, it says ἐγένετο γογγυσμὸς τῶν Ἑλληνιστῶν πρὸς τοὺς Ἑβραίους ("a complaint of the Greeks arose against the Hebrews"). In this context, it is possible that γογγυσμὸς refers to the content of the complaint, i.e. a result. However, process seems more likely because the entire agnate clause is very clear ("The Greeks complained about the Hebrews"), and γογγυσμὸς indicates the expression of ideas. The clause beginning with ὅτι expresses the content of those ideas.[73] The most common –μός noun to appear

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[71] See the entries for γίνομαι and συντελέω as examples.

[72] Perhaps it is, but from the brief research this dissertation did on that construction, it did not appear to be.

[73] BDAG, *Greek-English Lexicon*, 204.

in this pattern is σεισμὸς, as in Rev 6:12 (σεισμὸς μέγας ἐγένετο, "there was a great shaking").

Regardless of whether this is the earth shaking or something else, the reference is to the process

of the action and not a result of it, as there are no good options for a result. These examples

provide instances of the pattern where it is likely process, but not all situations are so clear.

All occurrences that match the pattern adhere to the principle, but some verses are

unclear whether or not they match the pattern. Whether the –μός noun is a nominative subject is

straightforward; determining if a verb is a "process-argument verb" is not. Words can have

multiple meanings, and sometimes words with more than one meaning are not always clear. In

other words, many verbs have multiple meanings, some of which make it a "process-argument

verb" and others which do not. If the verb has a meaning that takes only non-process arguments,

this pattern might not follow the principle. If the verb allows for the meaning that takes process-

arguments and non-process arguments, one must use context to determine the most likely

meaning. Take, for instance, a –μός noun that is clearly result: ἱματισμὸς ("clothing"). In Luke

9:29, the ἱματισμὸς flashes. The adjective λευκὸς ("white") makes it clear that the clothes flashed

white. This is clearly not an instance of the pattern because the verb does not take process

arguments. Two less clear counter-examples come from Mark 7:25 and 27: ἦλθον οἱ ποταμοὶ

("the rivers came"). These clauses could refer to this specific rush of water coming into existence

(which is what ἔρχομαι, as a process-argument verb, denotes).[74] However, due to the fact this

clause (ἦλθον οἱ ποταμοὶ) is parallel to other natural objects physically moving closer toward the

house, this verb almost certainly refers to the idea that the rivers (i.e. the water) physically

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[74] ἔρχομαι, when it denotes a process, refers to the beginning of a process or the process as a whole
(BDAG, *Greek-English Lexicon*, 393-395, note the examples under definition 4, which all fit into this category).
However, the process (the movement of water) was already occurring and will continue to occur after the flood in
this story.

moved. In other words, the reader should use context to determine if it is a process-argument verb when the –μός noun is a nominative subject. If context leaves no other choice, the –μός noun probably refers to a process.

Contextual agnate clause. If the agnate clause appears in the same context as the –μός noun, it is more likely a process DN. In "I drove 10 hours to get home, and my drive was tedious," "drive" and "drove" both refer to the action of steering a car. Finding the pattern is fairly straightforward. First, identify the verbal cognate, and then search for it. Second, determine the context of the –μός noun, and see if there are any occurrences of the verbal cognate in that context. Finally, determine if the arguments of the cognate verb are compatible with the modifiers of the DN. If the agnate clause is in the context and can logically match up based on the arguments/modifiers, this matches the pattern.

The third step is more subjective than the first two, but is clear in most cases. Going back to the above example, the person speaking is the agent of both "drove" and "drive". If someone said, "I drove 10 hours home, and her drive was tedious," then the arguments would not match. The agnate clause gives two arguments for the verb "drove" ("I", the agent, and "home", the goal/destination), and the DN ("drive") has one modifier ("her") that does not match either argument in the agnate clause. An example of a less clear case might be, "the Goths destroyed everything in their path, and the destruction of Rome was thorough." Here, "Rome" is a subset of "everything," and therefore they do match. Another less clear case might be when the recipient of the action is implied with the verb ("George murdered" does not communicate who George murdered), and included as a modifier of the DN ("Jane's murder was bloody."), but this is uncommon. In most cases, with effort and logic, a reader can see if the arguments and modifiers do not match in order to rule out this pattern.

If the reader finds this pattern, the –μός noun and the cognate verb probably have the same referent, but the reader must determine whether or not that is true. In all actuality, this principle is simply an observation of the fact that a process DN has the same referent as its cognate verb in the agnate clause, and the appearance of the agnate clause gives evidence that the process is in view. Further, this shows what to look for when evaluating whether the pattern (of a contextual agnate clause) leads to the principle (that the –μός noun is a process DN). The key to applying the principle is ensuring that the –μός noun and its cognate verb have the same referent. If they match the pattern, and if there are no other principles that apply, then one should lean toward the –μός noun being a process DN.

This pattern needs multiple examples to show the varying situations. A simple one is a good place to begin. Luke 4:2 says πειραζόμενος ὑπὸ τοῦ διαβόλου ("being tempted by the devil"), and Luke 4:13 says, συντελέσας πάντα πειρασμὸν ὁ διάβολος ("the devil completed every temptation"). πειρασμός in 4:13 is a deverbal noun formed from πειράζω, which is in 4:2. Both have διάβολος attached to them, therefore this matches the pattern. Another example comes from Acts 21:26, where Paul purifies (ἁγνίζω) himself and others, and then talks about the completion of the days of purification (τὴν ἐκπλήρωσιν τῶν ἡμερῶν τοῦ ἁγνισμοῦ). The deverbal noun ἁγνισμός ("purification") does not have any modifiers. However, the pattern does not require the DN to have modifiers that match verbal arguments; it says there cannot be a mismatch. Since there are no modifiers, there is no mismatch. Further, since Paul first purifies and then talks about the completion of purification, the logical conclusion is that they have the same referent. Therefore the principle applies here. A less clear example comes from 1 Cor 1:2 and 1:30. The first says ἡγιασμένοις ἐν Χριστῷ Ἰησοῦ ("to those sanctified in Christ Jesus"), and the second Χριστῷ Ἰησοῦ, ὃς ἐγενήθη … ἡμῖν … ἁγιασμὸς … ("Christ Jesus, who became to us

sanctification"). Whether the modifiers in 1:30 match up with the arguments in 1:2 is unclear.[75]

However, they are potentially compatible, so this verse matches the pattern.

Three other examples help show the limits of this pattern. First, an example where the

pattern seems to apply but does not appears in Rev 9:5. In that verse, locusts torture

(βασανισθήσονται) some people for five months, and the torture is compared to βασανισμὸς

σκορπίου ("torture of a scorpion"). These both refer to the process of torturing, and the DN, by

comparison, refers to the same instance of torturing as the verb. They are also cognates.

However, they do not match this pattern because their modifiers are different. Locusts are the

agent of the verb, but scorpions are the agent of the DN. This is made even more confusing by

the fact that there is another instance of the DN (βασανισμὸς) in the context, and that instance

does have a corresponding modifier (and therefore matches this pattern).

A second example shows that this pattern does not necessarily indicate a process DN.

Luke 13:16 shows that the devil bound a woman (ἣν ἔδησεν ὁ σατανᾶς), and later refers to "this

binding" (τοῦ δεσμοῦ τούτου). This matches the pattern quite well. The DN has a cognate verb

in context, the modifiers match, and there is even a demonstrative pronoun that indicates that the

verb is the antecedent referent of the DN. The contextual evidence strongly indicates that this is a

process DN. However, lexicons only provide a result meaning of "chains." Whether δεσμοῦ

refers to a process or a result is unclear.[76] Therefore this principle must be weighed against the

other principles.

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[75] In 1:2, Jesus could be the instrument ("through Jesus") or agent ("by Jesus") of sanctification. In 1:30, he could be the agent ("Jesus sanctified us") or the theme ("Jesus was set apart for us"). Other possibilities exist as well.

[76] Abney, "The English Noun Phrase," 81, claims that DNs for stative verbs are always result DNs.

A final example shows one more instance where this pattern can contain a result DN. Rev 14:15 says that the hour to reap has come (ὥρα θερίσαι), and the earth's harvest is ripe (ὅτι ἐξηράνθη ὁ θερισμὸς τῆς γῆς). The DN appears in the clause right after its cognate verb (θερίσαι). The modifiers and arguments are compatible despite no obvious correspondence, and context seems to indicate they match. Despite this compatibility, the DN refers to the items produced by the harvest. The fact that the harvest is ripe shows it is a result DN, as the process of harvesting cannot be ripe. In English, this could potentially make sense as a metaphor, but in Greek, the verb for "to be ripe" literally means "to dry", making this possibility unlikely. Therefore, while an occurrence of this pattern usually indicates a process DN, it can also refer to a physical item involved.[77]

This pattern applies in almost all cases, but definitely not all. When there is evidence that the DN refers to a result of the process, and that evidence outweighs this principle, the reader can ignore this principle in favor of other evidence. However, in the lack of such evidence, the reader should apply this principle. A final note is that this might be applied to DNs that do not have a contextual cognate verb, but do have a contextual verb with roughly the same meaning as the cognate verb. The reason this study does not include those is because there are not enough occurrences to make a decision; those seeking new projects should take note.

Conclusion of Process/Result Principles

This analysis provides a few principles that one can use when determining whether a –μός noun is a process or result DNs. Two patterns point toward result DNs. If the cognate verb is

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[77] Perhaps it can also refer to resultant concepts, or other kinds of results, but this study found no clear instances of that.

unergative, the –μός noun is a result of the action. Additionally, if a modifier indicates the physical nature of the –μός noun, it is probably a result. Two patterns can point toward process or result, depending on the context. If the –μός noun is in a list, it probably aligns with the other items in the list. If it is a list of actions, it is likely a process DN; if a list of results (whether people, objects, ideas, states, etc.), it is likely a result. Additionally, plural –μός nouns must correspond to a plural element in the agnate clause. If the verbal action is performed multiple times, the –μός noun can be a process DN; if there is a plural verbal argument or some other type of result, it can be result. There are also two patterns that indicate process DNs. One is if the DN is a nominative subject of a process-argument verb. The other is if a matching agnate clause appears in the same context. One can use these principles to determine meaning when the DN is unclear. Chapter four will suggest how to apply them. If these principles lead to a –μός noun being a process DN, their modifiers might refer to arguments in the agnate clause.

<div align="center">Principles for Distinguishing Subjective from Objective</div>

In addition to helping distinguish between process and result DNs, there are principles that can help distinguish whether the modifiers of a process DN are subjective, *Indirective*, or objective.[78] Studies of other languages offer fewer principles for distinguishing between subjective and objective modifiers (and none for indirective) than they do for distinguishing between process and result DNs. This dissertation also found some patterns not suggested by studies of other languages. Despite the lack of potential patterns, there are still a few that can help make exegetical decisions.

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[78] A definition of *Indirective* appears in the Either/Or and Indirective section below.

This section presents an evaluation of potential principles, beginning with those that are invalid and moving toward those that are valid. Unlike the section above concerning the distinction between process and result DNs, the research yielded no principles that were probably invalid, nor did it yield any potentially valid principles. All of the principles covered were either invalid, needed more occurrences of the pattern in order to make a decision, or were valid.

Invalid principles

The principles in this section, like the invalid principles for process/result DNs above, have clear counter-examples in Greek. The first pattern concerns a DN with a genitive modifier, and the principle says that this modifier must correspond to an argument changed by the verbal action in the agnate clause. The second concerns how many modifiers can exist when there are changed arguments.

Genitive Modifiers and [+change] Arguments

In Greek, genitive modifiers need not correspond to *[+change] arguments*. In linguistics, arguments that are changed by the verbal action are known as *[+change] arguments*.[79] Concerning DN modifiers, Polish reserves genitive modifiers for [+change] arguments. However, this restriction is not true for modern English, nor is it true of Koine Greek. Luke 1:44 contains the phrase τοῦ ἀσπασμοῦ σου ("your greeting"). Mary (the referent of σου) does not change when she greets Elizabeth; she is exactly the same before and after. Acts 6:1 mentions γογγυσμὸς τῶν Ἑλληνιστῶν ("a complaint of the Greeks"). Yet again, the Greeks are the agent of the action and undergo no change. The research ruled this out during the first round of

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[79] Rozwadowska, "Thematic Restrictions," 158. This is the same as the concept of "Affectedness" (see above in the Unaffected Objects section.

evaluations. As this principle is potentially limited to Polish and similar languages, it is unsurprising that it can be cast aside when it comes to Greek.[80]

Multiple Modifiers and [+change] Arguments

The following principle does not apply to Koine: if a transitive verb has two arguments, and one argument is [+change] or it fills the "experiencer" role, then that argument must appear in a DN phrase as a modifier and the other argument must be unstated.[81] This principle is somewhat complex, so examples are necessary. A sample agnate clause might be "the barbarians destroyed the city." The verb ("destroyed") is transitive, and it takes one [+change] argument ("the city"). A corresponding DN phrase would be "the destruction of the city." If this principle were true in English (it is not), then "the city" must modify "destruction", and "barbarian" could not. For example "the barbarian's destruction of the city", or simply "the barbarian's destruction" would both be ungrammatical were this principle applicable in English. An example from Greek comes from Rev 9:5, where it says βασανισμὸς σκορπίου ὅταν παίσῃ ἄνθρωπον ("a scorpion's torment of a person"). This is an example that matches the pattern exactly (transitive verb with one [+change] argument), but the –μός noun has two modifiers. An exception with an experiencer is πειρασμός ("trial") in Gal 4:14. The principle does not apply in Koine.

Principles that Require a Different Study

There are a few principles that require a different type of study before drawing conclusions. Many of these state a pattern that must or must not happen in certain situations. The hesitation with these principles is due to the limits of this study, and not the principles. This

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[80] The research for this dissertation did not find other languages where it applies.

[81] Rozwadowska, "Thematic Restrictions," 158.

study only covers 244 occurrences of DNs in Greek, and not all of those have modifiers, so there are hardly enough examples to draw conclusions about what must or must not happen. A much broader study might reveal the validity of these principles.

The principles in this section are as follows. Yet again, this category has a principle from Polish; this one concerns prepositions indicating agents. Another principle concerns the relationship between prenominal modifiers and [+change] arguments. A third principle concerns –μός nouns formed from unergative verbs. Perhaps a broader language study would shed some light on these principles.

Prepositions Indicating Agents

In some languages, certain prepositions indicate that the modifier corresponds to the agent of the agnate clause, but this study did not find a clear parallel for –μός nouns. In English, when the preposition "by" follows a process DN, the object of that preposition is usually the agent of the agnate clause.[82] In the phrase, "the assignment of problems by the professor," the object of by ("the professor") can only fit one role in the agnate clause: the agent.[83] In Greek there is no apparent parallel for the preposition "by" with –μός nouns. Prepositions appearing with New Testament –μός nouns include διὰ, εἰς, ἐκ, ἐν, ἐπὶ, κατὰ, μετὰ, περὶ, πρὸς, and ὑπὲρ. Only one (ἐν) has enough occurrences to even approach a decision, and it appears as location

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[82] Alexiadou, Cano, Iordăchioaia, Martin and Schäfer, "Direct Participation," 1; Alexiadou, *Functional Structure*, 91-100; Rozwadowska, "Event Structure," 341-342.

[83] There are a few situations where "by" can appear with a DN and not indicate the agent. The clearest contradiction to this principle is when it indicates the cause of instrument of the process, as in "paralysis by analysis." There, "by" indicates the cause ("analysis") of the process ("paralysis"). Another situation is when the DN indicates a created object. In "pictures by John", "pictures" is a result DN, and "John" is the owner/creator of them. It can also indicate location, as in "the construction of the hotel by the sea." This is a different meaning of the word "by". However, these situations do not overturn the general principle that "by" indicates agency with process DNs.

(Luke 11:43), cause (Gal 4:14), and destination (2 Cor 4:6). As no other prepositions appear more than six times, it would be hasty to draw conclusions for them. However, this does not prove there is no preposition that indicates the agent. For this reason, the current project cannot come to a conclusion on the matter. If someone were to search for all DNs and study their prepositional modifers, perhaps they would find that ὑπό or another preposition fits this principle.[84]

Prenominal Modifiers and [-change] Arguments

In some languages, theme arguments that do not change must appear after the DN. This is the same as the "Affectedness" constraint mentioned earlier.[85] Simply put, this phrase makes semantic sense: "the city's destruction by the barbarians". However, this one does not: "the movie's enjoyment by John." This principle more precisely relates to languages that reserve the position immediately before the DN (the "prenominal" position) for the subject of the action.[86] For the first example above, the agnate clause would be "The city was destroyed by the barbarians." The DN phrase corresponds to an agnate clause with a passive verb. The agnate clause for the second would be, "The movie was enjoyed by John." This, like the above DN phrase, sounds awkward in English; hence the principle.

In Greek it is unclear whether or not this principle applies. There are a few examples of prenominal genitives with –μός nouns (Heb 2:4 and 2 Cor 7:7), one with a prenominal

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[84] There are other principles similar to this one, but this research yielded the same conclusion for them as well. They concern restrictions on prepositions with experiencers, prepositions with agents, and prepositions when the DN's cognate verb is intransitive. See Alexiadou, *Functional Structure*, 78; Rozwadowska, "Event Structure," 341.

[85] See the Unaffected Objects section above.

[86] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 487.

prepositional phrase (Luke 2:35), an appositional phrase (1 Thess 4:3), and a couple prenominal adjectives (Matt 3:6 and Mark 1:5). The first three are probably agents, the fourth one is not an argument at all, and the last two are location. Some of these are result DNs; therefore there are even fewer examples. None of these contradict the principle, but it would be irresponsible to say what cannot happen based on so few examples.

Modifiers of DNs from Unergative Verbs

Some languages do not allow prepositional modifiers if the DN comes from an unergative cognate verb, but this dissertation found no occurrences of the pattern in Koine. The pattern requires the DN to have an unergative cognate verb, the DN to be a process DN, and the lone argument of the agnate clause (the agent) to either not appear with the DN, or to be a non-prepositional modifier. Take the agnate clause, "He acted." This principle allows the DN phrase, "his action", but not "the action by him". This study found no occurrences of the pattern with –μός nouns, which makes sense considering the process/result principle that says Greek unergative verbs cannot have cognate process DNs. The closest matches (γογγυσμός, "murmur," in John 7:12 and σαββατισμός, "Sabbath rest," in Heb 4:9) are not unergative and are a result DN (respectively).[87] Perhaps another study could find more examples, but perhaps not.

Valid Principles

Thankfully, there are a few valid principles for matching DN modifiers to agnate clause arguments. The below sections are organized as if there were a strict subjective/objective distinction. Many grammarians have framed the question in this manner, assuming the active

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[87] In this case, "not unergative" means that the cognate verb is not unergative.

voice and not the passive.[88] While this assumption is a safe one to make, it only paints part of the picture. Some of the time the subject of one verb has more in common with the object of another verb, and those two arguments appear in similar structures in the DN phrase.

A couple examples can illustrate the helpfulness in determining the argument role along with the subjective/objective distinction.[89] Take the two DN phrases "Roy's desire" and "Roy's pleasure." In both cases, "Roy" is the experiencer of the verbal action (he experiences desire/he experiences pleasure). However, the corresponding agnate clauses might be "Roy desires to read" and "Reading pleases Roy." In the first, "Roy" is the subject, while in the second, "Roy" is the object. Therefore, the same DN structure can communicate a subject or an object from the agnate clause depending on how the verb identifiers experiencers. Agents, causes, instruments, and themes also appear in both the subject and object positions.[90] The argument roles seem to have more impact upon the structure of the DN phrase than the subject/object position.[91] Therefore, the goal is to provide principles for determining subjective, indirective, and objective modifiers, and for determining what argument role the modifier plays. The first step in doing that is reconsidering a couple potential presuppositions.

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[88] Brooks and Winbery, *Syntax*, 14; Greenlee, *Concise Exegetical Grammar*, 25-28; Hoffman, *Everyday Greek*, 27-28; Vaughan and Gideon, *Greek Grammar*, 34; Young, *Intermediate*, 29. This dissertation does not criticize the active voice assumption, as it is commonly understood. Nonetheless, improvements can be made.

[89] Instead of using the terms "subjective" and "objective genitive," this dissertation chooses to use "subjective" and "objective modifiers", along with "indirective modifier" (See the Either/Or and Indirective section below). As non-genitive modifiers can represent arguments from the agnate clause, the word "modifier" better encapsulates the possibilities.

[90] Experiencers are the most divided between subject and object. Agents, causes, and instruments are usually subjects, but can be objects when the experiencer is the subject, as in the clause "John fears her/pandemics/the dark". Themes can also be the subject, but are usually the object. When themes are subjects, they are always the subjects of unaccusative verbs.

[91] See the principles presented in the current section's subsections.

Most Greek grammars only indicate that genitives can represent an argument in the implied agnate clause, but other modifiers can indicate arguments as well. The fact that grammars only mention genitives as candidates for arguments can lead to the presupposition that this is the only option.[92] One reason to discard this potential presupposition is that principles from other languages concern prepositional modifiers that represent arguments.[93] Those principles may or may not apply to Greek, but there are reasons to think they do.[94] Subsequent sections will discuss those principles.[95] The current paragraph exists to introduce the reader to this concept and hopefully question presuppositions. Further, there may be another presupposition to discard.

Most Greek grammars only indicate that modifiers of process DNs can be subjective or objective, but those are not the only options. Yet again, the fact that grammars only provide these options can lead to an incorrect presupposition; namely, that indirect objects cannot appear as modifiers of process DNs.[96] The fact that indirect objects exist show this presupposition to be

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[92] It did for the author of this dissertation.

[93] See the Prepositions Indicating Agents and Modifiers of DNs from Unergative Verbs sections above.

[94] For an introduction to distinguishing between arguments and non-arguments, see Vilmos Ágel and Klaus Fischer, "Dependency grammar and Valency Theory," in *The Oxford Handbook of Linguistic Analysis*, eds. Bernd Heine and Heiko Narrog (Oxford: Oxford University Press, 2015), 225–257. For a more thorough discussion, see Vilmos Ágel, Ludwig M. Eichinger, Hans-Werner Eroms, Peter Hellwig, Hans Jürgen Heringer, and Henning Lobin, eds., *Dependency and Valency: An International Handbook of Contemporary Research*, vols. 1 and 2 (Berlin: de Gruyter, 2003 and 2006).

[95] See the Implicit Argument Control, Arguments from Process-Argument Verbs, and Other Possibilities sections below, especially the last one.

[96] Young, *Intermediate*, 29, provides another option, but it does not concern sources or goals. Wallace, *Greek Grammar*, 119-121, provides an option for *double entendre*, where the genitive functions as both subjective and objective, and there are either multiple agnate clauses or a reciprocal action. This still leaves out the possibility of a modifier indicating a source or a goal. Speaking of Wallace's "Plenary Genitive," this dissertation does not evaluate it thoroughly, as no New Testament –μός nouns seem to take a modifier with this meaning. Wallace's argument for it makes good sense, but he hints that it is rare. Additionally, an agnate clause with a verb in the middle voice might also take this plenary meaning. If the phrase βαπτισμός αὐτοῦ appeared, it could indicate an agnate

tentative at best. Similar to the other discarded presupposition, examples of *Indirective Modifiers* appear in subsequent sections.[97]

Subsequent sections are as follows. First, there is one guiding principle that applies to every modifier. Second, this dissertation will discuss modifiers that usually represent the subject (subjective modifiers), such as how agents usually appear in the genitive. The genitive case can indicate any argument depending on context, and is not restricted to agents. Other patterns can imply any argument, such as implicit argument control and arguments of process-argument verbs. Another two principles come from the context; they concern contextual agnate clauses and common knowledge events. To aid future research, another section presents possibilities that do not fit into these patterns. This section will close with a short discussion of principles specific to objective modifiers, or rather, a lack thereof.

As with the valid principles for distinguishing between process and result, each subsection below is organized into three parts. First, the subsection describes the principle, i.e., the pattern that points to a meaning. Some examples appear next, and each subsection concludes by discussing the extent to which the principle applies.

Matching the Cognate Verb

Any potential arguments must fit in the agnate clause; in particular, they must fit semantically with the cognate verb. For example, one cannot say, "The bread walked," as the

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clause with βαπτίζω in the middle voice. In this theoretical example, αὐτοῦ would refer to both the subject/agent of the action as well as the object/theme of the action, i.e. a plenary genitive.

[97] See the Either/Or and Indirective section below, and the subsections therein.

agent of walking must be a living organism with legs.[98] More broadly, a verb's arguments must fit within the semantic range of that verb's expected arguments. Sometimes a verb will only take living beings as arguments. Other verbs restrict certain arguments to being physical entities, some restrict an argument to being another process, and still others only take direct objects/themes that are ideas.[99] Most of the time each individual argument slot has specific limitations, such as how the verb "to cook" limits the subject/agent to a human, and the object/theme to food. For these reasons, any potential arguments must be able to fill an argument role that is available to the DN's cognate verb. This principle will probably not be a surprise to grammarians, as it is intuitive and some grammars mention it explicitly.[100]

The pattern is simple to describe, but it is not as objective as the previous paragraph made it seem. First, before one attempts to find any arguments for the DN's agnate clause, one should first ensure that it is a process DN by applying the pertinent principles.[101] That is always a prerequisite.[102] The next step is finding the cognate verb. With –μός nouns, this task is fairly

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[98] This assumes a literal meaning of the verb "walk," which is by far the most common meaning. Context could make it clear that there was a figurative meaning that would be akin to the literal meaning of the word "move," but without context, one should assume the most common meaning for examples in this dissertation.

[99] For a discussion of the arguments of the cognate verb of each –μός nouns, see the Classifications of Arguments section above.

See the Nominative subject of process-argument verb section above for examples of verbs that take processes as arguments.

[100] Wallace, *Greek Grammar*, 113, 117, 120; Young, *Intermediate*, 29-32.

[101] See the section above concerning Valid principles for doing this.

[102] Result DNs can have modifiers that fit with the theoretical agnate clause, but searching for that often skews meaning. Take the phrase "his creation." While the agnate clause is almost certainly "he created," the word "creation" does not refer directly to the process, but to the object that now exists because the process is complete. Therefore "his" is better described as the producer. For an apt description of this, see Wallace, *Greek Grammar*, 105, especially footnote 89. Result DNs that indicate a state of being (resultant state DNs) come the closest of all result DNs to having an agnate clause, and might indeed have one. Certain verb forms have an emphasis on the resultant state regardless of one's stance on verbal aspect. However, as this dissertation did not find any discussion of agnate clauses for result DNs that indicate states within the linguistics literature, that is not presented here.

straightforward.[103] One should survey the major lexicons, especially Louw and Nida, to find the possible meanings of the cognate verb.[104] Third, if the word has multiple meanings, determine the most likely meaning(s) based on hermeneutical guidelines.[105] A helpful guide in determining which lexical entry applies is that the DN also has a limited range of meaning, so a DN can only imply agnate clause meanings that the DN itself also has. For example, πειράζω can take meanings that πειρασμός cannot. Therefore when πειρασμός appears, the reader does not need to consider meanings that the DN cannot take.[106] If the meaning of a modifier is clear, it can also help limit the meanings of the verb.[107] This might still involve making a decision based on context. Figurative meanings can drastically impact the arguments that a verb takes. In returning to the verb "cook", one can also "cook up an idea" (instead of food). It is possible that a cognate verb has no extant instances of a rare meaning, but the DN still takes that meaning. However, if this exists, it is rare.[108] For these reasons, determining the meaning of the verb in the agnate clause is vital to determining the limits on potential arguments.

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[103] See Appendix A for the verbal cognates for –μός nouns. Specifically, see the columns titled "Word" and "Verbal Cognate" in the "Lexicography" section.

[104] For a more detailed explanation of how to identify the cognate verb and possible pitfalls, see above in the Semantic Limitations sections, especially concerning diachronic semantics.

[105] Almost all of the time a word has one meaning in a given context, but that does not mean the reader can always understand which meaning the author intended. There are certainly situations during exegesis where the reader is unsure and has to make a decision. The reason for including the plural in parentheses is to allow for cases when the reader is unsure which meaning occurs in the context. In this case, one is encouraged to narrow it down as far as possible, and then to compare the modifiers to the argument slots for each meaning to keep in mind the possibilities. The goal should always be to find the meaning of a passage, which is usually singular.

[106] Louw and Nida, *Greek-English Lexicon*, 27.31, 68.58.

[107] This may seem like circular reasoning. However, the meaning of the modifier is not the goal; the goal is to determine the argument role of the modifier. Therefore the modifier's meaning can not only be used to determine its role, but it should be used for such purposes. Doing otherwise would be ignoring evidence.

[108] This study found no clear instances of a process DN that took a totally different meaning that its verbal cognate.

After determining the meaning, a reader will be able to describe the potential arguments

fairly well. This would have been intuitive for a native speaker. Thankfully, consulting multiple

Greek lexicons usually makes this clear for scholars today. To double-check the lexicons, one

should survey the occurrences of the cognate verb to see what arguments it can take. For

instance, κλαίω ("weep") takes people as its agent, similar to its English gloss. However,

different from the gloss, it can take a theme in the accusative that indicates the object for which

the agent is weeping (see Matt 2:18).[109] One should keep a reasonably open mind, especially for

cognate verbs that appear only a few times in extant literature.[110] One helpful way to determine if

an argument fits is by finding the agnate clause. This can be done if it appears in the same

context as the –μός noun, and the –μός noun refers to the agnate clause.[111] After all of this, the

reader will have a good grasp on the limitations a verb places on each argument.

Due to this principle being intuitive, only one example is needed. Matthew uses βρυγμὸς

("gnashing") many times, always as a process DN. Most commentators say that ὀδόντων

("teeth") is an objective genitive, but some say it is subjective.[112] This principle helps decide.

The cognate verb is βρύχω ("gnash"), and Louw and Nida list both βρύχω and βρυγμὸς under

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[109] A Greek verb might not seem take the same arguments as its English gloss. For this reason, one should still not assume that a Greek verb works the same as its English gloss. βρύχω ("I gnash") might only place the theme in the object position ("I gnash teeth"), but the English gloss allows "teeth" in the subject position ("His teeth gnashed"). See also the examples paragraph in this section (below).

When considering the differences between Greek and English verbs, one should remember that some verbs take arguments in the form of prepositional phrases (in both languages), and in the dative case (in Greek).

[110] As stated in the previous paragraph, it seems that current scholarship has a good grasp on the semantic range of most verbs. However, as the example with κλαίω ("weep") shows, a verb may take arguments differently than its English equivalent. Further, κλαίω is also an example where that form of the verb is uncommon, occurring only once. Other Greek verbs take arguments differently than their English gloss. For these reasons it is safe to assume that extant texts do not reveal all the options for how verbs take arguments.

[111] For how to do this, see the Contextual Agnate Clause section above.

[112] Wesley G. Olmstead, *Matthew 1-14*. A Handbook on the Greek Text (Waco: Baylor, 2019), 81.

one entry; or more precisely, they list the specific phrases βρύχω τοὺς ὀδόντας and βρυγμὸς τῶν ὀδόντων under the same entry.[113] Other lexicons confirm this meaning, and seem to indicate that "teeth" is objective.[114] The occurrences of βρύχω confirm this. A possible explanation for the confusion is that English translations of βρύχω or βρυγμὸς may be a word that allows the theme to move into the subject position. Specifically, one might say, "The lion gnashed his teeth to show dominance," or less commonly, "the lion's teeth gnashed to show dominance." In the first case, the structure is agent/verb/theme, whereas the second is simply theme/verb.[115] In Greek, there is little reason to think the second structure (theme/verb) is possible. Also, considering themes appear most commonly as objects, it is better to classify this as an objective modifier.[116] This example illustrates the importance of following this principle, especially following it in Greek rather than one's own native tongue. Despite its pervasiveness, this principles has pitfalls.

This principle applies to all process DNs, but that does not mean it will always be applied correctly. The nature of process DNs (they are derived from a verbal cognate and retain the verb's meaning) shows that this must apply.[117] However, there are many decisions one must make when searching for the pattern. Those decisions can provide one clear option, but not always. The more decisions one has to make, the more likely mistakes become. Perhaps an easier

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[113] Louw and Nida, *Greek-English Lexicon*, 23.41.

[114] BDAG, *Greek-English Lexicon*, 184; Liddell, Scott, and Jones, *Greek-English Lexicon*, 852-853.

[115] Whether "teeth" is synechdoche in the second example is irrelevant. The point is that this structure might be the cause of the confusion.

[116] See the Objective section below.

[117] To suppose a potential contradiction, one might find a process DN with a cognate verb that no longer exists. However, even in these cases one would be able to construct a theoretical agnate clause. The research for this dissertation found no –μός nouns where this is the case. This would be an odd and rare case. Even so, it would mean the process of identifying the pattern behind the principle changes and would not contradict the principle.

way to remember this potential pitfall is that the principle is objectively true, but its application

is subjective.[118] Thankfully there are other principles that can help one avoid these pitfalls.

Subjective

This research project found one principle that helps identify subjective modifiers. In a

sentence with an active verb, there are three arguments that are commonly subjects: agents

(living beings who act), causes (situations or events that cause actions), and instruments (objects

that agents use).[119] This dissertation found no patterns specific to identifying causes or

instruments because they rarely occurred with –μός nouns. Agents, on the other hand, are usually

a genitive modifier.

Agents as genitive modifiers. Agents normally appear as genitive modifiers when

directly modifying a –μός noun.[120] This is no surprise as genitives are far and away the most

common modifier of –μός nouns. Two important notes will help clarify this principle. First, this

means prepositional phrases, dative modifiers, adjectives, and any other word or phrase that

directly modifies a –μός noun probably does not represent an agent. Agent-oriented modifiers,

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[118] This sentence does not employ the dissertation's more common meaning of the terms "objective" and "subjective." Here they refer to the ideas of objectivity (lacking bias and therefore being true) and subjectivity (relying on one's opinion).

This is intended to aid memory because the occurrence of these two terms (subjective and objective) are two examples of a potential pitfall. First, a word can appear multiple times in one pericope with two very different meanings. These two terms mean something different here than they do in the majority of this dissertation. Further, it proves that a word can take a meaning distinct from its primary meaning in a pericope, even when the primary meaning appears many times and the other meaning appears only a few. This illustrates that one should not assume a meaning without at least skimming through the steps to identify the pattern.

[119] Themes and experiencers are also commonly subjects. However, themes are much more commonly the object of an active clause, and no New Testament –μός noun takes a theme as its subject. Additionally, experiencers are subjects roughly as often as they are objects, so they appear in the "Either/Or and Indirective" section below.

[120] Indirect modifiers (such as arguments from implicit argument control) and contextual modifiers (such as arguments from contextual agnate clauses) can be agents.

when they appear as direct modifiers, grammatically modify the –μός noun by virtue of being in the genitive case. [121] Second, not all genitive modifiers represent agents. Genitive modifiers can represent a host of arguments. Therefore, when one sees the genitive, they should not assume it represents the agent.

The question becomes what pattern to search for. There are two. First, when one finds a genitive modifier, they can consider whether it represents the agent of the action. Second, if the pattern is a direct, non-genitive modifier, they can assume it will probably not be the agent. There are ways that implicit modifiers can represent agents when they follow other rules, but direct modifiers are likely not agents.[122] All of these patterns can aid a reader in determining the agent of the agnate clause.

As usual, some examples help solidify this principle. One is Acts 6:1, which says ἐγένετο γογγυσμὸς τῶν Ἑλληνιστῶν πρὸς τοὺς Ἑβραίους, ("There was a complaint of the Greeks against the Hebrews"). Ἑλληνιστῶν is genitive, and as such can be the agent who is complaining. Ἑβραίους is not genitive, and is therefore unlikely to be the agent who is complaining. That the Hebrews are not is confirmed by the preposition governing Ἑβραίους (πρὸς), which indicates that the action is being done to them instead. Another example comes from Acts 20:37, which says ἱκανὸς δὲ κλαυθμὸς ἐγένετο πάντων ("But there was much weeping by all"). The adjective

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[121] Prepositional phrases that take a genitive noun are considered prepositional modifiers, and therefore are unlikely to be agents.

[122] See below in the Implicit Argument Control and Arguments with process-argument verbs subsections of the Either/Or and Indirective section. Those subsections show that agents can be in prepositional phrases if the DN is attached to a process-argument verb. If the DN represents a passive agnate clause, it seems even more plausible for the agent to be a non-genitive modifier, similar to how passive verbs can identify their agent with a preposition or in the dative case. This dissertation found no instances of a –μός noun with a modifier structured similarly to the agent of its passive cognate verb, but this study was very limited. Passive DN structure seems quite plausible based on how other languages work (see the Prepositions Indicating Agents section above).

ἱκανὸς is nominative, and does not make sense as the agent (it fills no argument role), while the genitive πάντων can represent the agent who is weeping. These two examples show how one can apply the principle.

The principle seems to be widespread, but this sample size could be larger. This principle held true for the current project, but 20+ instances is hardly enough to be certain. It might apply more broadly, but there are thousands of occurrences of DNs in the New Testament, and at least hundreds of occurrences of –μός nouns outside the New Testament. This sample size is too small to say how –μός nouns or Greek DNs work in their entirety. Thankfully, there are other principles scholars can apply.

Either/Or and Indirective

Some principles might point toward the modifier being the subject or the object of the agnate clause, depending on the verb. These include one that is widely accepted (the genitive case), two that work by clausal implication (implicit argument control and arguments from process-argument verbs), and two that context provides (common knowledge events and contextual agnate clauses). These findings appear here because they do not fit neatly into the subjective/objective distinction. Finally, this section will discuss other findings that do not fit anywhere else.[123]

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[123] Many of the principles presented in this section are not based on prior exegetical findings. This dissertation has attempted to build on the prior work of biblical and linguistic scholars, and up until this point, the findings presented have done just that. However, many of the principles in this section are based on linguistic scholars alone, and have been rarely (if at all) discussed by biblical scholars. This dissertation presents other principles that will be new to biblical scholars, but those have been based on other work in biblical studies. Some of the ones in this section are new and based only on linguistic scholarship. This probably will not matter, but some may find it an important distinction.

The patterns in this section can indicate any argument in the agnate clause. Which argument it is depends on the pattern, the context, and how the cognate verb takes arguments. Possible arguments include agents, causes, and instruments, which normally appear as subjects.[124] It also includes themes, which normally appear as objects.[125] Other arguments do not fit as neatly in the subjective/objective distinction, such as experiencers.

Experiencers appear as subjects or objects depending on the verb. In both "I scared Sue" and "Sue fears me," "Sue" is the experiencer. However, in the first she is the object and in the second she is the subject. Accordingly, experiencers can be subjective or objective depending on the DN's verbal cognate. Experiencers normally appear with psych verbs, which are not primarily physical, but occur in the mind. To be clear, experiencers are different than other arguments because they commonly appear as a subject and commonly appear as an object. They fit the traditional subjective/objective distinction, but vary depending on context. There are, however, two other arguments that do not fit the subjective/objective distinction very well.

Sources and goals do not fit into the subjective/objective distinction. Sources can be direct objects in English, such as "home" in "Melissa left home". They can also be another argument that does not have a common label, as "me" is in "He took the ball from me."[126] Readers often overlook these as verbal arguments because, when they are not a direct object, they usually appear in a prepositional phrase (see the previous sentence). Concerning the

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[124] See the Subjective section above.

[125] See the Objective section below.

[126] To show that "me" represents an argument in this sentence, consider another sentence: "He threw the ball to me." Anyone who passed English class in middle school will say that in this sentence, "to" identifies the indirect object. As "to" and "from" are opposites, they function in roughly the same way. Therefore, "from" identifies an argument. For an introduction to distinguishing between words that are and are not arguments, see Ágel and Fischer, "Dependency Grammar," 225–257. For a more thorough discussion, see Ágel, Eichinger, Eroms, Hellwig, Heringer, and Lobin, *Dependency and Valency*.

previous example, "me" is a source argument. Goals are the opposite of sources, and appear as indirect objects. Goals could be "tournament" in "Cole went to the tournament," or "basket" as in "Lindsey threw the disc into the basket." Greek grammars do not discuss indirect objects modifying a DN.[127] As such there is no word for a modifier that corresponds to the indirect object in the agnate clause. In lieu of such a term, this dissertation employs the phrase *Indirective Modifiers* for sources, goals, and locations that are part of the action.[128] Since sources, goals, and locations share characteristics, and since there is no apparent term for sources when they are not direct objects, this dissertation labels them as indirective modifiers.[129]

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[127] The research for this dissertation found no grammar that mentions this possibility.

[128] In linguistics, there are two words that can refer to how verbs take indirect objects: "Secundative" and "Indirective." Indirective refers to the way English handles the direct and indirect object combination, as in English the direct object retains its grammatical structure whether it appears with an indirect object or not. "I threw the ball" and "I threw the ball to her" can represent the same action. Secundative refers to the tendency of some languages to treat the direct object in another way depending on the presence of an indirect objects. Secundative verb structure is more similar to the DN + indirective modifier than indirective verb structure as secundative stresses the relationship of the action and the indirect object. However, this difference is negligible. As the two terms are roughly equal in accuracy, but most Greek scholars are aware of the word "indirect," the researcher chose the phrase *Indirective Modifier*. Hopefully the cognate will aid memorization. If, in the future, "secundative" surges in popularity, perhaps another scholar will wisely suggest overturning this decision. For a better introduction to the linguistic concepts of indirectivity and secundativity, see Martin Haspelmath, "Argument Marking in Ditransitive Alignment Types," *Linguistic Discovery* 3.1 (2014), 1-2. That article is publicly available [here].

[129] They all answer the question of "where" in some way (where it is, where it comes from, where it is going). Locations can also be irrelevant to the action. To make this distinction, considering the clauses "Sam went to the store," "Sam played in the store," and "Sam played in the dirt." In the first, the store is integral to the action; it is Sam's destination/goal. Taking it out changes the meaning to something akin to "Sam left." In the second, the store is probably not integral to the meaning, and is simply additional information about where Sam played. If the context added that Sam played with toys in the toy store, then the store would be integral to the action, but in this case, it is not. However, in the third example, the dirt is the location of playing, but it is integral to the action. Sam is playing in the dirt and using the dirt to play. Therefore, one must determine whether a location is integral to the argument to determine if the location should be considered an argument.

Genitive modifiers. Genitive modifiers can represent virtually any argument in the agnate clause, and normally represent an agnate clause argument.[130] This is uncontroversial, and as such, this section is much shorter than sections concerning other principles.

The pattern is familiar. One should confirm the DN refers to a process. If the process DN has a genitive modifier, one should go through the steps for checking what arguments the genitive modifier can match in the agnate clause.[131] Essentially, this principle is that being a genitive modifier allows and does not restrain the possible corresponding arguments. Therefore, the reader should use the overarching principle of matching the cognate verb.

Examples can help illustrate how this applies. The two occurrences of βασανισμὸς ("torture") in Rev 9:5 each take a genitive modifier (αὐτῶν and σκορπίου, "their" and "scorpion"). In both cases, they are subjective agents. The first case, however, is less clear. Whether αὐτῶν represents the agent or theme depends on its referent. It might refer to either the locusts (ἀκρίδες) or a group of people (ἀνθρώπους). The author uses αὐτός in reference to both of them at different points. In some cases the referent of αὐτός is clear from the gender: feminine forms refer to the locusts, and masculine forms to the people. However, the form αὐτῶν is the same in both genders. The author compares βασανισμὸς αὐτῶν ("their torture") to βασανισμὸς σκορπίου ("the torture of a scorpion"), which is clearly agentive. Due to the parallel, it seems better to take αὐτῶν as a subjective agent.

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[130] The reason for saying "virtually any" as opposed to "any" is because this study found no occurrences of a process DN + genitive modifier where the genitive modifier did not represent an agnate clause argument. Other studies might find genitive modifiers that do represent experiencers, but this one did not.

[131] See the Matching the Cognate Verb section above.

An example of an objective genitive modifier is the phrase καθαρισμοῦ σου ("your cleansing") in Mark 1:44 and Luke 5:14. The leper to which σου refers does not perform the cleansing, but he is cleansed. As such he is the theme, and an objective modifier.

The pattern of a process DN with a direct genitive modifier almost always indicates an argument.[132] This makes sense of the fact that grammars place discussions concerning subjective and objective modifiers as a subsection of the genitive case. This research found 40+ instances of direct genitive modifiers with –μός nouns that were process DNs. In all but perhaps one case, the genitive certainly indicates an agnate clause argument. Even in the instance where it is not certain, there is reason to think that the genitive refers to an argument.[133] This pattern does not help decide which argument it indicates, but it is helpful in recognizing that a modifier represents an argument. If the cognate verb takes other arguments, other principles can clarify them.

Implicit argument control. Implicit argument control can indicate any argument of the agnate clause. As mentioned above, implicit argument control is when two actions are related, and the audience can reasonably infer that a stated argument of one action (the *Main Action*) is also an argument of the other action (the *Secondary Action*).[134] Implicit argument control can happen with any two words that denote separate actions. While verbs are the most common words that denote action, this dissertation has shown that DNs can do so as well.

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[132] "Direct Genitive Modifier" indicates a modifier that has a direct (not implicit) grammatical connection to the DN, and they are connected through the modifier being in the genitive case.

[133] It is unclear whether κυλισμὸν βορβόρου ("a roll in the mud") in 2 Pet 2:22 refers to the location of the action (which is not necessarily a part of the action). Due to the fact that the genitive seems to usually indicate an argument, and the fact that βορβόρου seems to be part of the action (the mud is changing shape due to the pig rolling in it), this dissertation classified βορβόρου as a location argument.

[134] "Main action" and "secondary action" are not technical linguistic terms. They are terms this dissertation employs for clarity and brevity.

Two examples will help illustrate the principle. An example might be "The boss paired employees together for collaboration." The main action is "paired," and the secondary is "collaboration." The sentence does not state the subject of "collaboration." However, due to implicit argument control, the reader understands that the people collaborating are the employees. Another example might be "The boss paired employees together for encouragement." Depending on the context, it could be that the boss is the one encouraging the employees or that the employees are supposed to encourage each other. In either case, implicit argument control still applies. These two examples show that, depending on context and the arguments that both actions take, some arguments from the main action are arguments of the secondary action. Specifically, the first case showed that the object/theme of "paired" became the subject/agent of "collaborate." The second showed that either the subject/agent or the object/theme of "paired" became the subject/agent of "encourage." One final note is this: the fact that these are two separate actions tied together ("pairing" led to "collaboration") means that this is implicit argument control and not some other kind of implication. This begs the question of identification.

The pattern to look for is a main action that states its arguments and has a secondary action in the form of a DN. The main action is probably a verb, but could be another DN. After finding this grammatical pattern, one should see if the words are connected in some way. This is commonly done grammatically with words that indicate purpose or goal, such as εἰς ("for"), ἐν ("through"), or ἵνα ("so that"). There might be no grammatical connection if the connection is clear due to the semantics of the main and secondary actions.[135] Whether the connection is

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[135] More precisely, the two actions can be connected if the semantics of one action leads to another, For example, "cook," "eat," and "clean" often accompany one another in chronological order, as in "I cooked supper. After eating, cleaning took too long and I went to bed late." The agents of "eating" and "cleaning" are not stated, nor

grammatical or semantic, consider the semantic relationship of the two actions. Context can enhance the knowledge of the relationship beyond their semantic bond. Returning to the examples from the previous paragraph, if the context of the second example stated that the boss was looking for ways to boost morale, he would probably be the one encouraging. If the employees were tired of working alone, they might be the ones encouraging each other. This is how a reader can identify agnate clause arguments via implicit argument control.

This can also happen through more than one layer of actions. If one action implies another, which implies a third, implicit argument control can be passed down from the first to the third. This recursion of implicit argument control could continue indefinitely, but thankfully it rarely continues for long. The purpose of this paragraph is for the reader to be aware that the DN might be the third or perhaps even the fourth action in a chain. In all of these cases, one action leads to another and passes down arguments; this is implicit argument control.

Some examples help illustrate the principle at hand. Luke 14:28 says εἰ ἔχει εἰς ἀπαρτισμόν ("If he has (enough) for completion"). In that verse "he" is the subject of completion since the verb is in the 3rd-person singular form. The main action (ἔχει, "has") is connected to the secondary action (ἀπαρτισμόν, "completion") by εἰς ("for"). This connection implies argument control, and in this case, the subject of the main action is also the subject of the secondary action. Whether he has enough impacts whether he will complete the building process. 2 Thess 2:13 says εἵλατο ὑμᾶς ὁ θεὸς ἀπαρχὴν εἰς σωτηρίαν ἐν ἁγιασμῷ πνεύματος ("God chose you from the beginning for salvation through sanctification of the spirit"). Here is an example of implicit argument control being carried down through multiple layers, as εἵλατο ("chose") controls

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are they grammatically connected to "cooking," but the semantic range of each makes it clear that the speaker is the agent of all three.

σωτηρίαν ("salvation"), which in turn controls ἁγιασμῷ ("sanctification," the –μός noun). Since πνεύματος probably refers to the Holy Spirit and not the individual's spirit, the agentive argument slot of ἁγιάζω ("sanctify," the cognate verb of the –μός noun) is taken.[136] Therefore either θεὸς ("God") or ὑμᾶς ("you") should be the theme of ἁγιάζω. Indeed, ὑμᾶς fits nicely. These examples show how it works, but that does not mean it always happens that way.

This principle seems to be valid in almost all instances of the pattern. As stated above, the difficulty comes in determining whether the two actions are related and imply one another. As usual, there are situations when context overrides this principle, but it is generally true. Another similar principle concerns a verb that passes its arguments to another action word.

Arguments with process-argument verbs. Process-argument verbs that take a DN as an argument can transfer the other arguments to the DN. Previously, this dissertation concluded that –μός nouns appearing as the nominative subject of a process-argument verb are more likely to be process DNs.[137] The current principle also applies to process-argument verbs that take an action as their object. For instance, the process-argument verb "start" can indicate another action, and that action will involve the subject who "started". "Ricky started the fight" usually means that Ricky was fighting. It seems that the presence of the process-argument verb licenses/allows

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[136] F.F. Bruce, *1 & 2 Thessalonians*, Word Biblical Commentary, vol. 45 (Grand Rapids: Zondervan, 2015), 191-192; Karl P. Donfried, *1 & 2 Thessalonians*, International Critical Commentary (London: T&T Clark, 2013), 281-282; Charles A. Wanamaker, *1&2 Thessalonians,* New International Greek Testament Commentary (Grand Rapids: Zondervan, 2013), 266.

[137] See the Nominative subject of process-argument verbs section. While that section focuses on DNs that are the nominative subject of a process-argument verb, it also discussed how DNs in other grammatical positions have similar characteristics, even if this dissertation did not discover a formal principle on how to find them.

nominatives, datives, prepositional phrases, and even adjectives to represent agnate clause arguments.[138]

This is different than the above principle concerning implicit argument control due to the presence of a process-argument verb.[139] Implicit argument control does not involve a process-argument verb. It involves two specific, separate events that have a relationship. One event leads to another event. The principle at hand concerning process-argument verbs involves one action that points to a part of another action, i.e. they refer to the same action. Going back to the process-argument verb example of "He started a fight," "start" indicates the beginning of the action. The other action word ("fight") tells what the action actually is. On the other hand, return to the example for implicit argument control. In "The boss paired employees together for encouragement," the two actions (pairing and encouraging) are distinct, but have a causal relationship. The phrase "for encouragement" answers "why" the boss paired them together. Therefore, these principles reflect two distinct situations.

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[138] "Licenses" is a technical linguistic term that means a certain grammatical construct allows other grammatical constructs. For instance, a passive verb licenses the agent/cause/instrument of the action to appear in the accusative case instead of the nominative, whereas normally it must appear in the nominative.

Normally when prepositional phrases modify process DNs, they do not represent arguments. While a prepositional phrase modifying a DN (sans process-argument verb) can represent an argument, it is unlikely (this study found only one instance with –μός nouns; see the Other Possibilities section below). Normally this construction (process DN + prepositional phrase with no process-argument verb present) denotes the location of the action. Locations can indeed be arguments (only if they are involved in the action). However, when a process-argument verb appears with a process DN, prepositional phrases seem to commonly denote arguments.

[139] See the Implicit Argument Control section immediately above.

The pattern to look for is a process-argument verb that takes a process DN as an argument. The first step is finding a process-argument verb. Ones that appear in the New Testament with –μός nouns appear in Table 3.6. This is a very limited list, and there are certainly others that would work.[140] Second, one must ensure that the specific occurrence at hand takes a process DN as an argument. For example, take the process-argument verb "finish". Someone might say, "I finished the building," or "I finished construction." The word is "finish" in both cases and takes a DN in both cases. However, the object taken in the first case is a result DN ("the building"), and the second is a process DN ("construction").[141] One must use other principles to determine process or result. If the DN proves to be a process DN, one should then apply this principle.

Table 3.6

Word	Gloss
απολειπω	leave
γίνομαι	happen
δίδωμι	cause/produce
εἰμί	is/take place
ἐπάγω	bring on
ἐπεγείρω	stir up
ἔρχομαι	take place
ποιέω	do
συντελέω	finish
ὑπομένω	endure
ὑποφέρω	endure
φέρω	bear

After determining that a clause matches this pattern, one must determine which argument(s) the verb passes to the DN. The first step is to determine the arguments of the verb, which might not be obvious to most grammarians. As stated previously, there are many different types of arguments, and linguistics has recently brought to light some arguments that were

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[140] In searching for those, a good place to start is with verbal cognates such as τελέω, ἐγείρω, and μένω, but that should not limit a search. The only good way to find them all would be combing through every Greek verb. Possibly even then one might need to search for other action words like deverbal nouns.

[141] This English example might be confusing, because in "I finished the building," the word "constructing" (or a synonym) is implied. Therefore the meaning is "I finished constructing the building." Even so, "building" is still a result DN. The point of this example is that a reader cannot assume an accusative DN with a process-argument verb is always a process DN.

previously unrecognized, such as those in prepositional phrases.[142] For example, if the verb has a negative effect on the theme, ἐπὶ ("on") might govern the theme in the DN phrase.[143] Most of the time scholars will easily identify arguments. For instance, the subject in a "subject + process-argument verb + process DN as object" construction commonly indicates an agnate clause argument. In that construction, one should look for a nominative noun that is the subject of the process-argument verb. After identifying the process-argument verb's arguments, one can use usually slot the process-argument verb's arguments into similar slots in the agnate clause, and one can confirm that this is correct with the principle of matching the cognate verb.[144]

This paragraph will present some examples. A simple example comes from Luke 4:13, where συντελέσας πάντα πειρασμὸν ὁ διάβολος ("the devil completed every temptation"). Here, the devil (διάβολος) is the subject/agent of the process-argument verb (συντελέσας, "completed"), and the process-argument verb transfers this argument to be the subject/agent of the DN (πειρασμὸν, "temptation"). The agnate clause becomes "The devil tempted." Rev 18:7 is

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[142] See the Either/Or and Indirective section above.

Indirect objects are an English example of a prepositional phrase that indicates an argument. For an introduction to the idea of prepositions representing arguments, see Ágel and Fischer, "Dependency Grammar," 225–257. For a more thorough discussion, see Ágel, Eichinger, Eroms, Hellwig, Heringer, and Lobin, *Dependency and Valency*.

This is especially true for prepositional phrases that appear when the verb is in the passive or middle voice. From a linguistic point of view, it makes sense that a DN with a process-argument verb could license constructions similar to passive voice constructions. The DN + process-argument verb construction is similar to passive voice semantically. Take the examples of a DN phrase + process-argument verb ("A debate occurred") and a similar passive voice clause ("The point was debated"). In both examples, the focus is not on the people debating; emphasis is shifted elsewhere. Perhaps this semantic similarity leads to the grammatical similarity. Specifically, in order to state the subject, one could add the prepositional phrase "among the students" to either of the two examples and they would still mean the same thing. For the reason, this dissertation decided to list it as valid, but further studies may alter (and hopefully improve) this principle.

[143] Specifically, the 12th meaning of ἐπὶ listed in BDAG, *Greek-English Lexicon*, 366. See Acts 8:1 and 13:50 for illustrations.

[144] See the Matching the Cognate Verb section above.

an instance where the process-argument verb transfers two arguments. There it says δότε αὐτῇ βασανισμὸν ("give her torment"). "You" is implied in English, but is stated in Greek via the 2nd person plural ending, and refers to the audience. The process-argument verb (δότε, "give") transfers both the audience and the indirect object (αὐτῇ, "her") to the DN, with the audience as the agent and αὐτῇ as the theme. A third and final example comes from Heb 13:13, which says ἐξερχώμεθα … τὸν ὀνειδισμὸν αὐτοῦ φέροντες ("we must go (to him) … bearing his abuse"). This is a unique case, because the genitive modifier (αὐτοῦ, "him," referring to Christ) has already taken the experiencer slot that "we" (believers) logically fits into. However, this is a case where more than one iteration of the action is in view. In one, Christ is the experiencer. In another, believers are the ones experiencing abuse. The DN (ὀνειδισμὸν, "abuse") can refer to both instances of abuse because they occur for the same reason: both Christ and believers assent to the same ideas about Christ being God, and suffered abuse because of it. Another example comes from Luke 24:38, which has ἐν τῇ καρδίᾳ ὑμῶν ("in your hearts") modifying διαλογισμοὶ ("doubts") via the process-argument verb ἀναβαίνουσιν ("arise"). "In your hearts" cannot be the content of the doubt, therefore it must represent the people who are doubting. One might point out that ἐν ("in") commonly denotes location and seems to here. However, here the heart is a part of a person that represents the person themselves.[145] Therefore, even though it does show location, it is a euphemism for the people who are doubting, i.e. the location is the place in a

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[145] The preposition ἐν can represent many different parts of the agnate clause when it appears with a DN. This seems to be the case for two reasons. First, it is very flexible in general. BDAG, *Greek-English Lexicon*, 326-330, lists twelve distinct definitions for it. Many prepositions have multiple definitions, but ἐν has many definitions that are common. Second, there is a principle that some languages have a preposition that can denote many different parts of the agnate phrase. ἐν seems to be this preposition for Greek.

person where thinking occurs.[146] The people whose hearts are in view are the subject and experiencer of the action. However, one might find this pattern, but the principle might not apply.[147]

This principle seems to generally apply, but other data could overturn it. The fact that this principle has explanatory power led to it being included as a valid principle, but there are probably hundreds of instances of this pattern (process-argument verb + process DN as object) in the larger corpus of extant works. A much larger study of this pattern could validate the conclusion above, as is the case with many of the principles herein. Further, there are times when one finds the pattern, but it yields no arguments. For these reasons, this principle will be in the middle of the hierarchy.

Contextual agnate clause. Some of the time an author will include the agnate clause in the same context as the DN, using both in reference to the same event. An author might introduce an event with the cognate verb, and then refer back to that event with the DN. One might also introduce an event with the DN, and then fill in the gaps with a clause containing the cognate verb. In either case, the reader can find the agnate clause and use this to confirm and/or fill in the argument slots. This begins with appropriately searching for the pattern.

When a DN appears in the same context as its cognate verb and they both refer to the same event, the reader can use that clause to fill in the rest of the agnate clause. The first step is finding any direct or implicit modifiers/arguments using the above principles. This includes any

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[146] At that point in history, many people believed that thoughts originated in the heart instead of the brain. See Alan J. Thompson, *Luke*, Exegetical Guide to the Greek New Testament (Nashville: B&H, 2017), 52.

[147] Often a preposition that appears with the cognate verb represents another part of the agnate clause besides an argument. This is especially true with ἐν ("in"). Therefore one might find the pattern, but the pattern may not yield an argument. See σεισμὸς ("earthquake") in Rev 11:13, where ἐν denotes the time of the earthquake.

of the principles that identify modifiers stated in the text. After the reader has identified those modifiers and matched them to their potential argument roles, one can search for the agnate clause. The penultimate step is determining the cognate verb. Some of the time non-cognate verbs can reveal agnate clauses, but this dissertation was unable to find a good method of determining when that happens.[148] Readers should restrict their searching to clauses with the cognate verb. Finally, one can search the context for the cognate verb and see if any of the uses of that verb match the DN. The agnate clause will match any arguments found from the other principles, and where applicable, any information from the context of both. It is important to apply the other principles first because one could easily find the wrong agnate clause otherwise. In Acts 8:1, διωγμὸς refers to the persecution of the Jerusalem church. This is shown by the fact that it appears with a process-argument verb. If one were to search for the agnate clause without knowing this, they would find Acts 7:52, which refers to the persecution of the Old Testament prophets. These are not the same event.

The reasoning behind this principle is straightforward. When the agnate clause appears in the context, one can glean arguments from it. The simplicity of this principle hints at a potential issue. The issue is determining when a use of the cognate verb is an agnate clause, and when it refers to something else. One must be careful that the agnate clause is really the agnate clause. If one finds a false agnate clause, their findings will cloud the meaning of the text whether they know it or not. To help readers avoid this situation, here are four examples.

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[148] For instance, see χαίρω ("greet") and ἀσπασμὸς ("greeting") in Luke 1:29. If context makes it clear that there is a non-cognate agnate clause, then that potentially also fits this pattern. This dissertation did not find enough instances of non-cognate agnate clauses to make a decision on that.

The first occurrence of βασανισμὸς ("torment") in Rev 9:5 has an agnate clause in the preceding verse. The direct modifier (αὐτῶν, "their") refers back to ἀκρίδες ("locusts") in verse three. Verse four mentions a few actions the locusts do, including βασανισθήσονται ("torment"). This fits contextually as well, as καὶ ("and") indicates a connection between the two thoughts. Therefore one can confirm that αὐτῶν represents the locusts (the subject/agent). The reader can also infer that the object/experiencer is οἵτινες οὐκ ἔχουσιν τὴν σφραγῖδα τοῦ θεοῦ ἐπὶ τῶν μετώπων ("those who did not have the seal of God upon their foreheads"). This is a straightforward example, but others are slightly more difficult to find.

John 7:12 shows the agnate clause arguments of γογγυσμὸς ("grumbling") with a process-argument verb, and later confirms those arguments when the agnate clause appears in verse 32. Verse 12 contains a process-argument verb (ἦν, "was") with a DN (γογγυσμὸς) as the subject. The prepositional phrases (περὶ αὐτοῦ and ἐν τοῖς ὄχλοις, "about him" and "among the crowds") probably represent the theme and the agents (respectively). Moving along to verse 32, all of the same elements are there. The cognate verb (γογγύζοντος, "murmuring") replaced the DN, the agent (ὄχλου, "crowd") is unchanged, as is the theme (περὶ αὐτοῦ, "about him," which still refers to Jesus). This confirms everything that the principle concerning process-argument verbs revealed. Additionally, verse 32 contains a demonstrative pronoun (ταῦτα, "these things") that refers to the crowds' thoughts interspersed in 7:20-31.[149] Therefore this principle can help the reader grasp the text's meaning.

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[149] One might point out that 7:12 and 7:32 do not refer to the same exact event, and that is true to a degree. 7:12 refers to a subset of murmurings and 7:32 refers to a larger group of murmurings including 7:12. The salient point is that 7:32 does refer back to 7:12 in part. The other murmurings to which 7:32 refers are the same ideas as 7:12 spoken within the same context. In other words, 7:12 is the beginning of this specific set of murmurings, and 7:32 is the end.

Some of the time one must search a little more than the immediate context to find the agnate clause, as is the case with διωγμός in Acts 8:1. That verse is another that contains a process-argument verb (Ἐγένετο, "began") with a DN, and it reveals the theme (ἐπὶ τὴν ἐκκλησίαν τὴν ἐν Ἱεροσολύμοις, "against the church in Jerusalem"). However, it is different from the previous example in that there is no apparent subject/agent. In searching for the cognate verb (διώκω, "persecute"), one comes to 7:52, but that is not the agnate clause as the theme of 7:52 is προφητῶν ("prophets"). Therefore, one should continue searching. After finding other instances of the cognate verb that do not match, one will come to Acts 26:11. In that verse, Paul talks about what he did to the Christians in Jerusalem. This reference, allowing for stylistic variation, matches 8:1. Working backward through the other instances, one can conclude that other agnate clauses appear in Acts 9:4-5; 22:4, 7-8; 26:11, 14-15. Therefore the agnate clause (in English) is "Saul (Paul) persecuted Christians (starting in Jerusalem), and by doing so he also persecuted Jesus himself."[150] Additionally, those clauses help fill in the other parts of the agnate clause, such as how Paul persecuted them.

A final example shows how a contextual agnate clause can match a DN even when there are no direct or implicit modifiers. Matt 27:54 uses the word σεισμὸν in reference to an earthquake. One might reasonably assume that this is a common knowledge event caused by God.[151] However, three verses prior Matthew stated ἡ γῆ ἐσείσθη ("the earth shook"). Therefore one should not understand this primarily as God shaking the earth (although certainly it would have been attributed to him). The focus is not on God shaking the earth, but on the fact that the

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[150] As the process-argument verb in Acts 8:1 (Ἐγένετο, "arose") often refers to the beginning of an event, this matches well with the fact that Saul eventually left Jerusalem to persecute Christians elsewhere.

[151] In modern times one would attribute an earthquake to "Mother Nature." In first century Judaism, God was thought to be the agent behind natural events. See 2 Pet 2:5.

earth shook at the same time many other unnatural events occurred, and this caused even the

guards (who did not believe in Jesus) to come to believe he was God's Son. Therefore one can

conclude that the agnate clause behind σεισμὸν in Matt 27:54 is simply ἡ γῆ ἐσείσθη ("The earth

shook").

This principle weighs very heavily as long as it refers to the same event as the DN phrase,

but it is not very high in the hierarchy of principles. The example above from Acts 8:1 showed

the closest instance of the cognate verb is not necessarily the agnate clause. Therefore one should

first apply other principles to determine whether the clause with the cognate verb matches with

the DN phrase. First, it must match up with the DN phrases' modifiers, both direct and implicit.

This is often easy to see. If the cognate verb's arguments have the same referent as the DN

modifiers, then it likely matches. If so, then one must also determine whether they refer to the

same event. Context clues can help with this, but ultimately it comes down to a judgment call. In

many cases this judgment call will be fairly easy (e.g. Acts 8:1), but with some it will not be. In

Heb 12:14, the reader is commanded to pursue ἁγιασμόν ("sanctification"). Potential agnates

come from Heb 10:10, 14, 29; and 13:12. However, all of these refer to Christ's work on the

cross that makes believers holy (ἁγιάζω). One will likely make a decision based on theological

presuppositions as to whether one (or all) of these represents the agnate clause. Therefore, the

decision should be weighted in accordance with the strength of the decision. This is similar to

another principle.

Common knowledge events. In some cases an argument is understood by both the

author and the audience without the author mentioning it. This only happens when the

speaker/writer can reasonably expect the hearer/reader to understand an argument without

directly stating it. Authors can do this by referring to events that both the speaker and the reader

know about. Native Koine speakers would have understood the arguments as long as the DN phrase was specific enough to remind them of the rest of the event. By "common knowledge events" this dissertation refers to any events that the intended audience would know about and the author/speaker could bring to their mind.[152] For example, say in the second week of November during a leap year an American starts a conversation by asking, "What'd you think of the election?" The hearer would immediately understand the entire agnate clause: America elected a president. Without any grammatical clues the hearer would still understand. That this is true is shown by the fact that the speaker would be surprised if the hearer responded by asking, "What election?"

The pattern has less to do with the lexico-grammatical context and more to do with the historical context, and it often comes down to a judgment call. Lexicons can indicate words which are technical terms that any Greek speakers would have understood.[153] In those cases, one must understand the historical context in order to fully grasp the agnate clause. In instances without technical terms, the word might still be used in reference to a specific event. In those instances, one will have to rely on commentaries, their own knowledge, and any other tools that describe the historical context. Further, even knowing the historical context does not ensure accuracy. For example, does "Christ's abuse" (τὸν ὀνειδισμὸν αὐτοῦ) in Heb 13:13 refer to a specific type of abuse that Christ suffered, or the abuse in general? If it is specific, to which instance does it refer? The answer is unclear. Therefore, one must rely on the available historical context, and even then they must sometimes make a judgment call. Essentially it comes down

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[152] This concept is similar to three of Wallace's categories for the article: *par excellence*, monadic, and well-known. See Wallace, *Greek Grammar*, 222-225.

[153] Some examples include κατακλυσμὸς ("flood," referencing the Noahic flood) and παραπικρασμός ("rebellion," referring to the Israelite rebellion in Exod 17:7).

whether or not the DN can describe a situation that both the writer and the reader are familiar with. If the answer is yes, then one must ask if the writer can reasonably expect the reader to identify the particular situation from the words he wrote. This pattern is not formulaic like many others, but can be helpful in explaining some implied arguments.

As usual, a few examples help illustrate this point. The first example is a clear one as it involves the use of a technical term. Since κατακλυσμὸς was a technical term for the Noahic flood, anyone familiar with Judaism would have known the agnate clause after only hearing that one word.[154] When someone read or heard Matt 24:38-39 or Luke 17:27, they would have known that κατακλυσμὸς referred to the time when God had Noah build a boat and then flooded the earth.[155] Another example is πειρασμός. This was not a technical term, as it could refer to testing or trials in general. Despite this, in Heb 3:8, the author used it in reference to a specific time when the Israelites put God to the test.[156] The author added a locative modifier (ἐν τῇ ἐρήμῳ, "in the wilderness") to indicate that this was not just any testing; it was the time in the wilderness, which was common knowledge to most Hebrews. Either the readers only knew of one event where someone was tested in the wilderness, or if there were a few events, one in particular stood out above the others. Therefore the readers knew that the agnate clause of πειρασμός was "The Israelites tested God in the wilderness," These two examples illustrate situations where shared knowledge about certain events can imply agnate clause arguments.

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[154] BDAG, *Greek-English Lexicon*, 518.

[155] 2 Pet 2:5 also uses κατακλυσμὸς, but more clearly implies the subject through the use of a process-argument verb. There the use of ἐπάγω ("bring on") transfers the subject to the DN. See the Arguments from process-argument verbs section above.

[156] Exod 17:7; cf. Num 14:1–23; 20:2–5.

How pervasive this principle is depends upon how strict one's requirements are for determining when a –μός noun refers to a common knowledge event. On one end of the spectrum, someone might accept a –μός noun as a common knowledge event only if the evidence was overwhelming. In this case, the pattern would always indicate valid results. On the other end of the spectrum, someone might see a common knowledge event when there is any evidence for it whatsoever. In this case, the pattern would be less likely to indicate valid results. Due to the inexact process of determining the pattern, perhaps the pervasiveness of this pattern should be viewed differently.

One should grant weight to this principle in accordance with the strength of the evidence in each occurrence, but this principle is low in the hierarchy even when the evidence is strong. The last paragraph about each principle points the way toward a hierarchy of principles. Principles that are more pervasive should be higher on the hierarchy, and given more weight when the pertinent text matches their pattern. Less pervasive principles warrant less weight. Different from those, this principle may carry more or less weight depending on the amount of evidence. If there is strong evidence that the original writer and readers both knew about an event, and the writer knew a certain –μός noun would bring that event to the reader's minds, then this principle warrants more weight. If the opposite is true and the evidence is scant, this principle warrants less weight. It is unique in that sense, although it is very similar to the contextual agnate clause principle as the other principles should be applied first.[157] Therefore it is low on the hierarchy. There are other possibilities for principles as well.

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[157] The research process behind this dissertation has assumed strict requirements for determining common knowledge events. This project only concluded that seventeen occurrences of –μός nouns referenced common knowledge events, but there are potentially more. This dissertation adhered to strict requirements for common knowledge events due to the goal of building a foundation from which future works can explore DNs more thoroughly.

Other possibilities. This section will share a few other ideas about how modifiers can indicate arguments in the agnate clause. The goal is not to provide principles, but possibilities. This will be helpful in further illustrating that there are possibilities outside of what grammars have traditionally mentioned.[158] This dissertation has already illustrated how prepositional phrases can indicate arguments, and how some arguments do not fit into the subjective/objective dichotomy. In thinking ahead, one should not restrict themselves to only the principles mentioned herein. This is because one should not expect this dissertation to create an exhaustive explanation of how Greek DNs work. The current goal is to provide a starting point that others can use to discover more principles. This is a means to the long-term goal of scholars finding a consistent method for identifying process DNs and any agnate clause arguments. The examples below show other possibilities for modifiers in order to accomplish that goal.

A prepositional modifier can represent a cause, and does not need to appear with a process-argument verb. Gal 4:14 says ὸν πειρασμὸν ὑμῶν ἐν τῇ σαρκί μου ("Your testing in my flesh"). The cognate verb (πειράζω, "test") has two arguments: the subject (which is commonly an agent or cause), and the object (experiencer). Since a situation or physical object cannot be tempted, σαρκί μου ("my flesh") can only fit into the subject position. The question then becomes whether or not it reasonably fits there, and it does.[159] Therefore it seems best to take

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[158] See the Valid section above.

[159] Commentators confirm this, and one even uses the term "cause". See David A. DeSilva, *Galatians. A Handbook on the Greek Text* (Waco: Baylor, 2015), 86-92; Richard N. Longenecker, *Galatians*, Word Biblical Commentary, vol 41 (Grand Rapids: Zondervan, 2015), 191; F.F. Bruce, *The Epistle to the Galatians*, New International Greek Testament Commentary (Grand Rapids: Eerdmans, 1982), 209.

this prepositional phrase as indicating the subject/cause of the agnate clause.[160] One other

example shows a unique situation.

This dissertation has not yet given direct attention to identifying indirective modifiers

because they fall under a pattern mentioned above. Indirective modifiers are source, goal, and

location arguments. They commonly appear in verbs that take three arguments. The DN phrase

might imply the indirect object of the agnate clause by referring to a common knowledge event.

More explicitly, the writer can include an indirective modifier. For –μός nouns in the New

Testament, indirective modifiers appear in the genitive case. Two examples of source arguments

come from καθαρισμός ("cleansing") in Heb 1:3 and 2 Pet 1:9. In the first, the agnate clause

behind the DN phrase is roughly, "The Son cleansed (believers) from (their) sins."[161] The

genitive word that directly modifies the DN (ἁμαρτία, "sins") does not fit as either a subjective

or objective modifier. "Sins" do not cleanse, nor are they cleaned. Therefore it makes more sense

as an indirective modifier; specifically as the source from which the object moves away.

Another example of an indirective modifier comes from παροξυσμός ("provocation") in

Heb 10:24. There the two modifiers (ἀγάπης καὶ καλῶν ἔργων, "love and good works") represent

the goal of the action. One might say that they are subjective modifiers and cause arguments. If

so the agnate clause would be similar to "Love and good works provoke one another." This

makes little sense semantically and contextually.[162] The best option by far is to take the modifiers

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[160] σεισμὸς ("storm") in Matt 8:24 might be another example of this, or perhaps instrument, if the verse means that the sea was doing the shaking. If so, ἐν ("in") denotes the instrument/cause and not the location, i.e. the sea was doing the shaking and not where the shaking occurred. However, location seems more likely.

[161] See also 1 John 1:7.

[162] Semantically, "love" might be the subject/cause of provoking, but it is harder to imagine "good works" provoking someone. Contextually, the author is encouraging the reader to love others and perform good works.

as indirectives. They are not the source, as the author is not encouraging believers to leave love and good works. Therefore, due to the principle requiring them to match the cognate verb, they best fit as indirective modifiers, being the goal of the agnate phrase. These are just a few examples of less common modifiers; objective modifiers are quite common.

Objective

Finally, there are no principles unique to objective modifiers despite objective modifiers being quite common. This section will discuss potential reasons for this and then describe themes, which usually appear as objects.

The principles that help indicate objective modifiers have been covered above. The main principle can aid in this, and many of the principles in the "Either/Or and Indirective" section can help determine an objective modifier.[163] However, the present research process found no principles unique to direct objects. There are a few possible reasons for this. Maybe it is due to the fact that this research project only surveyed 244 occurences of DNs, and a good number of those were result DNs, which do not take argument-oriented modifiers. Another reason might be that there are theoretically fewer instances of objective modifiers than subjective modifiers due to the fact that all verbs take subjects but only some take objects.[164] Still another reason could be this dissertation overlooked a principle, or that there is no principle that only applies to objects/themes. For whatever reason, the research process yielded none.

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[163] See Either/Or and Indirective above.

[164] Wallace, *Greek Grammar*, 117. If this is a factor it is probably only a small factor, as this dissertation found that all New Testament –μός nouns with cognate verbs that are only intransitive are result DNs. Further, the research for this dissertation found 61 instances of modifiers likely representing subjects, and 105 instances of modifiers probably representing objects. Limiting to direct modifiers evidences that objective modifiers are even more common. There are 14 instances of direct modifiers likely representing subjects, and 30 instances of direct modifiers probably representing objects.

Themes are almost always objects. Other arguments can be objects, but they are more commonly subjects, indirect objects, or too flexible to fit into one category. One can identify the agnate clause's theme via a few principles. As usual, one should apply the principle for matching the cognate verb.[165] In addition to this, genitive modifiers, implicit argument control, arguments of process-arguments verbs, and common knowledge events can reveal the theme.[166] Since these principles all have the ability to indicate other arguments, this subsection simply refers to the other principles covered in this chapter.

Conclusion of Principles for Agnate Clause Arguments

This leaves a few principles that one can use when distinguishing between subjective, objective, and indirective modifiers of –μός nouns. One should remember that agents almost always appear as a genitive modifier. However, a genitive modifier is not limited to being an agent, and can represent virtually any argument. Other arguments can be implied, whether that is through a separate action or through a process-argument verb. Context can also provide arguments through an agnate clause or a common knowledge event. Finally, in addition to the common "subjective" and "objective" categories, this dissertation proposed a new category for DN modifiers titled "indirective." Indirective modifiers represent either the source, the destination, or the location of the action. All these principles can help the reader recreate the agnate clause.

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[165] See the Matching the Cognate Verb section above.

[166] See these principles in the Either/Or and Indirective section above.

Conclusion

The goal of this chapter was to discover principles for distinguishing process and result DNs, and for determining the argument corresponding to modifiers of process DNs. This chapter built upon the foundation of current Greek scholarship. From there, the research process analyzed the data around New Testament –μός nouns. Finally, the process gleaned principles from that data in order to clarify how Koine worked. As stated above, the principles fell into two categories.

This dissertation presented seven principles for distinguishing whether a –μός noun represents a process or a result:

1. The overarching principle says that each DN is limited by its semantic range.

2. Unergative cognate verbs indicate a result DN.

3. A physical nature modifier indicates a result DN.

4. If the DN is in a list, the other items can indicate a process or result DN.

5. The number (singular or plural) of the DN can indicate a process or a result DN.

6. If the DN is the nominative subject of a process-argument verb, this indicates a process DN.

7. If the cognate verb appears in the same context, this can indicate a process DN.

When these principles show that a DN represents a process, the DN may have modifiers that reveal the arguments of the agnate clause.

This study discovered seven principles that help determine agnate clause arguments:

1. The overarching principle is that modifiers must fit the semantic expectations of the cognate verb.

2. Agents normally appear as genitive modifiers.

3. Genitive modifiers can represent virtually any agnate clause argument.

4. Arguments can be passed down from process-argument verbs.

5. Arguments can be implied through implicit argument control.

6. Arguments can be implied with a contextual agnate clause.

7. Arguments can be implied through common knowledge events.

This list of principles for discovering arguments is incomplete, as there are some argument-representing modifiers that are not fully explained by these seven principles.

While the current project has discovered and presented these principles, it has not organized them or shown how to apply them as a unit. As the goal of this study is to present a systematic method for interpretation, an unorganized set of principles only partially accomplishes this goal. Therefore, chapter four will organize these principles into a synthetic method for application.

Chapter 4

Synthesis

The purpose of this chapter is to synthesize the principles discovered in chapter three. Those three chapters used a dearth of data to discover two groups of seven principles concerning the –μός suffix. While those chapters determined valid principles, it merely hinted at application. A grammarian might go about applying those principles haphazardly. However, it would be better if these principles were organized into a singular method for application. For this reason, the present chapter seeks to create a synthesized method of applying these principles together.

In order to show how to apply the findings of this study, the current chapter is divided into four sections. The first is a brief summary of the study thus far. The following two sections are parallel to one another. One discusses how to use the principles for distinguishing whether the –μός noun represents a process or a result of a process. The other concerns –μός nouns that represent a process. Specifically, it discusses how to use the principles for determining the process DN's agnate clause arguments. The final section will conclude this dissertation. It will first highlight some impacts that this study might have on scholarship, and then discuss how these impacts might spark further studies.

Summary

This dissertation has covered much information concerning deverbal nouns (DNs), and this subsection will summarize the salient parts. First, this subsection will present the ideas that formed the foundation of this study. Second, it will survey the data found during the project.

The Foundation

Greek grammars have become more and more common over time, but an in-depth study of Koine Greek –μός nouns has been missing. Many grammars include a section on subjective and objective genitives.[1] Some have even mentioned that these genitives modify nouns derived from verbs (DNs).[2] Others have also provided insight into the –μός suffix directly, discussing various words that take the suffix.[3] However, none of these were an in-depth study of the –μός suffix, and there are still gaps in the knowledge. Most grammars never mention the –μός suffix, and those that did rarely give it more than a paragraph. No works discussing the –μός suffix have attempted to integrate linguistic insights concerning DNs. Most importantly, there has been very little work done to determine the semantic range of the –μός suffix.

Linguistics contributed many terms and concepts to the study of deverbal nouns. Vendler created a verbal classification system upon which other linguists built.[4] Others followed in his footsteps and created additional categories.[5] These categories divided verbs based on various criteria, such as duration, telicity (whether the action terminates), and the arguments it takes. Lees and Chomsky discussed how DNs are very similar to their cognate verbs.[6] While they pushed the discussion forward, many of their ideas have been laid aside in favor of more viable

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[1] Brooks and Winbery, *Syntax of New Testament*, 14; Greenlee, *Concise Exegetical Grammar*, 25-28; Hoffman, *Everyday Greek,* 27-28; Vaughan and Gideon, *A Greek Grammar of the New Testament*, 34; Young, *Intermediate New Testament Greek,* 29.

[2] Ibid.

[3] Ibid.

[4] Vendler, *Linguistics in Philosophy*, 102-131.

[5] Rozwadowska, "Aspectual," 239, 256-257; Rozwadowska, "Event Structure," 341, 343-344; Grimshaw, *Argument Structure*, 28-29.

[6] Chomsky, *Remarks on Nominalization*, 4-7, 10, 13, 23-24; Lees, *The Grammar of English Nominalizations*, xx-xxi, 33, 38, 66, 87-88.

options, such as Grimshaw's landmark work on *Argument Structure*. Her work showed how

verbs take arguments, and similarly, how some DNs take modifiers that correspond to their

cognate verb's arguments. The idea of subjective and objective genitives was nothing new, but

Grimshaw provided some rules for distinguishing between the two main categories of DNs. The

first type are those that represent a process (those that are roughly synonymous to their cognate

verb, and as such can take modifiers that represent arguments). The second type are those that

represent a result of that process, such as the object created from the action ("creation") or the

agent who is tied to doing that action ("creator").[7] Since then, many others have discussed other

ways to distinguish process DNs from result DNs, which of her rules apply in what languages,

and ways to determine how DN modifiers correspond to verbal arguments.[8] One other

noteworthy contribution is the phrase "agnate clause," which refers to the sentence that lies

behind the DN and its modifiers.[9] With this dearth of information in hand, the present study

turned to the New Testament to mine it for data on the –μός suffix.

Gathering Data

The present study gathered data concerning New Testament –μός nouns. The study

determined that the New Testament was a sufficient corpus from which to gather data concerning

the –μός suffix. It is large enough for a diverse sample, but not overly cumbersome. The

researcher was familiar with it from his previous studies, and it is the work most pertinent to the

intended audience of this dissertation. From here he searched for and found 56 words appearing

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[7] Grimshaw, *Argument Structure*, 4-8, 28-29, 34.

[8] See the After Grimshaw section above.

[9] Alexiadou, Haegeman, and Stavrou, *Noun Phrase*, 2-3; Koptjevskaja-Tamm, *Nominalizations,* 252; Mallinson and Blake, *Language Typology*, 403; Venneman, "Explanation in Syntax, 352-354.

in the New Testament that certainly contain the –μός suffix.[10] These words appear a total of 244 times in the New Testament. These 244 occurrences have 201 direct modifiers, and almost 150 other words or phrases that are connected to the verbal action. These three categories (words, occurrences, and modifiers) present three different situations from which data can be gathered.

Words[11]

Words are much more than an ordered set of letters with a definition. The first bits of data gathered for words concerned the morphology and diachronics of the word, specifically the cognate verb from which the –μός noun derived and the oldest extant text in which this word appears. This gave a picture of how the –μός noun came into existence, the most important aspect being the connection to its cognate verb. The semantics of each of these verbs allowed classifying the word according to various features of its cognate verb's meaning, such as whether it represented an instantaneous event or one with duration. This showed how native speakers used the cognate verb. The semantic range of the verb impacted what arguments the verb took, specifically the verb's transitivity. What arguments it took impacted how readers understood the meaning in context, such as the case of the direct object and what prepositions appeared with it.

Few of these data points had a direct impact in determining principles for –μός nouns, but they laid the foundation for the entire study. The morphology of a –μός noun seemed to have no influence upon meaning. However, without identifying the cognate verb from which the –μός noun derived, this study would not have been possible. Some have claimed that diachronics can

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[10] See the Identifying –μός Nouns section above. Some other nouns potentially contain the –μός suffix, but this study aimed to lay a firm foundation for others to build from, and as such only included nouns that almost certainly contain the suffix.

[11] See Appendix A to view the data gathered for words.

help distinguish between process and result DNs, but this study was too small to confirm or refute that claim.[12] Classifying verbs according to their prominent features seemed promising, but only led to one valid principle.[13] Further, despite the claims that the –μός suffix indicates a process, this study found 13 –μός nouns that are always result DNs, and at least 6 that can be result DNs depending on the context.[14] The arguments a –μός noun's cognate verb could take restricted which agnate clause arguments each modifier could represent. Additionally, the syntax of these arguments can help identify them. While these data points did not directly lead to many principles, they allowed the researcher to use other data points to discover principles. Without a study of the words, the researcher would have had difficulty understanding how–μός nouns are connected to verbal ideas. He would also have had difficulty correlating modifiers to agnate clause arguments. Therefore, gathering data from the word and its verbal cognate was essential to study the occurrences of –μός nouns.

Occurrences[15]

When –μός nouns occur in a sentence, the meaning can transform into something more than what appears in a lexicon. As such, there is yet more data to gather. The first is the declension of each –μός noun; gender, number, and case in particular. From there, the research studied how it appeared syntactically with other words, such as articles, verbs, and other words

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[12] Anderson, "Deverbal Nouns," 62, 69, 79; Camacho, "Argument Structure," 21.

[13] See the Unergative Cognate Verb section above.

[14] Smyth, *Greek*, 176-178; Hoffman, *Everyday*, 27-28.

Almost half (27 of 56) of the words are always process DNs. For others, the definition(s) are either unclear whether the word is a process or result DN, or there is disagreement between lexicons.

[15] See Appendix B to view the data gathered for occurrences.

that identify sentence structure. This study then gathered what words each –μός noun modified and the declension of nouns it modified. Stepping back to look at the larger picture, the research also delved into the larger context in which the word occurred. Some words appeared in direct discourse, others in an epistle, narrative, or apocalyptic literature. Along with scholarly insights, this data formed a basis for categorizing each occurrence as a process or result DN. The researcher also provided a confidence scale for each occurrence, and showed how that confidence level changed over time. Lastly, the data showed the principles that impacted the researcher when coming to final decisions on whether the –μός noun was a process or result DN.

Some of these data points led directly to principles for –μός nouns. The declension of each word in context showed whether it was singular or plural, leading to the principle concerning how the number of a –μός must match the number of its referent.[16] In some cases this can help distinguish whether it is a process or result DN. The syntax of the sentence also helped distinguish between process and result DNs when the –μός noun appeared in a list. While the word it modified rarely had an impact upon meaning, the context of –μός nouns did.[17] For example, appearing in the same context as its cognate verb influenced the decision between process and result.[18] Scholarly opinion also had a large impact upon the process/result distinction, as this study chose to stand on the shoulders of studies coming before it. Digging even deeper, there was still data to gather concerning modifiers, especially for –μός nouns that represented a process.

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[16] See the Number section above.

[17] Words the –μός nouns modified rarely represented an agnate clause argument, but it is possible.

[18] See the Contextual Agnate Clause section above.

Modifiers[19]

When a –μός noun had modifiers, even more information was available. There were three

foundational categories for modifiers, and three other categories of data points that resulted from

the first three. The first of the foundational categories concerned the part of speech of the

modifier, many of which were pronouns, nouns, adjectives, or prepositional phrases. The second

discussed the grammatical construction that tied a modifier to the –μός noun. The common

structures were adjectives, the genitive case, and prepositional phrases. The third foundational

category dealt with scholarly opinions on these modifiers, in particular whether it was subjective

or objective in the agnate clause. Using this data, the researcher focused on modifiers that

possibly represented agnate clause arguments. He presented his initial decisions on their link to

the agnate clause, then his final decisions. Finally, he provided the reasoning for his conclusions.

The data confirmed ideas Greek grammarians have asserted in the past while also adding

to these ideas. Grammarians have mainly focused on the subjective/objective genitive distinction

when it comes to DN modifiers. Many of the modifiers that represented agnate clause arguments

were indeed genitive nouns, and grammatically modified the –μός noun by virtue of being a

genitive noun. It was these genitive nouns that scholars focused on almost exclusively when

claiming a modifier represented the subject or object of the agnate clause.[20] However, this study

revealed more complex grammatical structures that allowed other modifiers (such as

prepositional phrases and other nominal cases) to represent agnate clause arguments. Further,

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[19] See Appendix C to view the data gathered for modifiers.

[20] The lone exception (when a genitive modifier didn't represent an agnate clause argument) this research
found is in Heb 12:24, where the construction is a head noun followed by a genitive DN. In other words, the normal
DN as a head noun followed by a genitive noun was inverted. See Paul Ellingworth, *The Epistle to the Hebrews*,
New International Greek Testament Commentary (Grand Rapids: Eerdmans, 1993), 681-682; and William L. Lane,
Hebrews 9-13, Word Biblical Commentary, vol. 47b (Nashville: Thomas Nelson, 1991), 472.

this section led to various ideas concerning how agnate clause arguments can be clear even when they do not appear in the immediate context. The data around modifiers was invaluable in confirming previous scholar's thoughts while also adding to these ideas.

<div align="center">Conclusion of Gathering Data</div>

The study aimed to gather data in these three categories in order to discover principles concerning –μός nouns. The first category, concerning words with the –μός suffix, laid a foundation to understand each word so as to properly evaluate the other data. Data concerning each occurrence mainly helped make a distinction between whether the –μός noun represented a process or result. Data concerning the modifiers of –μός nouns helped determine which agnate clause argument the modifier represented. From this data, the researcher was able to derive some principles for scholars to apply. These principles are divided into two groups: those that help distinguish between process and result, and those that help determine the agnate clause argument represented by a modifier. This dissertation will now survey those principles before discussing how to apply them.

<div align="center">**Determining Process or Result**</div>

The first major step in dealing with a DN is determining whether it denotes a process or a result. If it represents a process, it will be a process denoted by the cognate verb. If it is a result, it will be a result of the cognate verb's process. The previous chapter presented principles that help distinguish between the two. However, that chapter presented those principles in a vacuum, and not how they work with each other. How they work together is the purpose of this section.

This section is divided into three subsections. The first section provides a summary of the findings thus far. The goal of this is to clearly present the principles discovered in chapter three. Another subsection will synthesize these principles into a hierarchy. This hierarchy will point to

how a reader should apply them when coming across a –μός noun. The third subsection will discuss how to apply these principles to a few passages. Together these three subsections will help a reader understand how to use those principles.

<div align="center">Principles</div>

This study found seven principles that one can use to distinguish between process and result DNs. The first and most important concerned semantic limitations. Two patterns indicated that the –μός noun was a result: when the cognate verb is an unergative verb, and when the –μός noun appeared with a modifier indicating physical nature. Two other patterns could point toward a process or result DN depending on the details of the pattern. The first concerns –μός nouns that appear in a list, and the second concerns the number of the –μός noun. Finally, two patterns indicated that the –μός noun was a process DN: when it appeared as the nominative subject of a process-argument verb, and when it appeared in the same context as its cognate verb.

Semantic Limitations

The first and most important principle states that –μός nouns, like any word, are restricted to their semantic range. When a speaker uses any word, the word conveys a meaning within its semantic range. With a –μός noun, if the semantic range is limited to results, the word can only have a result meaning when it appears in a text. The same is true if the semantic range is limited to a process. To determine this, one would survey the lexicons to find the word's semantic range. For example, lexicons provide one definition for ῥαντισμός; it always refers to the act of sprinkling. Therefore, when one approaches it in Heb 12:24 or 1 Pet 1:2, they can rule out the idea that ῥαντισμός refers to a result of the action, such as the person sprinkling, the liquid being sprinkled, or the destination of the liquid. Therefore a word can only mean what it can mean. Practically, there are two aspects of this rule to consider.

First, lexicons aim, but are not guaranteed, to list all possible meanings. Most of the time all of the possible definitions will be mentioned in the lexicon. Different lexicons might disagree as to the nuances of a word's semantic range, but they still usually convey the full range of meaning. It is best to consult with multiple lexicons, especially if an occurrence of a –μός noun does not seem to fit with any definitions in the first lexicon consulted. In this case, one should remember that a word is not restricted to the definitions in the lexicon, but to its semantic range. If someone finds a meaning not listed in the lexicon, then the lexicons would need editing and this rule would still apply. This is very unlikely, and one should probably not search for it. One reason it may happen is that words change meaning over time.

The second aspect of this rule is related to the first aspect: the meaning of a word changes over time. While words must carry a meaning within their semantic range, semantic range is fluid. While some words can retain a single meaning over centuries, others change many times within a century. Therefore, one must be certain that the lexical entry is focused on the time period of the text at hand. If one were to try and apply the definitions in BDAG to Homer, they would likely run across certain words that do not fit Homer's usage, because BDAG focuses on literature after Christ, not hundreds of years before him. These two aspects help illustrate the principle.

Unergative Cognate Verb

When a –μός noun derives from an unergative cognate verb, it is a result DN. An unergative cognate verb is a verb that takes a single agentive argument. An agent argument is a living being that performs the action. For example, "He worked," has an agent as the subject, and a verb showing what the agent does. There are no objects, and the subject does the action (the action does not happen to the subject, as in "He died"). For this principle, one cannot simply look

at the word and tell; they must go to the cognate verb in order to determine if that verb is unergative. Additionally, determining when this rule applies can be tricky for some words.

This rule did not seem to apply when a cognate verb was unergative only some of the time. In other words, the verb κλαίω has two distinct meanings; κλαίω (by itself) refers to someone crying, whereas κλαίω τὰ τέκνα (with an accusative) refers to weeping for a specific reason. Words with this variability did not seem to refer to a result. With that said, this study found only four verbs that were sometimes unergative.[21] When those four did refer to a process, they commonly referred to the process connected to their non-unergative meaning. One can determine if a –μός noun represents a non-unergative process based on the context. One can use principles that indicate a process to see if the word represents a process. For this reason, perhaps a better way to state this rule is that –μός nouns cannot refer to an unergative process. This is one of two rules that indicate a –μός noun represents a result.

Physical Nature Modifier

If a –μός noun appears with a word that indicates the physical nature of the –μός noun, it represents a result. In English, one might see the phrase, "the height of the building." Actions do not have height; height must refer to a physical object.[22] A physical object would be a result, and not a process. Therefore one can tell from the physical nature modifier that "building" is a result DN even if they did not know that beforehand. It is necessary to distinguish physical nature modifiers from physical modifiers. Actions have physicality; they can have a physical location, physical movement within space, etc. The term "physical nature" here refers to something that is

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[21] γογγυσμός ("murmur"), κλαυθμός ("weeping"), στεναγμός ("sigh"), and σωφρονισμός ("self-control").

[22] Figurative language can change this, but that is the exception and not the norm.

innately corporeal such as shape, size, or color. Therefore, if a –μός noun appears with a physical nature modifier, it is a result DN.

In a List

The common thread of a list can indicate whether a –μός noun in that list indicates a process or a result. This principle is based on the concept that lists generally have a common thread that ties all the items together. One might have a list of toys for a Christmas list, a list of locations for a road trip, or a list of prescribed actions to improve health. Finding the common thread of the list is the first part of using this principle. The more items a list contains, the more confident one can be that they have found the common thread tying all the items together. "Food and clothing" could refer to basic necessities, but, "Food, clothing, cars, toys, and all property" refers to a list of physical items that are owned. As in the last example, one entry in the list ("all property") might also summarize the list. Once one identifies the common idea running through the list, they must also determine whether the –μός noun is figurative. Many times words that appear in a list, despite having a common theme, are not always clear. For instance, a sentence with a list might be "Do not sin, not with your hands, feet, or mind." The items in the list (hands, feet, and mind) are all physical items, but they represent actions done with those items. All three are figurative. Therefore this rule only holds true if the –μός noun is literal.

Number

Plural –μός nouns must have a corresponding plural element in the agnate clause. Practically, this means a plural –μός noun that indicates a process must refer to a process done more than once. When Paul refers to his imprisonment, he frequently describes it as his δεσμῶν (plural of δεσμός). The plural indicates that he means it figuratively. He is only referring to one

instance of imprisonment, yet the word is plural.[23] For this reason, it cannot literally refer to his imprisonment, and must refer to a result (the chains which hold him). This only applies to a plural –μός noun, as singular DNs can match singular or plural agnate clause elements. To apply this rule, one needs to determine potential agnate clause(s) and then see what elements are plural (either grammatically or actually). One can then rule out any elements in the agnate clause that are not plural. This will rarely result in narrowing down the choices to only one option, but it frequently helps by ruling out some of the options. This principle, along with the previous one, can indicate either process or result depending on the context. The following two principles only indicate processes.

Contextual Agnate Clause

When the context of a –μός noun includes the cognate verb, the –μός noun more commonly represents a process. In this case, the theoretical sentence behind the –μός noun (the agnate clause) is no longer theoretical. The agnate clause presents the full concept, and the –μός noun refers to that concept. This can either be cataphoric (the –μός noun appears before the agnate clause and looks forward to it), or anaphoric (the –μός noun appears after and looks back). More commonly the –μός noun is anaphoric. It is possible this principle also applies with –μός nouns appearing with a synonym of its cognate verb, but the size of this study did not allow a firm conclusion regarding that. Finally, it is important to note that there are many counter-examples. For instance, the English clause "I built these buildings" clearly refers to a cognate

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[23] The argument could be made that, during his second imprisonment, he was referring to both of them, but many instances of δεσμός in the plural occur before his second imprisonment.

verb + result DN. One should not use this principle without accounting for other evidence, such as the following principle.

Nominative Subject of Process-Argument Verb

When a –μός noun is the nominative subject of a process-argument verb, the –μός noun normally represents a process. One can locate the first element of this pattern (a nominative subject –μός noun) by searching for nominative –μός nouns, and then determining if they are the subject of the sentence. Process-argument verbs are more difficult to find. One must determine whether a verb's semantic range allows it to point toward another process. A few English examples of process-argument verbs are "do," "start," "finish," "become," or "come." These verbs all take arguments that represent another process. For example, in the clause "The work concluded," "The work" indicates a process, and "concluded" is a process-argument verb (because it takes a subject that is a process). However, many process-argument verbs have non-process meanings as well, as in "The day concluded." "Day" is not a process, but a length of time. In that clause, the same verb ("concluded") is not a process-argument verb. Usually process-argument verbs will view the action from a certain point of view, similar to verbal aspect. They usually focus on the beginning of the action, the end of it, or the action as a whole.

Applying this principle to the text can be difficult. As the previous paragraph hinted, determining whether a verb takes a process meaning is not always easy. Sometimes whether the verb is a process-argument verb depends on whether the –μός noun represents a process or a result. Take this theoretical sentence: "The (–μός noun) came upon the boat and sunk it." Suppose the –μός noun in the sentence means something like "thrashing water." The question would be whether the reference of this theoretical –μός noun is to the action ("thrashing") or to the result ("water"). In this case, deciding whether the verb ("came") is a process-argument verb

is best done after deciding whether the –μός noun represents a process or a result, not the other way around. In other words, when one finds this pattern, they should be careful not to use this pattern as the end-all-be-all in making decisions. In order to avoid this, one should weigh the principles according to the strength of their evidence when distinguishing between process and result.

Synthesis

In order to properly use these principles, it is important to combine them into one method. Combining them involves two steps. The first is arranging the principles hierarchically into a method for application. The second subsection below offers some perspective on this hierarchy, and on this dissertation as a whole. That subsection will point out what the prescribed methodology can and cannot do. From there, one will be ready to apply these principles.

Hierarchy

This subsection will propose a systematic method for applying the principles. It will then explain this hierarchy, how the research arrived at this hierarchy, and provide a decision-tree for applying it. The hierarchy for applying the principles is as follows:

1. Semantics
   a. Limiters
      i. Semantic Range
      ii. Unergative Cognate Verb
2. Grammar
   a. Limiters
      i. Number
      ii. Physical Nature Modifier
   b. Indicators
      i. Nominative Subject of Process-Argument Verb
3. Context
   a. Indicators
      i. Contextual Agnate Clause
      ii. In a List

Structure

This tripartite hierarchy moves through the constraints of the language (semantics), the syntactic features of an utterance (grammar) and the larger context of the utterance (context). This is not necessarily meant to represent how the mind works when speaking/writing, or anything else. It represents how to accurately determine whether a –μός noun indicates a process or a result.[24] Logically, semantics can require and/or rule out a meaning. Grammatical features are generally the next strongest piece of evidence, and depending on the feature they can also require or rule out a certain meaning. They can also provide non-binding evidence that wants corroboration. Finally, context can evidence a decision as well. A single contextual rule rarely provides evidence that requires a certain meaning (at least not in the principles found herein). However, multiple points of grammatical and contextual evidence can strengthen one another. The next level of the hierarchy distinguishes what the principles can do.

In the hierarchy, "limiter" and "indicator" are technical terms. A limiter restricts the meaning of a –μός noun, either by requiring one meaning or by disallowing another. It reduces the number of options in some way. An indicator evidences, but does not require a –μός noun to have a process or result meaning. All of these principles provide good evidence; "limiter" and "indicator" distinguish between principles that provide near certain evidence and principles that lend evidence but are not conclusions in and of themselves. This hierarchy is designed to accurately and efficiently determine whether the –μός noun indicates a process or a result. Accuracy is more important. What value is there in reaching an inaccurate conclusion

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[24] Perhaps one day scholars will understand how DNs come to represent results and processes well enough that a hierarchy of principles can be laid out that do match how the mind works. At this point, though, the author deemed that would be a worse option than the one presented in this dissertation. The fact that this hierarchy does not match how the mind works is evidence that it is incomplete.

efficiently? Therefore rules that limit the options are higher on the hierarchy than those that can indicate a process or result. Further, each parent section (semantics, grammar, and context) could be subdivided into "limiter" and "indicator" (and probably other categories), each of which could have multiple principles underneath it. For simplicity, the outline above lists only the principles this paper found. This division between limiters and indicators illustrates how much impact each principle should have on decisions.

Weighing the Evidence

The above hierarchy is useful, but understanding a few other aspects of it will improve its usefulness. First, one should not assume the hierarchy perfectly represents every situation. Second, the hierarchy is ordered for efficiency, but only when that does not impact accuracy. Third, while theoretically a –μός noun might have multiple limiting principles that conflict one another, practically this does not occur. Finally, although it aims to be somewhat efficient, it is purposefully inefficient in some regards.

This hierarchy is useful for providing a general understanding of how the principles work together, but it is too rigid to perfectly represent every situation. First, it is too rigid to account for figurative language, as sometimes that makes the –μός noun difficult to understand. Perhaps the DN literally refers to a result but figuratively represents the process behind that result. Another example of the rigidity comes from the fact that it is designed to provide a broad scope of –μός nouns, and does not account for fringe examples. Second, sometimes principles listed lower in the hierarchy carry more weight than those listed higher. The principles above are listed in the order of stronger evidence to weaker; this is especially important for the limiting principles. For instance, the hierarchy shows that being in a list carries the least weight of the known principles. However, if the common thread between each item in the list is extremely

clear (such as having a title or context making it clear), that evidence becomes much stronger. If a word were in a list with a clear common idea, and it were the nominative subject of a verb that, in rare occurrences, was a process-argument verb, the principle concerning lists should be given more weight. However, the hierarchy above, taken at face value, might prevent the reader from seeing that. Therefore the order presented above is imperfect, but it is generally efficient.

The hierarchy is ordered for efficiency to a small degree. While the primary aim is pointing toward the correct conclusion, efficiency is still desirable. One efficient feature is that principles listed as limiters might provide sufficient evidence for a conclusion. Practically, this means someone might not need to continue through the hierarchy. The idea is that, after each limiting principle, one might have ruled out all alternatives or determined the meaning already. In fact, this is probably the most common outcome, and will normally happen after applying only the first principle. According to lexicons, 71% of the New Testament –μός nouns are restricted to either a process (27/56) or result (13/56) meaning. After applying any of these principles, if one has reached a conclusion, it is reasonable to come to a conclusion for the –μός noun and move on to other exegetical issues.[25] If one moves on after a limiting principle, but later finds evidence that makes them question their decision, they can easily come back and pick up where they left off in the hierarchy. Due to this suggestion, one might pose the question, "What if two limiting principles point toward different conclusions?"

An occurrence of a –μός noun will not have multiple limiting principles that point toward different conclusions. This idea allows the hierarchy to be efficient, and is more precisely stated

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[25] One should first be reasonably sure they are applying the principles correctly. This could be done by going through all of the principles a few times without stopping prematurely to ensure they have a firm grasp on all of the principles. Perhaps the section below on Application will help one fully understand how to apply the principles, but the best way to understand the principles is for someone to apply them on their own.

in two parts. First, this study found no situations where multiple limiting principles conflicted. Second, there is no reason to think it could happen. If the principles are accurately defined, then they will not conflict. One might suggest that figurative language might allow two principles to conflict. It is possible for a DN to be figurative, but in that case, one of the principles that seems to apply probably does not. As an example, say that lexicons limited a –μός noun to a process meaning, but in context the –μός noun had what appeared to be a physical nature modifier. In that case the modifier is probably figurative, and is therefore not a physical nature modifier. Another objection might say that a principle stated in this dissertation is inaccurate. However, that would be a problem with this dissertation and not with that principle. In that case, one would need to correct the principle. Therefore, when one comes to a conclusion based on any of the limiting principles, they can be reasonably certain that they have come to the correct conclusion. While this fact provides the opportunity to be efficient, the hierarchy is not always that way.

This hierarchy is purposefully inefficient in some areas. The most common way is in sacrificing efficiency for accuracy. For instance, the number principle rarely impacts a decision, while the list principle commonly does.[26] In many cases it'd be ideal to skip straight to the list principle and never check the number, but that might lead to an inaccurate conclusion as the number principle is a limiter. It also sacrifices efficiency in specific situations for general efficiency. A few –μός nouns have an unergative cognate verb, and checking this first would be more efficient than checking semantic limitations first. However, checking semantic limitations is generally more efficient for reaching a conclusion. Third, in general, the principles are ordered by how much weight they should carry. Searching for principles in this order allows the reader to

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[26] The majority of the time one will not make it past the principle for semantic limitations (see two paragraphs above). However, when one most go beyond that principle, the –μός noun will commonly be in a list.

present the evidence to themselves from the more impactful to evidence that is less so. This is an attempt to overcome the human tendency toward what one hears first. The hierarchy does not always accomplish that goal, as the principles vary in weight from occurrence to occurrence. Nonetheless, it is helpful in reaching conclusions.

Making Decisions

While a hierarchy of principles is a simple and clear way of presenting their weight, a decision tree better elaborates how to apply them. When attempting to interpret a specific occurrence of a –μός noun, the decision tree is as follows:
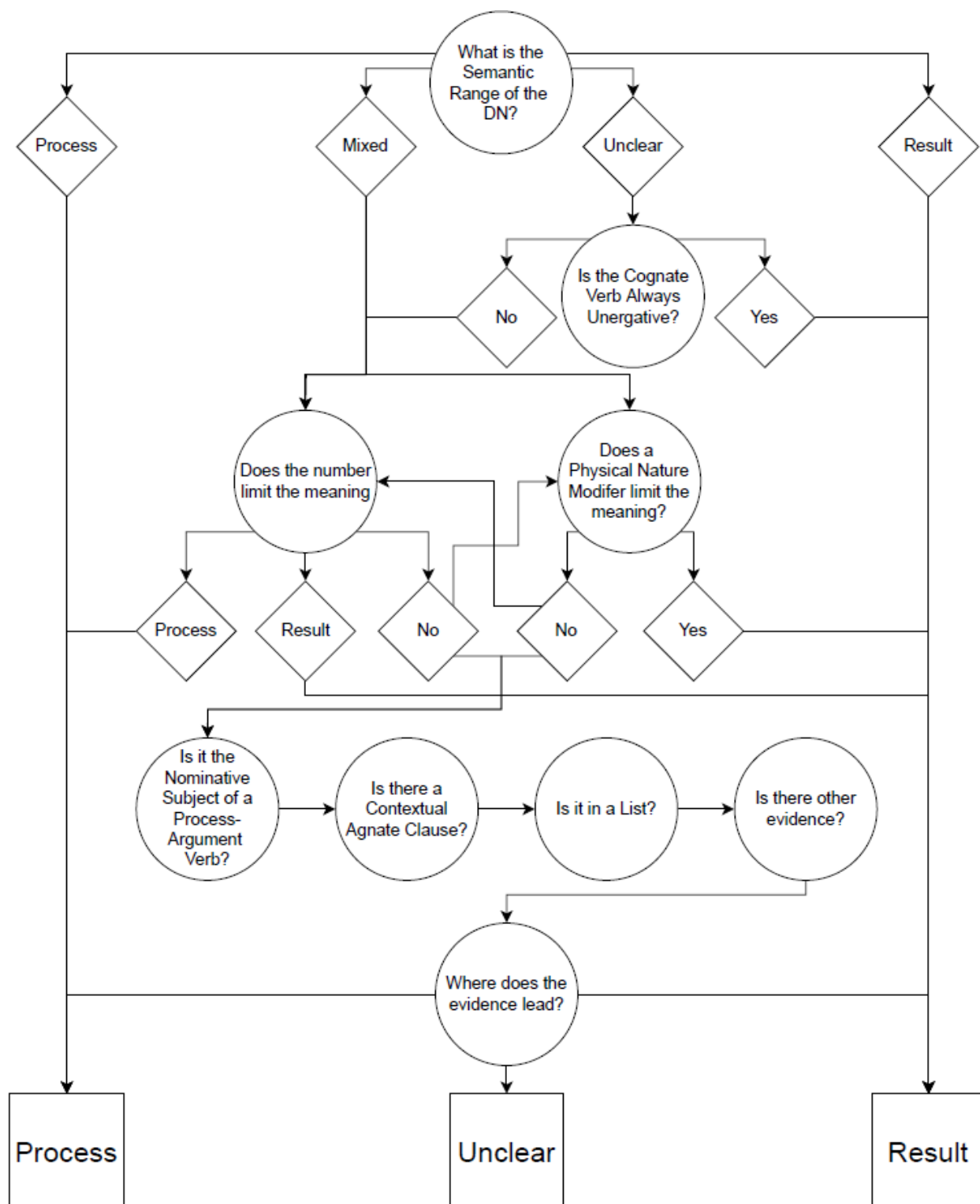
A few elements of this decision tree require explanation. Specifically, the shapes, the arrows, and the lines. First, different shapes represent different concepts. Circles represent questions to be answered. Diamonds represent intermediate decisions, and squares represent final conclusions for an occurrence. The arrows show in what direction someone should proceed. Starting with the circle in the top center, one has four possible answers to the question. From there, one can then come to a conclusion, or proceed to other questions, which will eventually lead to a conclusion. Lines leaving shapes (without arrows) represent the next place to go. An arrow pointing into a shape indicates the next step to which one should proceed. Some of the time one line will leave a shape and then branch into other lines. In this case, arrows indicate the possible options. Further, some of the time two lines will merge with one another, indicating that they both have the same possible options. For an example of the two previous ideas, the line out of the "Mixed" diamond close to the upper-left merges with the line from the "No" diamond below it and to the right. Both of these decisions have the same next steps. From there, the merged lines branch, and go to two separate questions. One can go to either question first.

Some decisions and conclusions need explanation. "Unclear" decisions/conclusions represent the idea that a reader cannot confidently answer the question. "Mixed" means that lexicons provide both process and result meanings. The decision tree above does not represent how to make a decision for the initial question (what the semantic range is for a word). That is broken down in another decision tree:

Do some definitions clearly represent a process?		
Yes	No	

	Yes	Mixed	Result	If any definitions are unclear and the conclusion is not mixed, then the conclusion should be unclear
Do some definitions clearly represent a result?	No	Process	Unclear	

To determine whether an occurrence of a –μός noun represents a process or a result, the first question is whether the lexical definition represents a process, a result, both, or is unclear. If all definitions of a word are clear, and all point toward a process, then the word represents a process. The same is true for result. If some definitions of a word clearly represent a process and other definitions of that same word clearly represent a result, then the decision is that the word represents a mixture of processes and results. If all definitions are unclear, or if some definitions are unclear while others clearly represent only one of either process or result, then it is unclear. This should illustrate how to make decisions, but not how –μός nouns fit in the bigger picture.

Perspective

There are two aspects showing that this hierarchy is incomplete. The first is that it is certainly missing principles concerning –μός nouns. The second is that it needs to be appropriately placed within the hierarchy of all exegetical principles.

There are almost certainly principles missing from this hierarchy. One might notice that there is only one subpoint under "Semantics", and other sections only have a single subpoint. This indicates that there are other principles to be found. For instance, there were times in the research when context showed that a –μός noun pointed toward a process or a result, but none of this dissertation's seven principles led to that conclusion. A good example comes from θερισμός, which can indicate either the process of gathering a crop ("harvesting") or the crop that is being gathered. In Matt 9:37 it seems to refer to the crop, as θερισμός is stated to be πολύς ("plentiful"). The crop is more likely to be plentiful than the act of harvesting. Four chapters later, Matthew refers to the time of θερισμός. Specific crops might have a designated time, but not crops in general; therefore Matt 13 uses θερισμός in reference to the process of gathering. Neither of these fit into a specific principle, but are still valid. One might also check the verb governing the –μός noun. This is not the cognate verb, but the clausal verb governing the –μός noun. If that verb prefers a certain type of argument (such as how "throw" in English takes a physical object as its direct object), and the –μός noun appears in that location, one can use that to reach a conclusion on the –μός noun. Perhaps these are principles, but this dissertation did not find enough examples to be confident in them. Therefore, context can provide other evidence. There are probably also semantic patterns or grammatical structures that this dissertation did not find. In other words, while the hierarchy presented above will frequently lead to solid conclusions for –μός nouns, it is certainly incomplete. It is also incomplete for other DNs.

This hierarchy is a small piece in the puzzle of Greek grammar. A goal of this dissertation has been to understand the –μός suffix with an eye toward understanding Greek deverbal nouns in general. This hierarchy will hopefully be somewhat true for other Greek DNs, and many principles will likely overlap. However, some might not, and other suffixes might have

additional principles. Therefore these principles should be located appropriately in the larger

hierarchy of Greek DN principles. The hierarchy of Greek DN principles should be placed in the

larger hierarchy of Greek noun principles, and so forth. That is the place of Greek grammars, and

not this work.[27] With this hierarchy and a healthy perspective on its limitations, it is time to turn

toward application.

Application

Ordering the principles into a hierarchy explains what to do; giving examples shows how

one should do it. Examples also show the nuanced differences between applying the different

principles. This section will provide those examples. The first subsection begins with clear

examples. Starting with the ideal situations allows the reader to easily grasp the hierarchy. The

next subsection concerns situations that are initially unclear, but the principles clarify the

meaning. The goal of these examples is to show how multiple, potentially conflicting principles

work together. The final subsection concerns unclear examples, where the principles do not

clarify the situation. These examples show the limits of the principles in the hope that readers

will not attempt to press them too far.

Conclusive Examples

The examples in this section contain verses where the hierarchy points clearly in one

direction. This subsection orders the examples based on how far they must press into the

hierarchy of principles before coming to a conclusion. The first example only has to use the

principle highest on the hierarchy, while the last example presses through all of them.

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[27] See the section below concerning Impact on Κοινῆ Scholarship.

In John 3:25, καθαρισμός ("purification") refers to a process due to its semantic limitations. BDAG provides two definitions, both of which are processes.[28] Louw and Nida list καθαρισμός within the same entry as its cognate verb καθαρίζω ("purify").[29] Therefore one can come to a reasonable conclusion about καθαρισμός in this verse due to its semantic limitations. This is helpful as grammar and context offers very little indication whether it is a process of a result. It is very common that a reader will come to a –μός noun, research the semantic limitations, and come to a conclusion without needing any other principles.

βωμός ("altar") in Acts 17:23 must refer to a result because it originally derived from an unergative verb. One would begin applying the principles by checking lexicons. This would show that the noun refers to a result.[30] However, if one needed to go further, they would see that βωμός came from βαίνω ("walk").[31] In having an agent and no other arguments, βαίνω is an unergative verb. Therefore, if the lexicons did not make it clear, one could still see that βωμός refers to a result.

The occurrence of δεσμός ("bond") in Phil 1 illustrates the Number principle. One could conclude from the current lexicons that δεσμός is restricted to being a result DN.[32] Were one to continue through the hierarchy despite having clear evidence, they would eventually discover

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[28] BDAG, *Greek-English Lexicon*, 489.

[29] Louw and Nida, *Greek-English Lexicon*, 53.28.

[30] BDAG, *Greek-English Lexicon*, 185; Liddell, Scott, and Jones, *Greek-English Lexicon*, 334; and Louw and Nida, *Greek-English Lexicon*, 6.115.

[31] βαίνω does not appear in BDAG or Louw and Nida as it does not appear in early Christian literature. See Liddell, Scott, and Jones, *Greek-English Lexicon*, 302

[32] BDAG, *Greek-English Lexicon*, 219; and Louw and Nida, *Greek-English Lexicon*, 6.14, 23.156, 37.115. While the third entry in Louw and Nida can refer to imprisonment, they note that it is a figurative extension of the literal meaning in 6.14.

that the context is less clear, as Paul used δεσμός in reference to his imprisonment, which is the process behind δεσμός. Despite that context, the number principle clarifies this situation. δεσμός is plural and refers to Paul being in prison.[33] When he wrote Philippians, Paul had only been imprisoned once. Therefore, if δεσμός were a reference to the process of Paul being put in prison, it would be singular. As it is plural, it must refer to something else. δεσμός literally refers to the chains that bind him in prison, while figuratively representing his imprisonment.

Physical Nature Modifiers often corroborate other principles, as it does with ἱματισμὸς ("clothing") in Luke 9:29. The semantic limitations on ἱματισμὸς show that it indicates a result. The fact that the clothes are described as λευκὸς ("white") confirms this. If someone stopped after reaching a conclusion with a limiter, they would rarely find a verse where physical nature modifiers would help determine that the DN refers to a result. While this principle might not be very helpful with –μός nouns, perhaps it would be helpful with other DNs.

A process-argument verb helps clarify the meaning of διαλογισμὸς ("thought") in Luke 9:46. Starting with semantic limitations, the word can refer both to the act of discussing an idea with others (a process), or it can refer to the idea being discussed (a result).[34] Similarly, neither the number nor physical nature modifiers limit the meaning. However, it is the nominative subject of a process-argument verb (Εἰσῆλθεν, "happen"). No contextual agnate clause presents itself, and διαλογισμὸς is not part of a list. Based on the principles presented in this dissertation,

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[33] Paul claims it as "my chains" (δεσμοῖς μου). Therefore he is involved. It could refer to him putting someone else in prison, but context provides no indication for this and the research for this dissertation found no scholar claiming such. The other options are Paul's first and second imprisonments. Scholars generally agree it refers to his first imprisonment.

[34] BDAG, *Greek-English Lexicon*, 232; Liddell, Scott, and Jones, *Greek-English Lexicon*, 402; and Louw and Nida, *Greek-English Lexicon*, 30.10, 30.16, 31.37, and 33.446.

διαλογισμὸς as used in Luke 9:46 probably refers to a process. This word is often difficult to distinguish.

Another example with διαλογισμὸς shows a contextual agnate clause lending clarity to the meaning of Luke 5:22. As stated in the previous paragraph, διαλογισμὸς can represent a process or a result. Here again it has no physical nature modifiers. It is plural, which can match up with the agnate clause in multiple ways. Verse 21 contains the agnate clause, which presents some plural options: the lawyers/Pharisees (multiple people), the action (done by multiple people, so there are multiple actions), or the creation of that action (the thoughts that went through their minds). That the agnate clause appears immediately before this evidences that here διαλογισμὸς represents a process. One might argue that διαλογισμὸς represents their thoughts. This is possible, but there is no evidence of this. The word does not appear in a list, and this dissertation found no other evidence in the context. Further, Jesus repeats the verb, reiterating the agnate clause. This shows that he is not focused on their thoughts, but the action. This conclusion could certainly be changed if someone presented stronger evidence to the contrary. But in the absence of such evidence, one should conclude that διαλογισμὸς in Luke 5:22 refers to a process.

Two examples are helpful to illustrate when a –μός noun appears in a list. First, an example that is a process. Were one to skip over the fact that semantics limits ἐλεγμός ("rebuke") to a process, they might come to 2 Tim 3:16 not knowing whether it is a process or a result DN. In that passage, they would find a contextual agnate clause and a list. That the word appears in a list of other actions corroborates with the contextual agnate clause in that both point toward a process. As an example of a list indicating a result, this dissertation turns to ψαλμός ("song") in Eph 5:19. With ψαλμός, semantics limits the meaning to being a result. Were one to skip over the semantic limitations, they would again find the word in a list and with a contextual agnate

clause. In this case, the list is more valuable than the contextual agnate clause. The list contains different types of songs. The contextual agnate clause is shown to be irrelevant by the fact that one could rearrange the sentence to have ψαλμός be the object of ψάλλω without changing the meaning. Col 3:16 represents this idea. Therefore, ψαλμός does not represent the same concept as ψάλλω, it represents a result. These examples show what happens when the evidence is reasonably clear, but that is not always the case.

Probable Examples

The examples in this section contain verses where the hierarchy points somewhat clearly in one direction. Like the last one, this subsection orders the examples based on how far they must press into the hierarchy.

Semantics overrides the other principles, as ψαλμός in 1 Cor 14:26 shows. ψαλμός is a word that refers to a result (a song). In that passage, were one to continue going through the hierarchy of principles, they would find that ψαλμός appears in a list of processes, has a contextual agnate clause (ψάλλω appears twice in 14:15), and is later referred to by a word that is the nominative subject of a process-argument verb (14:26b). These three indicators seem to point in the opposite direction than the principle concerning semantic limitations. However, ψαλμός, while literally referring to a result, is figuratively used to represent the process behind that result. Therefore, while individual principles might obscure the meaning here, the hierarchy clarifies it.

Heb 4:9 and the lexical entries for σαββατισμὸς ("sabbath rest") do not clearly indicate whether it is a process or a result, but this dissertation's principles point toward one conclusion. Both BDAG's and Louw and Nida's definitions slightly lean toward a result meaning by using

the word "period" in reference to time.[35] Liddell, Scott, and Jones' definition slightly leans toward a process meaning with the word "keeping."[36] Therefore lexicons are unclear. The next step is to check if the cognate verb is unergative, and indeed it is. σαββατίζω takes an agent and no other arguments. A person performs the action of Sabbath rest. There is no theme or any other arguments; one does not "Sabbath rest their arms." Therefore it is an unergative cognate verb, and as such, indicates that σαββατισμὸς is a result DN. It refers to the time of Sabbath rest. One could stop here and be confident in their conclusion. Were one to continue and look at the context, they would find other evidence. First, the context refers to both a specific time period (verse 4) and the action of resting (verses 1, 3, 4, 5, 8, 10, and 11). In other words, both are in view. Also, σαββατισμὸς is the Nominative subject of a potential process-argument verb (ἀπολείπω, "remain"), which further complicates the matter. Despite the context seemingly leaning toward a process meaning, the Unergative Cognate Verb principle overrides this. Digging into the context, ἀπολείπω probably does not take a process meaning in this case (it indicates a future time period, not a future event). Further, despite the context talking more commonly about the process of resting, it uses καταπαυσις ("rest") and cognates to refer to the process, and σαββατισμὸς breaks from this pattern, hinting to the reader that the referent has a different meaning. Therefore, while the situation might seem unclear, the evidence, properly weighted, points toward a result. Adhering to the suggested hierarchy of principles helps clarify this less clear situation.

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[35] BDAG, *Greek-English Lexicon*, 909; and Louw and Nida, *Greek-English Lexicon*, 67.185.

[36] Liddell, Scott, and Jones, *Greek-English Lexicon*, 1579.

Physical Nature Modifiers can add clarity to some unclear situations, as with ἀσπασμὸς in 1 Cor 16:21. There Paul refers to "the greeting with my hand" (Ο ἀσπασμὸς τῇ ἐμῇ χειρὶ). While the word usually indicates a process meaning, here it refers to the letters he penned on the page. The fact that Paul says τῇ ἐμῇ χειρὶ ("with my hand") indicates the physical nature of the greeting, i.e. the letters on the page. Were he referring to the act of greeting, he might have referred to his greeting in the same way as verses 19 and 20, using the verb. Further corroborating this is the knowledge that Paul used the same physical nature modifier at the end of his letter to the Galatian church when he said "large letters with my hand" (πηλίκοις … γράμμασιν … τῇ ἐμῇ χειρί). In that letter the physical nature modifier modifies a word (γράμμασιν, "letters") that refers to something physical (the ink on the page representing a letter). Semantically, ἀσπασμὸς ("greeting") could refer to either the process of greeting, or a written greeting.[37] In 1 Cor 16:21, the physical nature modifier restricts it to the written greeting; more specifically, to the letters on the page. Many times principles listed as "limiters" are able to clarify unclear situations. This happens less often with "indicators."

In Luke 24:38, διαλογισμός ("thought") might indicate a process or result, but the principles of this dissertation lean toward a process. Lexicons show that the semantic range allows either meaning, and the other limiting principles do not help narrow the decision. However, as it is the nominative subject of a process-argument verb (ἀναβαίνω, "arise"), it is more likely to be a process. This, along with the fact that it is one-half of a list (along with ταρασσω, "frighten") of psychological actions, helps clarify that this is more likely a process than a result.

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[37] BDAG, *Greek-English Lexicon*, 144.

Lexicons disagree on whether αγιασμός ("sanctification") represents a process or a result, but in 1 Cor 1:30, other principles indicate one meaning. Specifically, there is a contextual agnate clause in the second verse of the same chapter, and αγιασμός appears with two other processes. δικαιοσύνη ("righteousness") probably indicates a process, and ἀπολύτρωσις ("redemption") certainly does.[38] Therefore, despite the disagreement in lexicons, other principles point to one conclusion over another. This subsection and the previous one discussed situations where the hierarchy of principles pointed toward one conclusion. However, this hierarchy does not clarify all situations.

Unclear Examples

This subsection presents situations where the hierarchy does not lend as much help. The previous two subsections presented situations in the order of the principles that led to conclusions. As this one provides examples where the principles do not lead to a conclusion, it cannot order the examples that way. Three examples will follow: one that slightly leans toward being a process, one that does not lean either way, and one that slightly leans toward being a result. Those three examples will also show a passage with multiple conflicting principles, a passage with no principles, and a passage with one principle that is still inconclusive.

In Luke 13:16, δεσμός ("bond") is not clear whether it refers to a process or result. Most definitions agree that it refers to a result, but not all are clear.[39] δεσμός appears here in the

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[38] One might see this as conta Burk, "The Righteousness of God", 346-360. Burk's argument is solid throughout, but he rests upon the assumption that Young's list of suffixes is impeccable. However, Young includes the –μός suffix as one of the suffixes that indicates a process DN, and this dissertation has shown that the –μός suffix occurs with many result DNs. Burk's article is probably correct when it comes to δικαιοσύνη θεοῦ, but that does not necessarily mean δικαιοσύνη solely refers to a characteristic someone has. It can also refer to an action or multiple actions that represent that trait.

[39] BDAG, *Greek-English Lexicon*, 219; Liddell, Scott, and Jones, *Greek-English Lexicon*, 380; and Louw and Nida, *Greek-English Lexicon*, 6.14, 23.156, and 37.115. Some definitions in Liddell, Scott, and Jones leave

singular, and singular occurrences of δεσμός are distinct from plural instances.[40] For example,

δεσμός usually refers to a physical chain/shackle, whereas singular instances (here and Mark

7:35) do not.[41] Further, τούτου ("this") refers to the action of the verb δέω ("bind"). While Luke

could be referring to "this bond (the one that binds her)," one might argue it is simpler (and

therefore preferable) to take it as "this bondage". Stepping back to look at the big picture, the

present writer thinks there is more evidence to take the singular occurrences of δεσμός as a

process (i.e. "bondage") than a resultant instrument ("bond"). However, the evidence does not

bind the reader to come to the same conclusion.[42] Multiple principles point toward different

conclusions, and until someone shows that δεσμός in the singular can refer to a process, or until

someone finds other evidence, the tension will likely remain.

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open the idea of a process. Louw and Nida, 23.156 mention that the occurrence in Luke 13:16 refers to a result of Satan's activity, but the fact that Satan has bound her for 18 years seems to indicate that it is not a resultant state, but an ongoing process.

[40] Antiphon, *On the Murder of Herodes*, trans. K.D. Maidment (Cambridge: Harvard, 1960), 5.17 seems to fit this as Maidment translates δεσμός in the singular as "confinement". Whether he thinks this to be literal or figurative is unclear, but there is reason to think it is literal. There are many extra-biblical occurrences of δεσμός in the singular where the translation uses a plural word (either chains or bonds). This negative of translating a singular word with a plural would be easily remedied if the singular referred to the process (imprisonment) while the plural referred to a result (the instrument used to imprison, i.e. the chains). Perhaps Maidment is following that line of thought. In the NT, there is a clear difference between the singular and plural uses of δεσμός, and a brief survey of the larger corpus of Greek writings seems to hold that distinction as well.

[41] As Luke shows, sickness was perceived as spiritual, differentiating it from the physical chains. Greek speakers often used σύνδεσμος ("bond") for a binding instrument not related to imprisonment. While words often encroach on each other's semantic range, the instances of σύνδεσμος are distinctly different than the instances of δεσμός in the singular. σύνδεσμος would fit better here if the meaning were a physical instrument unrelated to imprisonment. This line of thought does not mean that δεσμός must mean something else, but the presence of σύνδεσμος in Greek semantics makes sense of the situation if the singular version of δεσμός referred to the action of binding someone instead of an instrument used to bind. To explain this with an analogy, they key (σύνδεσμος) fits the lock (the semantic domain of Κοινῆ words related to binding and imprisonment), but that does not mean it will turn and open the door.

[42] Finally, this might seem to go against the Lexical Meaning principle. However, it does not. This dissertation is arguing for another lexical meaning already existing, and not saying that a word means something outside of its semantic range. The semantic range exists independent of what lexicons say; if one finds that multiple instances of a word probably represent an idea not mentioned in lexicons, then the lexicons are wrong, not the new semantic range. This tension of following the lexicons but being aware of their mistakes is hard to balance when doing word studies, hence the trepidation in this sentence.

In 2 Cor 7:1, μολυσμός ("defilement") might refer to either a process or a result, but which one is unclear. Lexicons do not lead to a clear conclusion. Lexicons often use "defilement" to define μολυσμός, but Louw and Nida clarify that it is a "state of defilement," which would be a resultant state, and not a process.[43] Context offers very little help.[44] Since none of the principles apply to this situation, it is best to admit that the hierarchy suggested above is inadequate for determining whether it refers to a process or result.

The appearance of λογισμός ("argument") in 2 Cor 10:4 slightly leans toward result, but the evidence is not weighty enough to be confident. Lexicons provide definitions of a process and a result. However, they disagree concerning the precise semantic range. BDAG slots this specific occurrence as a result.[45] It occurs in a list with one other item, ὕψωμα ("arrogant opinion"), which seems to be a result. Lexicons lean slightly toward result, and the list seems to point in that direction, but it is inconclusive. Whether lexicons list it as a result or not is evidence, but not as strong as it might seem. Lexicons aim to provide the semantic range; giving examples is a secondary priority. These should not be discounted, but they are not the piece of evidence on which the entire argument turns. Being in a list with a word that is probably a result also lends evidence, but this evidence is even weaker than the examples from lexicons. The list only has one other item. It is difficult to determine the common thread of a list based on one

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[43] BDAG, *Greek English Lexicon*, 657; Liddell, Scott, and Jones, *Greek English Lexicon*, 1142; Louw and Nida, *Greek English Lexicon*, 53.35.

[44] παντὸς ("everything") seems to indicate that this is a result DN. It makes sense to say "everything that defiles." However, it might make sense but it is not necessarily true.

[45] BDAG, *Greek English Lexicon*, 598; Louw and Nida, *Greek English Lexicon*, 30.9, 30.11. BDAG lists it as result, but Louw and Nida's definition is unclear.

item. For these reasons, the evidence certainly leans toward λογισμός being a result. However, one should hold this position tentatively, not adamantly, as none of the evidence is strong.

Conclusion of Process/Result

The hierarchy presented above is helpful, but not exhaustive, in distinguishing whether a –μός noun refers to a process or a result. The seven principles that this research project found are all helpful by themselves. Taken together, they have greater explanatory power. One must weigh them accordingly, and when one does, they will usually lead to a firm conclusion. One should also remember that this is only one aspect of a passage's meaning. It is a small part of the greater meaning, and if it is a process DN, another part of the meaning concerns the agnate clause.

Determining Agnate Clause Arguments

The second step in dealing with process DNs is determining the agnate clause. This is done by finding the cognate verb, gathering the possible arguments, and placing those possible arguments into the appropriate argument slots within the agnate clause. The previous chapter presented some principles to help identify and place arguments. That chapter did not state how those principles work in combination with one another; that will happen here.

This section is divided into three parts. The first summarizes the principles mentioned in the previous chapter. The second synthesizes these principles into a hierarchy. The third will suggest how a reader should apply those principles when coming across a –μός noun. These three sections will hopefully aid the reader in understanding the principles.

Principles

This study found seven principles for agnate clause arguments. Two of these principles help identify possible arguments. These include genitive modifiers and implicit argument

control. Three of them assist in both identifying potential arguments and matching them to their argument slot in the agnate clause. These include arguments with process-argument verbs, common knowledge events, and contextual agnate clauses. Two others do not help find argument, but do help match the argument slot. These are agents as genitives, and matching the cognate verb.

Genitive Modifiers

Genitive modifiers are a widely recognized way that a modifier can represent an argument. Grammars commonly point this out as an inherent feature of the genitive case. This dissertation also found that genitives can represent virtually any argument in the agnate clause. τὸν ὑμῶν ὀδυρμόν ("your mourning") in 2 Cor 7:7 shows a genitive modifier representing the subject/agent of the agnate clause. τὸν καταρτισμὸν τῶν ἁγίων ("equipment of the saints") in Eph 4:12 contains a genitive modifier that represents the object/theme of the inherent action. Finally, καθαρισμός τῶν ἁμαρτιῶν ("cleansed from sins") in Heb 1:3 is an example of a genitive representing the indirect object/source from which an action is moving. Therefore, genitive modifiers can represent any agnate clause argument, and one must use other principles to help place them. One other principle is the same in this regard.

Implicit Argument Control

Grammatically speaking, action words can implicitly pass arguments to dependent actions. This is called implicit argument control. For this to happen two action words must represent distinct but related events. In that case the main action can pass some of its arguments to the dependent action. In 2 Cor 12:10, the writer states εὐδοκῶ … ἐν διωγμοῖς ("I am content … in persecutions"). The writer does not explicitly state that he is involved with persecutions, but the sentence probably does not mean "I (Paul) am content that someone else is persecuted."

The speaker is probably an argument of the agnate clause behind διωγμοῖς ("persecutions").

Further, it could be any argument, as implicit argument control does not indicate which

argument. This particular occurrence is fairly clear (Paul is the object/theme), but that is not

always the case. Thankfully, there are other patterns that help identify arguments and place them

within the agnate clause.

Arguments with Process-Argument Verbs

When a –μός noun appears as the argument of a process-argument verb, it often inherits

the other arguments from the verb. A process-argument verb is a verb that takes an action (i.e., a

"process") as ones of its arguments. A process-argument verb does not refer to a separate event,

but portrays the action from one point of view. Usually this point of view is temporal. Examples

include "start," "finish," and "do." Luke 4:13 states Καὶ συντελέσας πάντα πειρασμὸν ὁ

διάβολος … ("When the devil completed every temptation …"). This contains a participle that is

a process-argument verb (συντελέσας, "completed") which has a subject/agent (διάβολος,

"devil") passed down from the main verb via implicit argument control. Since διάβολος is the

agent of συντελέσας, it is also the agent of the –μός noun (πειρασμὸν, "temptation"). Simply

put, the one who completed the action is the one who did the action. Therefore, like implicit

argument control, this principle also reveals potential agnate clause arguments.

Unlike implicit argument control, this principle also suggests where in the agnate clause

these arguments fit. If the DN is not the subject of the process-argument verb, the reader can

often put the cognate verb of the DN in place of the process-argument verb and drop the DN

phrase as an argument. This will leave the reader with the agnate clause, or at least a partial

version of it. In going back to the example from Luke 4:13, συντελέσας πάντα πειρασμὸν ὁ

διάβολος would become πειράζεται ὁ διάβολος ("the devil tempted"). When the DN is the

subject of the process-argument verb, one must transform the clause more to get to a partial

agnate clause, but it can still be done. Acts 8:1 says Ἐγένετο … διωγμὸς μέγας ἐπὶ τὴν

ἐκκλησίαν τὴν ἐν Ἱεροσολύμοις ("A great persecution arose upon the church in Jerusalem").

There the process-argument verb is Ἐγένετο ("arose") and the DN is διωγμὸς ("persecution"). To

transform this into an agnate clause, one should again use the DN's cognate verb to replace the

process-argument verb and drop the DN. This might clearly reveal arguments of the agnate

clause, such as the agent (from the subject) or theme/experiencer (from the object). Additionally,

the reader should look for other arguments in prepositional phrases or dative nouns. The

semantics of the preposition (or dative case), in combination with the DN's cognate verb, will

commonly indicate what agnate clause argument the process-argument verb argument fits. For

example, in Acts 8:1, the persecution is being done ἐπὶ τὴν ἐκκλησίαν. ἐπὶ represents the

argument to whom the action occurs, i.e. the theme. Therefore the agnate clause becomes

"ἐδίωξαν τὴν ἐκκλησίαν." It is common that, if the DN is the subject of a process-argument verb,

this transformation process will lead to the agnate clause having no subject (as in this example).

There are other ways to find the subject and any remaining modifiers.

Common Knowledge Events

When both the writer and reader are familiar with an event, the writer can refer to the

entire event by only referencing a distinguishing feature of the event. For instance, κατακλυσμός

can be used as a one-word reference to the Noahic flood, and is used as such in Matt 24:38-39

and Luke 17:27. This common knowledge allows the writer to use only the word κατακλυσμός

but also imply that the subject/agent is θεὸς and the object/theme is κόσμος. Both the agnate

clause arguments and their position in the agnate clause are implied; therefore, the entire agnate

clause is implied. This can be done with technical terms (such as κατακλυσμός), phrases that

clearly reference a specific event (such as πειρασμοῦ ἐν τῇ ἐρήμῳ in Heb 3:8), or when context is clear (παραπικρασμός in Hebrew 3:8).

Contextual Agnate Clauses

Authors may use a process DN and its cognate verb in the same context; when these refer to the same event, then the reader can use this to confirm or fill in the agnate clause. In 2 Tim 3:16 the DN ἐλεγμός ("rebuke") appears, and in 4:2 the cognate verb appears. These likely refer to the same action. Therefore one can use the arguments in 4:2 to either fill in the unknown arguments left from 3:16, or to confirm the arguments they found in that verse. Some of the time the pair appears in close proximity. Other times the cognate verb does not appear in the immediate context of the DN. The agnate clause for ἐνταφιασμός ("burial preparations," John 12:7) contains the verb ἐνταφιάζω ("prepare for burial," 19:40), but they are many chapters apart. One must be diligent to find the correct agnate clause when multiple possibilities arise. διωγμός ("persecution") in Acts 8:1 does not refer to διώκω ("persecute") in 7:52, but to διώκω in 26:11, and other instances of διώκω throughout the book. One should first apply many of the other principles before searching for a contextual agnate clause in order to match more than just the cognate verb.

Agents as Genitives

The direct modifier that can represent agents in the agnate clause is a genitive modifier. In other words, this dissertation did not find any instance of an adjective, a prepositional phrase, or any other direct modifier representing the agent in the agnate clause. 2 Cor 7:7 contains the phrase τὸν ὑμῶν ὀδυρμόν … ὑπὲρ ἐμοῦ ("your mourning … for me"). ὑπὲρ ἐμοῦ ("for me") is a prepositional modifier. As such it does not represent the agent of the agnate clause. One should note that this study restricted itself to –μός nouns, and that this might not broadly apply to other

DNs. Nonetheless, it held true for the present study. However, it is certainly not the most important principle when it comes to determining which agnate clause argument a modifier represents.

Matching the Cognate Verb

Matching the cognate verb is the most important principle for matching a modifier with its corresponding agnate clause argument. All of the other matching principles must adhere to this one, and all of the principles that help identify DN modifiers anticipate this principle. Specifically, verbs have limits on the arguments they can have. When reading, someone must read something that contains words; one cannot read a tomato or happiness. Further, the reader must be literate, i.e. a human. The book could not read a man, but the man could read a book.

For example, 2 Tim 3:11 says τοῖς διωγμοῖς … οἷά μοι ἐγένετο ἐν Ἀντιοχείᾳ … ("the persecutions … which happened to me in Antioch …"). ἐν Ἀντιοχείᾳ ("in Antioch") does not represent an agnate clause argument because there is no slot in which it fits. διώκω ("persecute") takes 2 arguments: an agent who persecutes, a theme being persecuted. Antioch could not be the agent. While it could possibly be the theme ("The governor persecuted in Antioch," i.e. all the people therein), that seems unlikely. It is even less likely in this passage where μοι ("to me") probably represents the theme. Therefore ἐν Ἀντιοχείᾳ does not represent an agnate clause argument. Another example illustrates how this principle can help determine which argument slot a modifier fits. In Rev 9:5, the phrase βασανισμὸς σκορπίου ("torture of a scorpion") appears. While scorpions could indeed be tortured, they are more commonly viewed as enacting the torture. Therefore it is preferable to view them as the agent, not the experiencer. These principles have suggested some parts of the hierarchy, and now the time has come to provide the full hierarchy.

Synthesis

Proper application comes from correctly understanding these principles. In order to help the reader understand them, this dissertation arranges the principles in a hierarchy. The hierarchy here is similar to the hierarchy of principles for process/result DNs, but the way of applying that hierarchy is quite different. Some perspective will show how that hierarchy fits within exegesis as a whole.

Hierarchy

This section will propose a systematic method for applying the principles. It will first arrange the principles into a hierarchy. The first subsection below will explain this hierarchy. The second subsection will show how to use the hierarchy to make decisions. The hierarchy for applying the principles is as follows:

1. Lexical Boundaries
    a. Matcher
        i. Matching the Cognate Verb
2. Direct Modifiers
    a. Identifier
        i. Genitive Modifiers
        ii. Other Modifiers
    b. Matcher
        i. Agents as Genitives
3. Implicit Clausal Modifiers
    a. Identifier and Matcher
        i. Arguments with Process-Argument Verbs
    b. Identifier
        i. Implicit Argument Control
4. Contextual Modifiers
    a. Identifier and Matcher
        i. Common Knowledge Events
        ii. Contextual Agnate Clause

Structure

The goal of the hierarchy is to provide a systematic method for determining the agnate clause behind a process DN with the –μός suffix. The structure of the hierarchy is not meant to represent how someone would fill out the agnate clause in their mind when reading/hearing a text. However, the hierarchy might be close to resembling how a reader/hearer would fill out the agnate clause.[46] For instance, when someone uttered the phrase ἀσπασμοὺς ἐν ταῖς ἀγοραῖς ("greetings in the marketplaces") to a Jewish audience, that phrase would remind Jews of greetings, specifically the ones in the marketplaces, which consisted of Jews from a lower religious rank greeting those with a higher rank. More precisely, they would have roughly worked from the word to the direct modifiers, to what is implied from the clause, and to the context.[47] This is the overall structure of the hierarchy.

The principle for matching the cognate verb restricts what the other principles can indicate. This principle has a similar affect as the semantic limitations principle for the process/result distinction, although it is implemented quite differently. It is the same in the sense

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[46] The example provided illustrates starting with the process DN/cognate verb, moving to the direct modifiers, skipping over what is implied in the rest of the clause, and going to the historical context. Each distinct occurrence of a process DN might glean meaning from one to four of these areas (Lexical Boundaries, Direct Modifiers, Implicit Clausal Modifers, and Contextual Modifiers).

Whether this process (of moving through the four areas of meaning) is conscious or subconscious is irrelevant. This dissertation has argued that, whether or not the original readers were aware, they understood at least part of the agnate clause when hearing a process DN. The goal of this dissertation has been to discover what they would have understood. One difference is that this dissertation is "recreating" the agnate clause in a much more conscious manner than the original readers would have done so, even if they did it consciously. Since readers today are two millennia removed from their culture, and are not fluent in Greek, it is better to break down how they would have done it consciously (to ensure the reader is doing it correctly). Certainly no one in their day would have written 200+ pages in order to determine an agnate clause. Hopefully over time scholars will get better at reading the text and understanding the agnate clause without having to think about it as much, and hopefully they can also translate the New Testament in a way that does the same. Thankfully, in this scholar's opinion, many translations do a fairly good job of that already.

[47] Evans, *Mark*, 278.

that it places boundaries to show what is not possible. The other principles must fit within the boundaries allowed by this principle. Other principles may provide boundaries, but this is the only principle that gives boundaries for every situation. From there, the reader can begin to search for agnate clause arguments in a specific order. This order is for good reason.

The demand for accuracy suggests the need to work from direct modifiers to implicit clausal modifiers to contextual modifiers. It would save time if readers could instantly begin searching for a contextual agnate clause or common knowledge events. This would allow skipping some principles and immediately start with principles that can find all of the agnate clause arguments. However, in doing so, one would arrive at the wrong conclusion some of the time when they could easily avoid it. The example of διωγμὸς ("persecution") in Acts 8:1 shows this. Searching for the cognate verb in the same context leads to Acts 7:52, but that is not the agnate clause. Therefore, one should begin with direct modifiers, move to modifiers implied from the clause, and then to the context.

This dissertation found three different categories of modifiers. A direct modifier is any modifier that is grammatically tied to the DN and is part of the DN phrase. A genitive, a prepositional phrase, and an adjective are all common direct modifiers. Implicit clausal modifiers are those that are clearly implied from the clause based on grammatical rules, but are not "direct modifiers."[48] These appear within the same clause as the DN, but would not be listed as directly related to the DN if one were to diagram the sentence. Direct modifiers would be listed under the DN in a sentence diagram. Finally, contextual modifiers are those that are not stated within the

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[48] In this dissertation "implicit" does not necessarily mean "implied." Modifiers can be implied from context. "Implicit modifiers" and "implicit clausal modifiers" refer to modifiers that follow grammatical rules for implication, i.e. there is a specific grammatical structure that shows the reader that the author is implying a modifier.

same clause, but are still clear to the majority of the intended audience. There are almost certainly more principles for scholars to find, but these four categories provide a good way to categorize any subsequent findings. There is another helpful way to categorize principles.

This hierarchy categorizes all principles as either an identifier, a matcher, or both. Identifiers help the reader find the agnate clause arguments. Matchers help the reader determine how those arguments fit into the agnate clause. Take for instance the principle concerning genitive modifiers. One can be reasonably certain that, when a genitive modifies a process DN, the genitive will represent an agnate clause argument. However, as grammarians are well aware, the genitive does not indicate which argument in the agnate clause it represents. On the other hand, non-genitive modifiers are slightly restricted due to the principle concerning agents appearing as genitives. When a reader sees a non-genitive modifier, it might or might not represent an agnate clause argument. If it does, a reader should first attempt to fit it into the agnate clause as any argument other than the agent. Therefore, the principles concerning genitive modifiers is an identifier, but the principle concerning agents as genitives is a matcher. Some, like common knowledge events, are both an identifier and a matcher. Once a reader recognizes that κατακλυσμός refers to the Noahic flood, they can both identify the arguments (θεὸς, "God," and κόσμος, "world"), and match them to their argument (θεὸς as the agent, κόσμος as the theme).

The final point of note is to distinguish this hierarchy from the one concerning the process/result decision. That hierarchy listed a set of principles that allowed one to make a decision between two distinct options. Therefore is it helpful to say which principles grant more weight to the argument. This hierarchy is quite different. First, the goal is not to decide between two options, but to find or recreate the agnate clause, which involves many choices with many

options. Second, the principles in this hierarchy do not conflict; they simply indicate how to complete the task at hand. It is not a matter of going through the principles in the order of the hierarchy. Some of these principles must be applied more than once while going through the process in order to match the arguments to their position within the agnate clause. Other principles need to be applied only once in order to identify possible arguments, and some will not need to be applied at all. To illustrate this more, this dissertation now directly discusses how to use these principles to make decisions.

Making Decisions

A decision tree is helpful to explain how one should use this hierarchy in order to find the agnate clause. This section will present the decision tree, and then explain it. The parts to explain concern the different shapes used, the cycles/rows of the decision tree, and the columns. The decision tree is as follows:
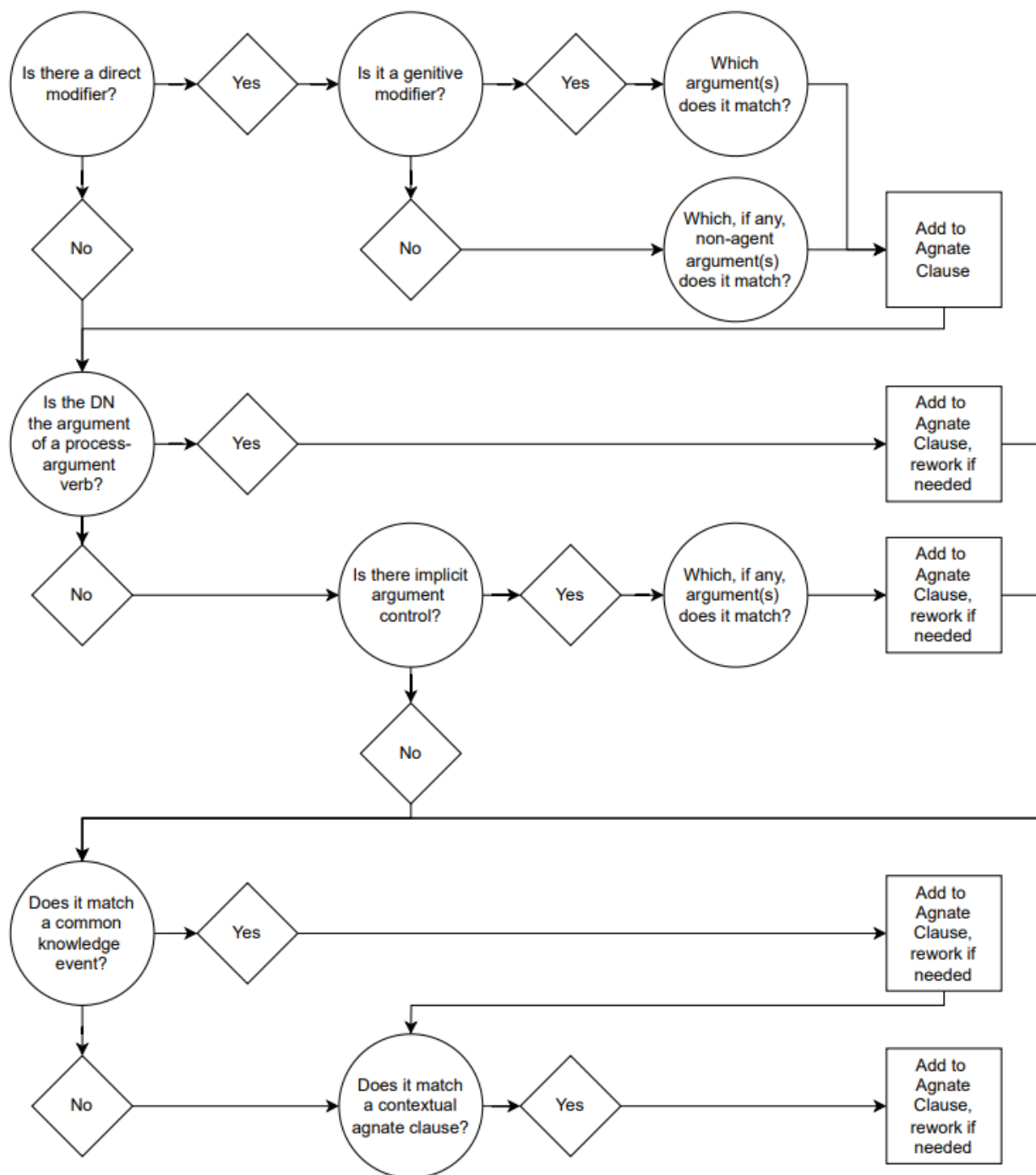
Parts of this decision tree need explanation. First, as with the previous decision tree, circles represent questions to answer, diamonds represent choices, and squares represent decisions. Unlike the other decision tree, there are no final conclusions. More precisely, one will

commonly not reach a final conclusion. There are many process DNs that do not reveal all of

their agnate clause arguments. Even those that do often do not fill out the agnate clause entirely.

This dissertation has only been focused on the arguments of an agnate clause. These often

answer "who" and "what," sometimes answer "where," rarely answer "when" or "why," and

almost never answer "how." Therefore, the principles mentioned herein will usually not allow a

reader to completely reconstruct an agnate clause. However, they are not designed to do so. They

are designed to allow the reader to understand the "who," the "what," and the other arguments of

an agnate clause. As the verb and its arguments make up the most important parts, this makes

sense as a point of focus.

There are three cycles above. A new cycle begins after lines that point back to the far left

column.[49] Each cycle contains a few elements. A cycle has questions that require decisions that

allow one to add to the agnate clause. These three cycles represent the three parts of the

hierarchy (excluding the "lexical boundaries" section). The first cycle concerns direct modifiers,

the second cycle helps with implicit clausal modifiers, and the third with contextual modifiers.

This order allows one to appropriately build out the agnate clause in the same order that scholars

generally perform exegesis; starting with the words in the immediate context and working

outward.

The first cycle investigates direct modifiers. The first question is whether or not there are

any. The second question concerns whether it is a genitive modifier or not. If it is, one should

expect it to match an agnate clause argument, perhaps as the agent. If it is not a genitive

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[49] There is one line that points back to the left, but not to the far left. This line points to the question concerning whether it matches a contextual agnate clause. This does not point all the way to the left, and does not represent a new cycle.

modifier, one should seek out non-agentive arguments that it might match, but should not force it into the agnate clause. It may or may not match an argument slot.

The second cycle investigates the clause. After checking if the DN is an argument of a process-argument verb, one might or might not check if there is implicit argument control. As these are two very similar grammatical structures, they do not appear together in a text with a –μός noun. They could be done in either order. The third cycle is similar, although the decision tree represents the situation slightly differently.

The pair of principles concerning common knowledge events and contextual agnate clauses comprise the third cycle. Similar to the second cycle, these are interdependent. If one finds a common knowledge event, they likely do not need to search for a contextual agnate clause. If they do not think that the agnate clause is filled out, or if they want to double-check their prior work, searching for a contextual agnate clause is encouraged. However, if an event is well-known enough to be considered a common knowledge event, then that likely means the entire agnate clause is known, or the author has stated the event (i.e. there is a contextual agnate clause). In the second case, the reader mislabeled a contextual agnate clause as a common knowledge event. This reveals how similar the two are.

One might notice that there are three columns of circles; the third column is restricted to the matching principles, mainly the one for matching the cognate verb. Some principles identify but do not match. These principles need to go through the matching process. Additionally, principles that are both identifiers and matchers do not need to be filtered through the matching principle. To be clear, these principles still need to match the cognate verb. However, principles that are identifiers and matchers have already matched the cognate verb. How arguments match the agnate clause might be shown by how the author places the verb grammatically (via

arguments of process-argument verbs), contextually (via a contextual agnate clause), or historically (via common knowledge events). Another, simpler way to say this is that the biblical authors have already matched the arguments. Therefore identifying principles need to be matched, while principles that are both identifiers and matchers have already been matched. With these ideas in mind, one must not weigh the principles above too heavily in exegesis.

Perspective

As with the process/result distinction, two important notes are at hand. First, this hierarchy and decision tree is incomplete, just like the process/result hierarchy. Hopefully future scholars will find other principles that apply to DNs, and perhaps even other principles that apply to –μός nouns in particular. They might concern direct, implicit clausal, or contextual modifiers. There may or may not be another "boundary" principle. Perhaps another scholar might be able to formulate the current boundary principle better. Scholars will find more principles that are matchers and others that are identifiers. As scholars find and/or edit principles, they are encouraged to modify the hierarchy and decision tree accordingly.

Perhaps a more important perspective on these principles is that they usually have little to no impact on exegesis. There are many more important grammatical, exegetical, historical, social, rhetorical, etc. principles that one should spend their time on before getting to these. The goal of these principles is to provide a good framework for making decisions when the agnate clause does impact the larger meaning, but more often these principles will simply add nuance or a fuller understanding to a text that is already well-understood. This is a small paragraph within the current dissertation, but the importance of it cannot be overstated. In order to ensure it is properly understood, the reader is encouraged to note how little the text's meaning changes in light of the following examples.

Application

Providing some examples of applying the above hierarchy will illustrate how to use it. In doing so, this section aims to clarify the strengths, nuances, and shortcomings of these principles. When this dissertation applied the principles concerning process and result DNs, it gave examples that ranged from clear to unclear. Since reconstructing the agnate clause requires multiple decisions, some of which may be clear and others which may not be, this section has a slightly different layout. The first subsection below concerns passages where the principles allow one to reconstruct the agnate clause. The examples in this section reveal all the arguments of the agnate clause behind the –μός noun. The second subsection provides examples where partial reconstruction is possible, and the third gives a couple of examples where reconstruction is not possible. In most cases, regardless of whether one can reconstruct the agnate clause, these principles generally lead to a sufficient understanding of the agnate clause.[50]

Reconstruction

This section concerns itself with passages that have a process –μός noun, and the passage allows readers today to reconstruct the agnate clause behind that –μός noun. However, when this dissertation says "reconstruct," it does not necessarily refer to a total reconstruction of every nuance of the agnate clause. It refers to being able to identify all of the arguments in the agnate clause, i.e. to fill every "argument slot." As stated above,[51] this dissertation is only sometimes

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[50] "Sufficient" here refers to whether or not one can understand the meaning of the DN phrase well enough to accurately understand the passage as a whole. This is opposed to "exhaustive" understanding, which would indicate that the reader grasps the full depth and breadth of every nuance of meaning. Whether one has reached an exhaustive understanding of any text is impossible to say. It is probably true that no human has an exhaustive understanding of any text, but one cannot say this confidently without themselves having an exhaustive understanding of that text.

[51] See the Making Decisions section above.

concerned with "where" the event occurs, rarely with "when" or "why," and almost never with

"how." The first example comes from 2 Pet 2.

2 Pet 2:5 says κατακλυσμὸν κόσμῳ ἀσεβῶν ἐπάξας, which refers to the Noahic flood. In

going through the decision tree above, the –μός noun (κατακλυσμὸν, "flood") has no direct

modifiers. It is, however, an argument of a process-argument verb (ἐπάξας, "brought upon").

This process-argument verb takes a process as the object/theme. Therefore one can take the

subject of that process-argument verb as the subject of the agnate clause. As ἐπάξας is a

nominative participle, it inherits its subject from the main verb (ἐφύλαξεν, "protect"), which

inherits its subject from another verb (ἐφείσατο, "spare"). Therefore θεὸς ("God") is the subject,

and also fits as the agent of the agnate clause. This matches the cognate verb (κατακλύζω,

"flood") well. Further, the indirect object in 2 Pet 2:5 moves to the direct object of the agnate

clause, telling the reader what God flooded (κόσμῳ ἀσεβῶν, "ungodly world"). Therefore one

can arrive at the conclusion that the agnate clause is κατέκλυσεν ὁ θεὸς τὸν κόσμον ἀσεβῆ ("God

flooded the ungodly world"). This is corroborated by the common knowledge events in Genesis.

This is a straightforward example, and one most readers could reconstruct without any of the

principles above. Others require a little more work.

The use of καθαρισμός ("cleansing") in John 2:6 also leads to a clear agnate clause, even

though that is not immediately apparent. The immediate phrase is καθαρισμὸν τῶν Ἰουδαίων

("cleansing of the Jews"). Scholars suggest it could be possessive, subjective, or adjectival.[52]

When genitives appear with a process-indicating –μός noun they almost always represent an

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[52] Murray J. Harris, *John*, Exegetical Guide to the Greek New Testament (Nashville: Broadman & Holman, 2015), 58.

agnate clause argument.[53] It also matches with the principle that direct genitive modifiers can be agents. Therefore it might seem likely that this is a subjective genitive, and that fits with the cognate verb. The Jews being the agents of cleansing fits historically as well. However, there is another option: the Jews might be the ones being cleansed. While that seems slightly less likely, it is certainly an option. One can look to other principles for clarity. There are no other direct modifiers, but there is a modifier inherited through implicit argument control: λίθιναι ὑδρίαι ἓξ ("six water stone jars"). Implicit argument control does not indicate what argument the modifier represents, so if and how it matches the cognate verb is yet again important. The most logical argument is an instrument. It could be theme, but purifying jars was less common.[54] Moving on to the final cycle, one will not find καθαρίζω ("cleanse") in the context, but there is some common knowledge that helps fill in the agnate clause. Jews commonly washed their hands before eating (see Mark 7:1-5). The stone jars were likely at the wedding reception for exactly that reason. Therefore the agnate clause would be something like ἐκαθαρίσαντο οἱ Ἰουδαῖοι μετὰ λιθίνας ὑδρίας ἓξ ("The Jews washed themselves (probably their hands) with the water in the six stone jars").

Another example of being able to reconstruct the agnate clause comes from 1 Thess 4:3. Some think that ἁγιασμὸς ("sanctification") refers to the resultant state of being holy, but the evidence in this passage (and possibly the word in general) leans toward a process.[55] Here ἁγιασμὸς has three modifiers, two of which (Τοῦτο, "this," and θέλημα τοῦ θεοῦ, "will of God")

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[53] This is the only potential exception to that rule that this dissertation found. Genitives commonly modify result DNs (ἀσπασμός, δεσμός, μακαρισμός, παροργισμός, ποταμός, and σύνδεσμος) without representing an agnate clause argument, but rarely (if ever) represent process DNs without doing so.

[54] As καθαρίζω rarely takes an instrument, there is some hesitation. However, it makes good sense here.

[55] BDAG, *Greek-English Lexicon*, 10.

are tied to the –μός noun through a copula. Neither of these represent agnate clause arguments. The third (ὑμῶν, "your") is a genitive, and does represent an argument. While being in the genitive case allows it to represent the agent of the agnate clause, it probably does not; the Thessalonican church would not have made anyone else holy. Based on theological assumptions, one might guess that God is the agent without it being stated and that the Thessalonican believers are being purified. No implicit arguments confirm this, but a contextual agnate clause does. Verse 23 in the next chapter says ὁ θεὸς … ἁγιάσαι ὑμᾶς ("may God … purify you."). This confirms that θεὸς ("God") is the agent and ὑμῶν (Thessalonican believers) represents the theme.

Yet another example comes from πειρασμός ("temptation") in Luke 22. In verses 40 and 46, Jesus tells the disciples προσεύχεσθε μὴ εἰσελθεῖν εἰς πειρασμόν ("Pray that you will not fall into temptation").[56] The DN (πειρασμόν) has no direct modifiers, but implicit argument control passes the second person plural pronoun (σύ, "you"). In the context σύ fits as the experiencer of the action, the one being tempted. There is no contextual agnate clause, but common knowledge events reveal one other argument: Satan is the agent. Further, Luke makes this clear as he opened Jesus' public ministry with the story of Satan tempting Jesus, and recently stated that Satan has shifted his focus to Peter while implying that the other disciples will also be tempted.[57] Therefore the agnate clause is πειράζει ὁ σατανᾶς τοὺς μαθητὰς ("Satan tempts the disciples").

A final example comes from πειρασμός ("temptation") in Gal 4:14. That verse begins with καὶ τὸν πειρασμὸν ὑμῶν ἐν τῇ σαρκί μου … ("And your trial in my flesh …"). πειρασμός contains two direct modifiers. The first is the genitive ὑμῶν ("your"). Although genitives can

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[56] Verse 46 is slightly different: προσεύχεσθε, ἵνα μὴ εἰσέλθητε εἰς πειρασμόν.

[57] See Luke 22:28-38, especially verses 28 and 31.

represent agents, this seems to be the object/experiencer of πειράζω ("tempt") as being the agent would make little sense in context. Specifically, if the Galatian church were the agent of the trial, it makes little sense why Paul would be concerned with them despising him. The second modifier is the prepositional phrase ἐν τῇ σαρκί μου ("in my flesh"). As a non-genitive modifier, it might not represent an argument, but it fits well as the subject/cause of the testing. Many actions have causes, but most actions do not take causes as arguments. Psychological verbs can take causes as arguments, and πειράζω specifically can.[58] To illustrate the difference, take the verbs "run" and "scare." One might say "Jackie ran because of her mother." Her mother inspired her to run, but it is not an argument as "run" only takes one argument (the subject/agent). However, with "the pandemic scared the germaphobe," a situation (the pandemic) is the cause of the action. πειράζω can take a cause. The cause in Gal 4:14 is some sort of physical shortcoming.[59] ἐν τῇ σαρκί μου fits well as the cause, and the agnate clause becomes something akin to ἐπείρασεν ἡ ἀσθένεια τῆς σαρκὸς μου ὑμᾶς ("My physical weakness tested you"). Although it is quite common that the principles herein reveal all the agnate clause arguments, that is not always the case.

Partial Reconstruction

Rom 8:35 mentions διωγμὸς ("persecution"), and the agnate clause behind it is only partially clear. διωγμὸς does not have any direct modifiers, nor is it an argument of a process-argument verb. Two potential arguments come from the main verb χωρίσει ("separate") through implicit argument control (τίς, "who," and ἡμᾶς, "us"), but only ἡμᾶς helps identify an

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[58] See Gal 6:1; Jam 1:14; and perhaps also Rev 2:10.

[59] See verse 13. It is unclear what specific shortcoming this is.

argument.[60] The question then becomes how ἡμᾶς fits with διώκω ("persecute"). The Roman church could be doing or receiving the action; both the agent and the theme of διώκω is usually a human. However, a few verses prior Paul mentions how he and the Roman church have people καθ᾽ ("against") them. This idea matches up with the action of διώκω in that it places Paul and the Roman church on the receiving end of the action. It is, therefore, better to take Paul and the Roman church as the object/theme. Moving along in the decision tree, no other principles provide the agent. The agnate clause is left to be ἐδίωξαν _____ τὸν Παῦλον/ τὴν Ῥωμαῖαν ἐκκλησίαν ("_____ persecutes Paul and/or the Roman church"). The principles for this dissertation do not allow the reader to find the agent. Nonetheless, this agnate clause is sufficient for exegesis. Paul is saying that it does not matter who persecutes them. No persecution will separate them from the love of Christ, regardless of who does it.[61] In this case the principles herein do not reveal the full agnate clause, but that lack does not affect exegesis. Thankfully, this is commonly the case when the principles only lead to a partial reconstruction.

Another example comes from Heb 10:33. In that verse, ὀνειδισμός ("insults") has no direct modifiers, but it does inherit a modifier through implicit argument control. The second person plural subject (σύ, "you") is passed from ὑπεμείνατε ("endured") to θεατριζόμενοι ("exposed") to ὀνειδισμοῖς. In context, σύ only fits as the theme, as the phrase ὀνειδισμοῖς … θεατριζόμενοι ("exposed to insults") makes no sense if the person exposed was the one insulting. There are no arguments from context either, leaving the only known argument to be the

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[60] χωρίσει is the main verb of the first clause in verse 35, and that verb is implied to be the main verb of the second clause. τίς in the first clause corresponds to διωγμὸς in the second, so it does not represent an argument.

[61] Another way to state this agnate clause is "no matter who persecutes Paul/the Roman church …," or "Anyone might persecute Paul and/or the Roman church, but …" Those provide a clearer understanding of what Paul is saying, but they are less clear on the fact that the subject/agent is unknown and irrelevant.

experiencer (τοὺς Ἑβραίους, "the Hebrews"). Despite that, this is again sufficient for understanding the passage. The original readers would likely remember who had insulted them, but reader's today do not need to know it. The purpose is that the Hebrews were insulted but did not let that hinder them. In all the examples thus far, these principles led to a sufficient understanding of the DN, even if it is an incomplete one. That is not always the case.

One insufficient and partial example comes from θερισμός ("harvest") in John 4:35. There John records Jesus saying χώρας ὅτι λευκαί εἰσιν πρὸς θερισμόν ("the fields are white for harvest."). Direct modifiers are not present, but εἰσιν ("are") passes χώρας ("fields") through implicit argument control. As fields do not harvest themselves, they only fit as the theme. No contextual agnate clause or common knowledge events clarify who is harvesting. Although Jesus immediately preceded this statement by mentioning a period of four months between sowing and harvesting, he does not state the agent.[62] Even if he did, he seems to be contrasting that statement with the current action of harvesting. Therefore the principles of this dissertation do not allow one to sufficiently understand this passage. Other exegetical principles (particularly the historical context and the passages' context) allow the reader to grasp that Jesus was referring to the spiritual harvest, as Samaritans were coming to believe in him as he spoke.[63] Therefore the agnate clause becomes θερίζουσιν ὁ Ἰησοῦς καὶ οἱ μαθηταὶ αὐτοῦ ψυχὰς ("Jesus and his disciples harvest souls").[64] The principles of this dissertation have limitations, and must be combined with sound exegesis in order to produce sound conclusions. The principles do not

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[62] One might argue Jesus implies that sower becomes the harvester, but, that simply passes the question along because Jesus does not state who is sowing.

[63] See D.A. Carson, *John*, The Pillar New Testament Commentary (Grand Rapids: Eerdmans, 1990), 229.

[64] Others may choose to phrase this differently, but the meaning is roughly the same.

sufficiently explain every –μός noun, and for those one must rely on other exegetical principles entirely.

No Reconstruction

The principles for this dissertation do not reveal any agnate clause arguments for οἰκτιρμὸς in Col 3:12. There are no direct modifiers. There are no implicit arguments and οἰκτιρμὸς ("mercy") is not an argument of a process-argument verb. There is no common knowledge event of which both the author and readers are aware, and there is no contextual agnate clause. The main reason for the principles not providing any agnate clause arguments is due to the figurative nature of the verse. At the clausal level, the verb (Ἐνδύσασθε, "clothe") illustrates the idea of wearing attitudes as if they were clothes. Within the nominal phrase, the head noun (σπλάγχνα "guts") is figurative. σπλάγχνα οἰκτιρμοῦ represents the Colossian believers' attitudes toward others. At their core, the Colossians should show mercy to others.[65] To generalize, the principles above are less helpful when the DN appears in a figurative context. Identifying the literal meaning of figurative words and phrases might help, but the figurative language still makes these principles less useful.

Another word that does not benefit from the decision tree above is ψιθυρισμὸς ("gossip") in 2 Cor 12:20. It has no direct modifiers, and it is not the argument of a process-argument verb. No arguments are passed through implicit argument control. There is no common knowledge event and no contextual agnate clause to communicate the agnate clause. Therefore the principles above do not reveal the agnate clause arguments. As in the previous example, good exegesis will

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[65] Douglas J. Moo, *The Letters to the Colossians and to Philemon*, The Pillar New Testament Commentary (Grand Rapids: Eerdmans, 2008), 276-277.

reveal some arguments. Context clues show the reader that the Corinthian church is (potentially) gossiping. Paul is concerned that when he arrives in Corinth, he will find believers gossiping. The agnate clause is still not fully known; context does not clearly show the content of the gossip. Perhaps they were gossiping about Paul's apostleship, or some other topic of the letter. It is probably that Paul and the Corinthian church had common knowledge about this gossiping, but the reader today does not have that same knowledge. However, whether the content of their gossip is an argument or not, knowing that the Corinthian believers were the ones (potentially) gossiping is sufficient to understand the text. Paul is concerned that when he visits Corinth, he might find some sins to be commonplace in the church—gossip being one of them.[66] Therefore the content is irrelevant, and the act itself is what is most important. This further explains why the agnate clause is not immediately clear. The focus is on the act itself, and Paul did not need to clarify the arguments.

<div align="center">Conclusion of Agnate Clause Arguments</div>

When it comes to process-related –μός nouns, traditional exegetical methods and the principles above are sufficient to understand the meaning of –μός nouns. Much of the time these principles will reveal all of the agnate clause arguments by themselves. Some of the time they will not, and in those cases traditional exegetical methods will help. Good exegesis will not always reveal every agnate clause argument. However, agnate clause arguments are not always necessary for understanding the meaning of a passage as a whole. In these cases, good exegesis and the principles herein are not exhaustive, but are sufficient.

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[66] Mark A. Seifrid, *The Second Letter to the Corinthians*, The Pillar New Testament Commentary (Grand Rapids: Eerdmans, 2014), 468-471.

Conclusion

This goal of this study has been to analyze the –μός suffix. The hope was that this analysis would lead to finding patterns correlated to meaning, and this analysis did find some. In particular, those patterns first aimed to distinguish between –μός nouns that indicated process or result. A second aim was to find the agnate clause arguments when the –μός noun indicated a process. This dissertation accomplished those two goals by gathering information on –μός nouns, finding each occurrence of those nouns, and searching the context of those occurrences for modifiers. After reviewing the data and discovering patterns, this dissertation presented those patterns and synthesized them into a uniform method.

This conclusion now points the path forward. There is more work to be done in two specific areas. The first is a survey of how this study might impact scholarship as a whole. These impacts concern discoveries that might change how scholars think about a specific issue. The second provides some suggestions for future studies. These suggestions are ideas that the researcher had while performing this study, but those ideas did not fit within the current scope of work. These two areas of research are similar, but distinct for one reason. The first list (concerning potential impacts) show conclusions that the author came to while performing this study, whereas the second list contains gaps in current research. A final section will conclude this dissertation.

Potential Impacts

This study impacts scholarship in various ways. The obvious way is that scholars should apply the principles covered above when researching –μός nouns, and perhaps when researching all Greek DNs. Aside from that potentially obvious impact, this section presents two other prominent impacts it should have. First, the discussion concerning –μός nouns (and Koine Greek

DNs as a whole) should account for some smaller discoveries that this dissertation made.

Second, this study might slightly influence modern linguistic theory.

Impact on Koine Scholarship

There are a few ideas that impact Koine discussion of –μός nouns Greek DNs as a whole. First, –μός nouns are not restricted to being process DNs. Second, genitives are a straightforward way for readers today to discover agnate clause arguments. Third, genitives are not the only way to identify agnate clause arguments. There are a few other, less impactful changes as well.

This study should change the discussion of some elements concerning Koine Greek DNs, and –μός nouns in particular. The most glaring change that needs to be made is that not all –μός nouns represent a process, and scholars should correct that assertion.[67] The words in Table 4.1 are result DNs anytime they appear, and many other –μός nouns refer to a result in certain contexts. Scholars have perpetuated the idea that –μός represents a process for a century, seemingly without questioning prior assumptions.[68] This paper has questioned those assumptions and found them wanting. Moving forward, grammarians are encouraged to show that –μός nouns can represent both a process and a result. Someone might find enough evidence to overturn the evidence presented herein, but that seems unlikely.

Table 4.1

Word	Gloss
ἀναβαθμός	stairs
βαθμός	step
βωμός	altar
δεσμός	bond
ἐπισιτισμός	provision
ἱματισμός	clothing
Ἰουδαϊσμός	Judaism
ποταμός	river
σαββατισμός	sabbath rest
σύνδεσμος	bond
φραγμός	fence
ψαλμός	psalm

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[67] Greenlee, *Concise Exegetical Grammar*, 28; Hoffman, *Everyday*, 27-28; Moulton, Howard, and Turner, *Grammar*, 350-351; Smyth, *Greek Grammar*, 176-178.

[68] Burk last made this claim (2012) in "The Righteousness of God", 346-360. Burk is clear that he stands on the shoulder of Young, *Intermediate*, 29, who wrote in 1994. Young was probably standing on the shoulders of research done by Moulton, Howard, and Turner, *Grammar* (1963), 350; Greenlee, *Concise* (1953), 28; and Smyth, *Greek* (1916), 177.

This study should also affect the study of nominal modifiers. In general, scholars should be confident in the traditional categories of subjective and objective genitives. When a genitive appears with a process –μός noun in the New Testament, it represents an agnate clause argument.[69] This might be extracted as a general principle for the grammatical construction of process DN + genitive modifier. Even if it does not hold that all genitive modifiers with process DNs represent agnate clause arguments, it will likely still be generally true. Despite this, the DN + genitive modifier construction does not necessarily indicate a process DN. In Luke 9:29, ὁ ἱματισμὸς αὐτοῦ refers to Jesus' clothing, not Jesus putting clothes on. While scholars agree that genitive modifiers often represent agnate clause arguments, the current research project found no claim that other direct modifiers can represent agnate clause arguments.

Another change to be made is that genitives are not the only ways one can find agnate clause arguments. A quick survey of appendix C will show that common knowledge of an event can reveal other arguments, as can a contextual agnate clause, implicit argument control, or the rest of the clause with a –μός noun and a process-argument verb. This dissertation even found that non-genitive direct modifiers (such as prepositional phrases or the dative case) can represent an argument.[70] This is rare, but the point is that genitives are not the only way to find agnate clause arguments. Recently, grammars have moved away from naming specific categories of Greek case uses in favor of stating what the case is doing in the text specifically. Students are well-served by this trend, as it helps them to understand the text rather than classify a noun into a

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[69] This study found that every occurrence of a genitive modifying a process –μός noun represented an agnate clause argument. As this study covered a small subset of Greek DNs, for now it is best to say that a genitive modifier of a process DN usually represents an agnate clause argument. Perhaps future studies will reveal that this is almost always, or perhaps always the case.

[70] Although the argument will probably not be the agent.

specific case use. On the other hand, understanding the possibilities of the Greek cases (and prepositional phrases) will help students determine what is happening in a specific text. Depending on the goal of a New Testament grammar, a grammarian might improve his work by mentioning that genitives are not the only way to find agnate clause arguments.

Other miscellaneous changes are as follows. First, this dissertation found no correlation between objective genitives and the passive voice. If scholars want to use the phrase "passive DNs" or similar, they should clarify what they mean by this.[71] Second, it would be very helpful for scholarly computer programs to add data points mentioned in this study.[72] Types of verbs (activity, accomplishment, achievement, psychological, etc.) and the transitivity of verbs (unergative, unaccusative, transitive, ditransitive, etc.) would be very helpful for assisting future research. Perhaps most importantly, the stems from which a word is formed would help scholars quickly find a group of words using that stem. The root stem would be helpful, even though they can be easy to identify with current software. Being able to search for affixes would be very beneficial. These changes would drastically reduce the amount of time it takes to perform similar studies with other suffixes, but would require a good bit of work themselves.[73] These suggestions have focused on Greek grammar, but there is one potential impact for modern linguistic theory.

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[71] See George W. Knight, *The Pastoral Epistles*, New International Greek Testament Commentary (Grand Rapids: Eerdmans, 1992), 255, for a good example of stating that it is used in the passive sense and explaining what that means. This dissertation encourages any future studies comparing objective genitives and passive verbs to act similarly.

[72] Accordance and Logos are two prominent examples.

[73] See the Similar Projects section below.

One problem with this suggestion is that scholars generally take these computer programs to be presenting facts rather than opinions, and sometimes the stems are debated. The program might list a word as having one affix, when it reality that is highly debated. However, programs can be built to indicate what is debated, and scholars can (and in this case would need to) adjust their assumptions about these programs. Well-designed programs can assist scholars in questioning these assumptions.

Impact on Linguistic Theory

This study might cause a slight adjustment to the linguistic theory behind plural DNs. Linguistic theory states that, in general, plural DNs refer to results.[74] There are exceptions to this, such as when the DN refers to a telic and bounded event.[75] However, this study found instances of –μός nouns that were atelic or unbounded, but referred to a process. διωγμός in Mark 10:30 is an example of a word that is both atelic and unbounded but refers to a process. Perhaps ancient languages did not follow that rule as closely as modern languages do. Perhaps this is an exception that proves the rule. Due to the amount of linguistic discussion around plural DNs, the exceptions found in this study will probably have little impact. Regardless, another study could be done to determine how this fits into the larger theory of deverbal nouns in all languages.

<p align="center">Suggestions for Future Research</p>

While researching, the author found other ideas for research topics. They can roughly be divided into two categories. The first concerns research opportunities similar to the present dissertation. The second concerns ideas for quite different projects.

Similar Projects

This dissertation has purposefully restricted itself in many ways, and changing those restrictions would create many other similar studies. This study limited itself to one particular suffix that denotes a DN. The simplest change would be to do this same study with other suffixes

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[74] This idea was popularized by Grimshaw, *Argument Structure*, 54-56.

[75] Alexiadou, Iordăchioaia & Soare, "Plural Marking," 4-5; Alexiadou, *Functional Structure*, 41-42; Alexiadou, "On the Role," 278; Greenlee, *New Testament Greek Morpheme*, viii; Grimshaw, *Argument Structure*, 54; Markantonatou, "The Syntax"; Mathieu, "Nominalizations in Ojibwe," 7.

that can indicate a process. These include –σις, –σια, –τι, –τις, –ια and the null suffix.[76] A study

of result DN suffixes would look very different, but would likely prove beneficial. If studies of

individual suffixes were available, a study comparing and contrasting DN suffixes would be

desireable. That study might research what sets of suffixes are used on the same root to form

words, and what suffixes do not occur with the same root. For instance, one might find that –σις

and –μός were rarely added to the same root words (perhaps because their meaning is similar), or

that they were added to the same root words (because their meaning was dissimilar enough). A

researcher might also find that certain principles apply to all suffixes, while others only apply to

some. One could even expand this study to other dead languages, or one might study suffixes

other than DN suffixes. Some suffixes change a word from a verb to an adjective (–σύνη), from a

noun to an adjective (–ιμός), or from a noun into a verb (–τιζω). One could also dig further into

morphology, determining better methods for distinguishing when a suffix does and does not

appear with a lexeme. This would potentially impact the semantics of a word. How suffixes

impact meaning might prove helpful in other areas as well.

Other Suggestions

One might also study specific principles mentioned in this dissertation with a broader

scope. After gathering a larger list of DNs, one might study the process-argument verb + DN

argument construction across many different suffixes. This could confirm or limit the principle

concerning arguments with process-argument verbs. The same could be done with any of the

other principles in this dissertation. In addition to this, one might choose to study the principles

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[76] The null suffix refers to the lack of a suffix other than the standard ending of the appropriate declension. An example is ἀγάπη, which is formed from ἀγάπ— and the standard first declension endings.

that this dissertation deemed inconclusive. In chapter 3, this dissertation stated that the present

research project was inconclusive to make decisions on some potential principles. If someone

chose to search for other principles, this author encourages them to begin with the principles that

were potentially valid and work backward from there.[77] Another study might concern unergative

verbs with DN suffixes. The main question might be whether an unergative verb + DN suffix

always creates a result DN. If Greek DNs formed from unergative verbs can refer to a process, a

secondary question would be how the DN phrase communicates the agent.

In a similar sense, studying a variation of the principles found in this dissertation might

be helpful. This study found some instances of non-cognate agnate clauses. In Luke 1:29, the

angel greets Mary (χαίρω, "greet"), but Mary refers to that same event with ἀσπασμὸς

("greeting"). Knowing how to determine when an event qualifies as the agnate clause despite it

having a non-cognate verb would allow scholars to confidently find more process DNs and

agnate clause arguments. One might also search for patterns among prepositional phrases that

represent agnate clause arguments, or a consistent method of how context reveals arguments.

There are many possibilities, some of which were probably not included in this dissertation.

A Parting Thought

This dissertation has revealed some aspects of the nature of the –μός suffix, and perhaps

even some principles about Greek DNs in general. This study has many implications for Greek

scholarship and ideas for future research. These implications will likely not cause a major shift in

scholarship, but will hopefully result in a better understanding of the –μός suffix, as well as

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[77] See the sections above concerning Potentially Valid principles for the process/result distinction, the Patterns that Require another Study for the process/result distinction, and the Principles that Require a Different Study concerning agnate clause arguments.

clarify a few passages in scripture. The next step is the integration of these ideas into other works, such as grammars, commentaries, and other linguistic research papers. In the previous sentence, "integration" is a process DN. The question that the reader must answer is whether or not they are an agent of the agnate clause.

Appendix A

This appendix is a worksheet in an Excel file. You can access it in the supplementary

files section of Liberty University's dissertation portal, or online at this address (copy and paste

into a browser):

https://docs.google.com/spreadsheets/d/1KRXzt0cmYkKILiccxlC_iRl1AvvDc1BD3pYyF8kim9

U/edit#gid=1894076245. The worksheet lists out all of the –μός nouns in this study, the cognate

verbs from which they derived, and other details pertinent to this study. This dissertation

explains the pertinent details mainly in the Gathering Data from Verbal Cognates section in

chapter 2, but also in the Set 1: The Basis for Initial Decisions section in chapter 3.

Appendix B

This appendix is also a worksheet in an Excel file. You can access it in the supplementary files section of Liberty University's dissertation portal, or online at this address (copy and paste into a browser):

https://docs.google.com/spreadsheets/d/1KRXzt0cmYkKILiccxlC_iRl1AvvDc1BD3pYyF8kim9U/edit#gid=1894076245. The worksheet lists out the New Testament occurrences of the –μός nouns in Appendix A and pertinent details concerning those occurrences. This dissertation explains the pertinent details in the Data Points section in chapter 2.

Appendix C

This appendix is the third worksheet in an Excel file. You can access it in the supplementary files section of Liberty University's dissertation portal, or online at this address (copy and paste into a browser): https://docs.google.com/spreadsheets/d/1KRXzt0cmYkKILiccxlC_iRl1AvvDc1BD3pYyF8kim9U/edit#gid=1894076245. The worksheet lists out all of the modifiers of each New Testament –μός and the pertinent details for those modifiers. This dissertation explains the pertinent details in the Data Points section in chapter 2.

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