AN OVERVIEW OF THE PHENOMENON OF DOUBLETS IN ENGLISH

by

KAREN ELIZABETH SESTERHENN

(Under the Direction of Jared Klein)

ABSTRACT

As a language rich in vocabulary items, English contains a great number of borrowed word-forms. One result of this propensity to accept foreign words is cognates known as "doublets." Doublets are varying word-forms from the same original source existing in a single language at a given point in time. They typically occur in pairs but can also form larger groups of cognate word-forms, which may be native and foreign cognates, repeated borrowings from a single language, or cognates from different languages. Every doublet in this thesis contains at least one borrowed word-form. Doublets exist if the forms differ in meaning or in phonological shape, so that speakers avoid synonymy, which is generally avoided in languages. This study aims to separate English doublets from phenomena that show systematic alternation and group them according to phonological correspondences while also revealing the true etymologies of forms that are believed to be doublets.

INDEX WORDS: doublet, loanword, borrowing, English, North Germanic, Norman French, Parisian French, Latin, Greek

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KAREN ELIZABETH SESTERHENN

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KAREN ELIZABETH SESTERHENN

Major Professor:	Jared Klein
Committee:	Jonathan Evans
	Keith Langston

Electronic Version Approved:

Suzanne Barbour
Dean of the Graduate School
The University of Georgia
May 2016

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TABLE OF CONTENTS

Page

ACKNOWLEDGMENTS iv

LIST OF TABLES vii

CHAPTER

1 INTRODUCTION 1

Definition of "Doublets" 3

A Focused History of English 5

2 COEXISTENCE OF ENGLISH AND NORTH GERMANIC WORDS 11

3 BORROWINGS FROM LATIN AND FRENCH 27

Norman and Parisian French Forms 27

Latin and French Forms 34

4 DOUBLETS AND TRIPLETS IN GREEK, LATIN, AND ENGLISH 44

5 EXCLUDED FORMS 50

Suppletive Forms 52

Allomorphy 52

Ablaut 54

Analogy 55

6 CONCLUSION 57

WORKS CITED 59

APPENDICES

A NORTH GERMANIC ETYMOLOGICAL TABLES....61

B FRENCH ETYMOLOGICAL TABLES....63

C LATIN AND FRENCH ETYMOLOGICAL TABLES....64

D GREEK, LATIN, AND ENGLISH ETYMOLOGICAL TABLES....65

LIST OF TABLES

Page

Table 1: Possible Forms Showing North Germanic /sk-/ and English /ʃ-/ Alternation 11

Table 1a: [Revised] Doublets Showing North Germanic /sk-/ and English /ʃ-/ Alternation 17

Table 2: Possible Forms Showing North Germanic /g/ and English /j/ Alternation......................18

Table 2a: [Revised] Doublet Showing North Germanic /g/ and English /j/ Alternation 19

Table 3: Possible Forms Showing North Germanic /k/ and English /ʧ/ Alternation.....................19

Table 3a: [Revised] Doublet Showing North Germanic /k/ and English /ʧ/ Alternation 21

Table 4: Possible Forms Showing North Germanic /ei/ and English ou/ Alternation 23

Table 4a: [Revised] Doublets Showing North Germanic /ei/ and English ou/ Alternation...........24

Table 5: Norman French /k-/ and Parisian French /ʧ-/ Alternation 28

Table 6: Possible Forms Showing Norman French /w-/ and Parisian French /g-/ Alternation 29

Table 6a: [Revised] Doublets with Norman French /w-/ and Parisian French /g-/ Alternation 32

Table 7: Latin /k-/ and French /ʧ-/ Alternation...34

Table 8: Possible Latinate Triplets 37

Table 8a: [Revised] Latinate Triplets/Quadruplets..39

Table 9: Earlier and Later Latin Borrowings Examples 40

Table 10: French Intervocalic Consonant Lenition 41

Table 11: Earlier and Later Greek Borrowings..45

Table 12: Triplets: Greek, Latin, English 46

Table 13: Greek Sound Changes: /h-/ from PIE */s-/ 47

Table 14: Five Doublet Members from √*g^w^eiə-* 'to live' 48

Table 15: Cognate Members from Greek *diskos* 48

Table 16: Latin and French Allomorphic Suffixes 54

Table 17: Older and Innovated Forms in English 55

Table 18: Summary of North Germanic /sk-/ and English /ʃ-/ 61

Table 19: Summary of North Germanic /g-/ and English /j-/ 61

Table 20: Summary of North Germanic /k-/ and English /ʧ-/ 61

Table 21: Summary of North Germanic /ei/ and English /ou/ 62

Table 22: Summary of Norman French /k-/ and Parisian French /ʧ-/ 63

Table 23: Summary of Norman French /w-/ and Parisian French /g-/ 63

Table 24: Summary of Latin /k-/ and French /ʧ-/ 64

Table 25: Summary of Triplets in Latin and French....64

Table 26: Greek and Latin Doublet Example 65

Table 27: Earlier and Later Greek Borrowings....65

Table 28: Summary of Triplets (Greek, Latin, English)....65

Table 29: Quintuplet (Possible Doublet) 66

CHAPTER 1

INTRODUCTION

One principal reason for selecting English for a study of doublets is the size of its lexicon, which is among the largest of all known and recorded languages (Schmitt and Marsden 2006:78). This is mainly due to English's lengthy history of contact with other linguistic groups, especially Latinate and Germanic peoples, and has been facilitated by English's willingness to accept loanwords from various languages (Watkins 2011:viii). While retaining its inherited Germanic grammatical structure as well as native forms, English has built a large inventory of loanwords from a wide range of language groups, the most influential being Germanic, Latinate, and Greek (Watkins 2011:viii). This has resulted in the coexistence of words that bear similar meanings. Even though synonymy is generally avoided in languages, as it is a burden on the memory for adult native speakers as well as for children or adults acquiring the language, these forms differ just enough in meaning or phonological shape to survive together in English.

Prestige and novel concepts or items from contact groups have been the main driving forces for the integration of loanwords in English. When they have lacked a term for something novel, speakers have often chosen to adopt the accompanying foreign label instead of creating or applying a native word. A similar situation may also occur among social or economic classes. A linguistic group's prestige motivates borrowing, as will become evident in the following discussion on Norman and Parisian French. Often when one group is ranked socially higher than another, linguistic referents (such as cuisine items versus farm animals) may be different enough to require separate words from both aristocratic and lower-class groups. The more prestigious

linguistic group may have ideas or things unfamiliar to the socially lower group or vice versa. As Schmitt and Marsden (2006:83) point out, the large number of synonyms found in English was sustained by poetry because literary devices, such as alliteration, could be employed to a great degree if poets had a considerable inventory of words expressing identical meanings to choose from. These factors have all been prominent in the history of English and are the reasons behind the language's high word count. German, the runner-up for the most vocabulary items, as stated by Denning et al. (2007:3), contains not even half the amount of words English has.

Even though English has accepted many foreign terms, inherited words directly descended from Proto-Indo-European or Proto-Germanic have survived. These include *sun, moon, life, death, mother, health,* and *god*, which are essential to describing objects and activities in daily life and are therefore not susceptible to replacement by borrowings (Denning et al. 2007:34). They are some of the most frequently occurring words, and that frequency has contributed to their survival (Schmitt and Marsden 2006:82). Additionally, function words that serve a grammatical purpose, such as pronouns and prepositions, are more likely to be retained than lexical items that refer to a real-life or conceptual entity. Schmitt and Marsden (2006:82) point out that about 15 percent of Old English words survive today, and this is because of their frequent, essential role in the language. Nevertheless, as this last statistic indicates, most of the native word-forms have disappeared over the course of the language's history. While accepting of loanwords, English has experienced a significant loss of native forms, which have been replaced by extensive borrowing. More than half of the inherited Indo-European roots in English can be traced back to a borrowed form or element (Denning et al. 2007:7-8). When native words survive alongside foreign ones or when English repeatedly borrows an element from the same original source, the outcome is doublets.

Definition of "Doublets"

Since the languages that have contributed the greatest to English's vocabulary are Indo-European, the same language family to which English belongs, many cognate forms exist in English as doublets. Our definition of this phenomenon will help us determine which purported forms are doublets and which are not. Denning et al. (2007:28) initially define the term as "pairs of native and borrowed cognates." While cognates are related forms found in different languages, doublets are cognates found in a single language. As we will see, and as Denning et al. (2007) later elaborate, a doublet is not limited to "native and borrowed cognates" but can also be a pair or set of words that are exclusively foreign. That is to say that we will encounter cognates borrowed into English from different languages or even from the same language at different periods, and these groupings may lack a native English form. Kennedy (1935:403) also includes dialects as sources for doublets as well as instances of both old and new native forms. Coexisting native forms will be taken into consideration later, as most have undergone a different process, such as analogy.

With this information, we may define "doublets" as instances of two or more varying forms from the same original source found in a single language at the same time. Millward (1989:359) states that they are "[w]ords derived from the same source by different paths." Historically they share an origin, but over time these cognates have evolved into forms that may or may not be recognizably related. Obscure relationships are often the result of phonetic or orthographic changes, which occurred separately in descendants from Proto-Indo-European or subsequent mother languages. Nevertheless, knowledge of systematic phonological changes can uncover the single original form, and such changes will accompany the examples of doublets in this thesis, illustrating how the forms are related through correspondences. Anttila (1989:165)

points out that extensive borrowing from a single language will result in these regular correspondences, but it's important to note that these are not systematic because there is no underlying rule for their application. Instead, there is a foreign vocabulary substratum.

This definition allows us to accommodate several different instances of related forms. If we were to restrict our definition to an original *word*, we would not be able to account for doublets that do not share a source word-form. For example, pairings that will still be considered doublets in this thesis may have developed from the same root, but they come from different derivations, where at least one has been borrowed into English. One member of the pair may have come from the base form of the root while the other is from an affixed form. Since they are historically related, our definition should be able to include these forms. That being said, specifying an original *word* would reflect the importance of borrowing in this phenomenon because we would be able to trace the source of the doublet pairs to an original word-form that was either borrowed in one instance or repeatedly. However, this would be too restrictive, so instead we may place members of doublets on a scale where certain forms are more closely related than others, as will be especially clear when examining triplets.

Finally, even though a discussion of what will be excluded from this definition won't be undertaken until the penultimate chapter, it is important to note here certain cases that will not be considered as doublets, the first of which are morphophonemic variants. These are grammatically productive forms, such as *sing, sang, sung*. While these forms are derived from a single root, they are grammatical variants formed by a process called **ablaut**, where the grammatical information (such as verb tense) is indicated by alternations in the root vowel. In other words, the alternations serve a grammatical purpose and are not instances of cognate forms. Therefore, our data will consist of loanwords exclusively. Also omitted are pairings or sets of seemingly similar

forms that may have arisen from coincidence (i.e. animal calls, accidental similarities, and features inherent in the nature of human language, such as baby talk). Chapter 5 will discuss this further and take other examples into consideration, such as synchronic variants and the coexistence of two or more native forms where one is older and the other innovated. As we will see, their alternations will not fit within our definition of "doublet."

A Focused History of English

In order to successfully examine what constitutes an English doublet, it is necessary to first establish the contexts in which English has gained such an augmented vocabulary. Watkins (2011:viii) argues that "linguistic heritage…does not imply genetic or biological descent" but rather is influenced greatly by contact among peoples through "conquest, assimilation, migration, or any other ethnic movement." While languages descend from one generation to another, contact between different dialectal or linguistic groups plays a highly influential role in the evolution of language, responsible in a large part for creating variation, which results in change. English has a long history of such linguistic heritage, in the form of contact with other Germanic peoples, French groups conquered by North Germanic invaders, the Romans, etc. This is evident in its lexicon and, more specifically, in its doublets.

Historical events, such as contact situations, help us determine when loanwords were integrated into the language, even in relation to other borrowings' arrivals. In some cases, major linguistic change results from contact, and a language's history can be separated into distinct epochs. English is a West Germanic language with somewhat distinguishable periods that can be broken up into Prehistoric English, Old English (700-1100), Middle English (1100-1500), and Modern English (1500-Present) (Denning et al. 2007:25-31). These eras are not perfectly defined by their given range of centuries, but significant linguistic changes due to contact with other

groups support these demarcations. Each time span contains significant instances of contact, such as the Norman Conquest in 1066 at the end of the Old English period. The types of borrowings changed with the centuries and with new group interactions. For instance, words for commonplace items preceded literary and ecclesiastical terms in the earlier periods of English, and scientific borrowings entered English later during the Renaissance (Denning et al. 2007:36). The principal contact groups that introduced these borrowings were North Germanic, Latin, and French.

As an early contributor to English's vocabulary, the North Germanic linguistic group made its greatest impact during the Old English era. As Schmitt and Marsden (2006:81) state, "English has at least 900 words taken from Old Norse, most of them borrowed during" this time. The language of this group, brought to England by the Viking invaders from the northern lands, did more than just lend words. According to Gordon (1972:152), the Viking language "accelerated the rate of morphological change, which was already in progress" in Old English. It seems that in the early stages of English the language was not solidified enough nor perhaps seen as a means to cultural or political unification, so it was susceptible to even deeper linguistic change, such as that affecting morphology, from this outside source. Social interaction was largely responsible for the pervasiveness of North Germanic. With enough time to interact, speakers continued using North Germanic grammatical features as well as lexical items, and some had lasting effects, such as the present-tense verbal inflection *–s* for third singular subjects (Gordon 1962:152). This linguistic group had an early influence that was prevalent beyond the Old English period. Even when the French conquerors known as the "Normans" invaded Britain in 1066, the linguistic adstratum of that language group was North Germanic ("Norman" is French for "north man" i.e. Scandinavian). Germanic also underlies Old French, the source for

varying Norman and Parisian French forms, when Frankish influenced French on the continent during the Old High German period (Anttila 1989:171).

While North Germanic made significant changes to English's grammar and lexicon in an older stage of the language, French and Latin have had an even longer history of contact with the speakers on the British Isles. In order to understand their influence, it is helpful to summarize their history as well. French, a daughter language of Latin, was "an evolution of the popular speech of Romans and Latinized Gauls" (Gordon 1972:150). It underwent sound changes independent of Latin and its other descendants, collectively known as the Romance languages, and achieved the status of language instead of dialect (Gordon 1972:150). The result in English, which borrowed from both languages, is sometimes an obscurity of original sources. That is to say that whenever a borrowing comes from French, it may be difficult to determine whether we should consider the form a Latin borrowing or a French one (Denning et al. 2007:29). For our purposes, we will keep French and Latin loanwords separate and treat those which entered English through French as forms from the daughter language.

As stated before, there are several reasons for incorporating foreign words into one's language, often out of necessity but also because of prestige. Robertson (1954:154) notes that foreign words distinguish themselves from native ones by being associated with education or refinement. This is especially true of French borrowings. While the Anglo-Saxons coexisted with the Normans in Britain, the Norman culture came to be regarded as the more prestigious one. Britain became a bilingual society where English was used for commonplace items and ideas, and French was the language of "elegance and courtly living" (Robertson 1954:152). The bilingual speakers in Britain were the sources for Norman French loanwords because they leveled out competing synonyms, often in favor of the more aristocratic choice, and brought up

these novel words while interacting with monolingual speakers (Anttila 1989:177). In this case, one might argue that French words were adopted because English lacked cultural concepts or material goods that the Normans introduced, now that there was a social divide between classes. Robertson (1954:149) states that the English "native vocabulary was generally adequate to the life of the times" and grew by combining previously adopted loans that subsequently became naturalized. But the Norman Conquest brought with it novel things, and this is clear from "the established practice of borrowing from French" (Robertson 1954:152).

This wave of French influence was the first of two that led to English doublets. The conquering Normans opened up Britain's borders to a steady French influence, and English began borrowing heavily since that historical event (Robertson 1954:149). Gordon (1972:151) describes this initial rise of the French aristocracy and, consequently, of the coexistence of English and French words in the British Isles during the Middle English period:

> The remarkable extent of the French borrowing is accounted for by the fact that a large part of it occurred in the living speech of a great number of people, for the evidence is that the most abundant borrowing took place during the period when the families of French ancestry were gradually relinquishing the French language; that is, between 1250 and 1400. In these years there must have been an extended period of bilingualism, in which French words were frequently put into English context.

More and more the foreign language was becoming integrated into English and seems to have lost some of its power as a prestigious language by becoming naturalized into English. However, French regained its upper-class status through a second and more significant wave of prestige when "Parisian or Central French…displaced the Norman dialect as the source of new borrowings" (Robertson 1954:156). When Norman French and English had coexisted for some

time, it seems the Scandinavian-influenced dialect dropped in social status. This allowed a variant from a different part of France (Paris) to enter Britain, replacing the former variety as the language of aristocracy. As we will see, these varieties of French coexisting in Britain yielded French-based doublets in English. They are repeated borrowings, one earlier from Norman French and another later from Central French.

French survived as the language of prestige, as evidenced by synonyms such as *conceal* and *hide*, where the former is of French origin and is used in more literary situations, and the latter is the common, native English word. The French influence persisted into the Modern English era because of its central position in European culture, "but word borrowing was then less abundant and largely confined to the cultural level" (Gordon 1972:151-152). French has had a long period of influence, making its mark early on and continuing into modern times. Even before the Norman Conquest in 1066, the Anglo-Saxons in the British Isles were adopting words from the Scandinavian-conquered Frenchmen, leading to 150 years of borrowings (Robertson 1954:156).

Perhaps even more influential than French and the North Germanic languages was Latin. Latin has had the longest history of contact with English speakers due to English's early and continuous contact with the Romans, which began prior to the Germanic migrations from the continent to the British Isles (Robertson 1954:152). In the centuries before the Norman Conquest, between 350 and 500 Latin words entered Old English (Schmitt and Marsden 2006:81). Latin then continued to have an effect throughout the time of the Roman Empire and on into the Renaissance when the number of Latin loanwords increased (Robertson 1954:152).

Latin's reputation seemed to contrast enough with French's cultural prestige in order to allow Latin and French doublets in English. Latin was regarded as a language of higher learning

instead of that which the aristocracy spoke (Robertson 1954:152). During the Middle English period, Latin loanwords were actually altered to seem more like French (Robertson 1954:152-153). This may have been due to French's prestige at that time. The impact of the Latin words that remained recognizably Latin stemmed from "works of a learned or technical character" and survived when they extended to the popular speech on Britain (Gordon 1972:151). Once Latin ceased to be spoken, loanwords extracted from the dead language were considered "learned borrowings" as they were brought into English by scholars (Denning et al. 2007:210). As a result, doublets of older and newer borrowings from Latin exist in English.

The final principal language that greatly influenced English was Greek, which primarily entered English through Latin and French (Millward 1989:244). If we look at the make-up of English's lexicon, it becomes clear how significant these languages' impacts were. Robertson (1954:155) estimates that of the one thousand most frequently used words in Modern English, more than half are from Old English, French makes up about a third, and Latin and Scandinavian round out the total. It's likely that the most frequent words in English are short words, like pronouns, prepositions, and articles, and the majority of them are native to English, which explains why Old English's percentage is so high. As we progress to the second set of the most frequent one thousand words, English drops to less than half and Latin grows to about half (Schmitt and Marsden 2006:82). The remainder of the English lexicon is very similar to this second set: 36% of words are native English, 51% are Latin, 7% are Greek, and 6% are other languages (Schmitt and Marsden 2006:82). Keeping in mind the fact that foreign words are just as prevalent as native ones in English's lexicon, we now turn our attention to the phenomenon of doublets in English.

CHAPTER 2

COEXISTENCE OF ENGLISH AND NORTH GERMANIC WORDS

As one of the earliest groups in contact with English, the North Germanic language branch left a significant mark in the form of several hundred loanwords. Today, some of these loans survive as doublets, where one member of the pair is a native English word and the other a foreign one from North Germanic. What follows are doublets grouped by phonological correspondences between English and North Germanic. In some cases, sources disagree about whether these are true North Germanic-English doublets, and we will find that fewer pairings are actual doublets of this sort than what were thought to be so previously.

First, while North Germanic shows /sk/ in initial position, the consonantal cluster has undergone palatalization or softening to /ʃ/ in English (Schmitt and Marsden 2006:82). This can be seen in the following doublets, such as *shirt* /ʃɹt/ and *skirt* /skɹt/ (Note: this table and the following ones are not complete lists of doublets but instead large, representative samples):

Table 1: Possible Forms Showing North Germanic /sk-/ and English /ʃ-/ Alternation

North Germanic	*English*
skirt	shirt
scot	shot
scabby	shabby
scatter	shatter
scale	shale
score	shore
scuffle	shuffle
scrub	shrub

The members of these pairs share historically related meanings and have survived together because of semantic differentiation in addition to this phonological alternation. However, only about half of them can be considered true North Germanic-English doublets for certain. The pair *skirt* and *shirt* can be traced back to the Proto-Indo-European root √(*s*)*ker-* 'to cut' which was extended to **skerd* and yielded **skurtaz* in Proto-Germanic from the zero-grade with the o-stem suffix **skr̥d-o-* (Watkins 2011:80). The Proto-Germanic form contains the nominative suffix **–az* (Salmons 2012:67). We can see the Proto-Germanic outcome [-*ur*-] from the syllabic sonorant [-*r̥*-] as well as the change of PIE **o* in the suffix to Proto-Germanic **a* (Salmons 2012:57, 60). The resulting forms, *sċyrte* in Old English and *skyrta* in North Germanic, share the meaning 'skirt' or a 'cut piece,' the latter being closer to the source root's meaning (Watkins 2011:80). While Old English orthography writes *sċ*-, which might be mistakenly pronounced as /sk-/, the <ċ> is actually palatalized to be pronounced as the voiceless fricative /ʃ-/**.** When *skyrta* was borrowed into Middle English, there needed to be a reason to preserve it since the forms were identical in meaning (Stevenson 2007:2859). Myers (1966:111) states that the two forms became "specialized, *skirt* for the lower half [of a person's body] and *shirt* for the upper" in order to avoid synonymy. The two forms still retain the same core meaning: a garment that is open at the bottom (Denning et al. 2007:28). This Old Norse borrowing as well as several of the following ones are first attested in Middle English. Even though Old English was the period when the majority of Scandinavian loanwords entered English, the loans may not have been fully integrated until the early Middle English period.

Semantic splits, like in the pair *skirt* and *shirt*, occurred with other doublets as well. The root √*skeud*- 'to shoot, chase, throw' is the source of Germanic **skutaz* 'shooting, shot' which produced *sċeot* in Old English, yielding *shot* (Watkins 2011:81-82). s*hot* was inherited and

appeared in Old English as *scċ*(*e*)*ot* and *gesċ*(*e*)*ot* (Stevenson and Waite 2011:1334). The form *scot*, which is found in Modern English in the expression "scot-free," was borrowed from Old Norse *skot*, and its meaning, which is a payment towards a tax or other rate, may be linked to the original root by picturing money being thrown down (Watkins 2011:81). Stevenson and Waite (2011) confirm this origin. They state that *scot* is an Old English borrowing of the Old Norse form *skot* (Stevenson and Waite 2011:1290). In an earlier version of *The Oxford English Dictionary*, Stevenson (2007:2704) states that late Old English *scot* was partly influenced by the Old Norse form and was partly influenced by Old French *escot*, where the initial vowel was lost. Schwarz et al. (1988:1319) agree with this. This French word itself was influenced by the Germanic language Frankish, so we are still seeing a Germanic sound. Also, since it is generally agreed that North Germanic did in fact lend English *scot*, we may still consider this a North Germanic-English doublet despite the additional French influence.

The forms *shabby* and *scabby* originated from √(*s*)*kep-* which yielded the expressive form **skabb-* in Proto-Germanic (Watkins 2011:80). Stevenson and Waite (2011:1282) state that *shabby* and *scabby* are both related to the form *shab* from an unknown dialect. The base for *shab* 'scab' was Germanic, which meant 'itch' (Stevenson and Waite 2011:1321). The Old Norse descendant *skabb* was integrated during the Middle English period (Stevenson and Waite 2011:1282). Schwarz et al. (1988: 1309) state that Latin *scabiēs* may have influenced this form and may have reinforced the initial /sk-/ sound. *shabby* is dated later, from the seventeenth century (Stevenson and Waite 2011:1282). Robinson (1999:1286) cites the Old English form *sċeabb* as the source for *shabby*. As North Germanic provided one member of this pairing, these forms qualify as a North Germanic-English doublet.

The remaining pairs in Table 1 seem to exhibit this North Germanic-English alternation between /sk-/ and /ʃ-/ when in fact other information must be taken into consideration before drawing that conclusion. Some origins are uncertain, such as the ones for *scatter* and *shatter*, and we should be hesitant to classify them under this type of doublet for lack of accurate historical evidence. Watkins (2011:79) traces *shatter* and *scatter* to the root √*sked* 'to split, scatter,' an extension of √*sek* meaning 'to cut,' which is **skod-* in the o-grade. This was purportedly the base for *shatter* and *scatter*, both from Old English **sċ(e)atarian* from Proto-Germanic **skat-*, which shows the Germanic change of **o* to **a* and Grimm's Law (Watkins 2011:79). However, Stevenson and Waite (2011:1325) show more caution and list *scatter* and *shatter* as possible imitative forms from the Middle English period that are variations of each other. Stevenson (2007:2688) still speculates that *scatter* shows a Scandinavian-influenced substitution whereby /ʃ-/ was replaced with /sk-/. Despite the forms' uncertain origin, it's likely that the varying forms do show this difference in initial segments and can therefore still be classified as North Germanic-English doublets.

In some cases, an intermediate stage may prevent these pairings from being included in this classification. For example, *score* and *shore* are also from the root √(*s*)*ker* 'to cut' (Watkins 2011:80). *score's* link to this meaning is fairly clear, since one may keep score by leaving a mark, like a notch. s*hore,* on the other hand, may not be so obvious, but we may tie it to 'cut' as in a demarcation between land and sea. While Watkins traces these back to the same root, he provides different derivations that resulted in the two forms. *score* is from the Germanic form **skur-* which became *skor* 'notch, tally' in Old Norse, and *shore* came from the suffixed form **skur-ō* which became *sċora* in Old English (Watkins 2011:80). However, while Stevenson and Waite (2011) agree with Watkins about the etymology of *score*, they cite other West Germanic

languages as the origins of *shore*. The English word came from Middle Dutch and Middle Low German's word *schōre* (Stevenson and Waite 2011:1333). Since it appears English borrowed both words, this is not a true North Germanic-English doublet. However, we may still consider them doublets of a West Germanic-North Germanic sort. If we consider the root as the source for these forms, instead of a word-form, we may still qualify them as doublets, even if the derivations were different (one from the base form and one from a suffixed form).

Additionally, *shale* has an intermediate French stage. *shale* and its doublet partner *scale* are from the root √(*s*)*kel*-, which also means 'to cut' (Watkins 2011:79). Robinson (1999:1287) traces *shale* to Old English *sċealu*. *shale* may otherwise be related to another English dialect's *shale* meaning 'dish,' and was first recorded in the eighteenth century, likely borrowed from German *Schale* (Stevenson and Waite 2011:1323). *scale*, referring to what are found on fish or reptiles, is a Middle English borrowing from Old French *escale* whose origin was the Germanic base for *scale*, which refers to a balance for weighing things (Stevenson and Waite 2011:1282). This loanword was Old Norse *skál* 'bowl' (Stevenson 2007:2681). Watkins (2011:79) states that the French form *escale* 'husk, shell' is from the same Germanic **skalō* as Old English *sċealu* is from. Even though these are not examples of a direct doublet pairing, the origin of the Old French loanword is North Germanic, so at an underlying level we do have an instance of a North Germanic-English doublet with a French intermediate stage.

The origins for *scuffle* and *shuffle* are also uncertain. *scuffle* is likely from a North Germanic source. The root √*skeubh-* 'to shove' is the source for both (Watkins 2011:81). It is disputed what North Germanic word was the origin for *scuffle*. Watkins (2011:81) cites Old Norse *skūfa* as this source and Middle Dutch (another West Germanic language) *schoffel, schuffel* for *shuffle*. Robinson (1999:1264) traces *scuffle* back to Swedish *skuffa*. *shuffle* is linked

to sixteenth-century German *schuffeln* (Robinson 1999:1300). Stevenson and Waite (2011) support these derivations but seem to be even more cautious when identifying the sources. They don't cite Swedish *skuffa* as the source for *scuffle* but instead say that the English word is likely to be from a Scandinavian source, although they do not posit what that could be (Stevenson and Waite 2011:1296). The Low German form *schufflen* 'to walk clumsily' is also likely to be the source of *shuffle*, but it is not certain (Stevenson and Waite 2011:1337). Stevenson (2011:2822) states that *shuffle* is either a cognate of or a descendant from the Low German form. Despite no definite North Germanic source, the consensus is that some word from that language branch is the origin of *scuffle.* The issue here is that the alleged English word may not be itself an inherited word but rather is borrowed from another West Germanic language. We may then explain the change from /sk-/ to /ʃ-/ by citing the change in Middle High German from sC (where 'C' stands for any consonant) to schC (Salmons 2012:195). It would be prudent, therefore, to exclude this pairing from the North Germanic-English doublet classification and instead group it with *score* and *shore* as a North Germanic-West Germanic alternation.

Finally, Denning et al. (2007:28) list *scrub* and *shrub* among the other North Germanic-English doublets. However, the source for *scrub* is disputed. According to Watkins (2011:80), the forms *shrub* and *scrub* are derived from the previously mentioned root √(*s*)*ker*, but *shrub* is from Old English *sċrybb* 'rough plant' from Proto-Germanic **skrub*-, and *scrub* is from the Middle Dutch word *schrobben* 'to scrape' which came from the Proto-Germanic form **skrab*-. Stevenson and Waite (2011:1295), however, list the Middle Dutch word as the origin of *scrub* 'rub hard' and claim the origin of the second lexical entry for *scrub* 'vegetation' is a variation of *shrub*. Since there is no North Germanic loanword from either of these accounts, we cannot list this as a North Germanic-English doublet.

The first five pairs in Table 1 may be considered true North Germanic-English doublets that exhibit the phonological correspondence between /sk-/ and palatalized /ʃ-/. Their etymologies prove that the varying forms are from the same sources; English inherited one of the doublet members and borrowed the other from North Germanic, even if there was an intermediate stage. The last three pairs in the table do not fit these criteria. In some cases, the histories of the forms are disputed or are simply uncertain and this precludes classifying them with certainty as doublets of this sort. Therefore, Table 1a provides a revised version of North Germanic and English doublets with the /sk-/-/ʃ-/ alternation while the omitted forms may be considered doublets within West-Germanic:

Table 1a: [Revised] Doublets Showing North Germanic /sk-/ and English /ʃ-/ Alternation

North Germanic	*English*
skirt	shirt
scot	shot
scabby	shabby
scatter	shatter
scale	shale

More outcomes resulted from palatalization in English. For example, Schmitt and Marsden (2006:82) state that North Germanic languages had a hard /g/ and /k/ before *e* and *i* corresponding to English /j/ and /ʧ/, respectively. We can see the North Germanic hard /g/ contrasting with the palatalized English /j/ in the following doublets:

Table 2: Possible Forms Showing North Germanic /g/ and English /j/ Alternation

North Germanic	*English*
garth	yard
guild	yield

In the first pair, *yard* is more commonly considered a doublet with *garden*, but the latter is a borrowing from Norman French *gardin*, which is a variant of *jardin* (Robinson 1999:550). Peter Rickard (1989:11) states that *jardin* was a borrowing from Frankish into Old French sometime between the fifth and eighth centuries. The Germanic source was likely to have been the same word as Old High German *garto* (Salmons 2012:170). Stevenson and Waite (2011:586) corroborate this. Orel (2003:126) traces *garth* and *yard* to Proto-Germanic **ʒarðaz*, which in Old High German became *boumgart* 'garden.' On the other hand, *garth*, which is recognized in British English, forms a more direct North Germanic-English doublet with *yard* (Stevenson and Waite 2011:587). *garth* came from Old Norse *garðr* and entered Middle English (Stevenson and Waite 2011:587). The pair comes from the root √*gher*- meaning 'to grasp, enclose' (Watkins 2011:30). When the o-grade form was suffixed (**ghor-to*- or **ghor-dho*-) the resulting form in Old English was *ġeard* which yielded *yard* (Watkins 2011:30). Watkins (2011:30) cites the Germanic form **gardaz* as the source for both *yard* and *garth*, therefore qualifying this as a North Germanic-English doublet.

The second pair, *guild* and *yield*, comes from the root √*gheldh*- 'to pay' which in Proto-Germanic became **geldan* with a neuter derivative **geldjam* (Watkins 2011:30). The former outcome **geldan* became *gieldan* in Old English (Stevenson and Waite 2011:1674). When the final syllable –*an* was lost and the initial /g-/ became palatalized, the result was *yield*. Robinson (1999:596) cites *gield* as the Old English source for *guild*. Stevenson and Waite (2011:633) trace

this Old English form back to Middle Low German and Middle Dutch and cite *gilde* as the source form. While Watkins (2011:30) lists the Old Norse form *gildi* as the source for *guild*, his claim that this is a doublet is not supported by the words' etymologies. The phonological change of /g/ to /j/ did happen in English, but it seems that only one of these pairs found in Table 2 is a doublet exhibiting its correspondence with the original /g/ in North Germanic:

Table 2a: [Revised] Doublet Showing North Germanic /g/ and English /j/ Alternation

North Germanic	*English*
garth	yard

One could argue that another doublet exhibits this correspondence; however, one of its pairs no longer exists in Modern English, and the other member's etymology is not certain. During Chaucer's time, the native English form *yive* (whose initial segment was pronounced /j/) coexisted with *give* (Myers 1966:110). While neither Stevenson and Waite (2011) nor Robinson (1999) trace *give* back to a North Germanic source, Watkins (2011) does. He claims that Old Norse *gefa* was partly responsible for influencing the form *give*, along with the Old English source *giefan* (Watkins 2011:28). If there was a North Germanic influence, it did not completely replace the native English form and therefore did not produce this type of doublet.

The alternation /k/ and /ʧ/ mentioned above is exhibited in the following examples:

Table 3: Possible Forms Showing North Germanic /k/ and English /ʧ/ Alternation

North Germanic	*English*
kirk	church
kist	chest

The first pair has no issue in qualifying for this type of doublet. The source for *kirk* and *church* was the medieval Greek word *kuriakon* from the phrase *kuriakon* (*dōma*) 'Lord's house' from *kurios* 'master, lord' (Stevenson and Waite 2011:257). The Old English descendant from this source was *cirice* which yielded *church* (Robinson 1999:248). Stevenson and Waite (2011:785) cite *cirice* as the source for Old Norse *kirkja* which was integrated into Middle English. The Middle English form is *kirke* and the descendant form *kirk* is used in Scottish to denote a church (Robinson 1999:748). Stevenson and Waite (2011:785) also state that a northern English dialect may have also used this word. It seems that in this case the Old English descendant from the Greek source exists in English as a native form and was also borrowed into Old Norse then reentered English. We may then identify *cirice* as the source form for this doublet.

On the other hand, it is more difficult to qualify *chest* and *kist* as this type of doublet. *chest* is from Old English *ċest, ċyst* which was based on Greek *kistē* 'box' (Stevenson and Waite 2011:245). Robinson (1999:239) cites Latin *cista* as the source for the Old English forms instead of the Greek word. If Latin is the source, Welsh *cist* 'chest-shaped tomb' entered English in the nineteenth century; the pronunciation of its initial segment varies between /k-/ and /s-/ (Robinson 1999:251). Stevenson and Waite (2011:261) trace Latin *cista* to the Greek form and agree that *cist* is a Welsh word from the classical sources. While Robinson does not have an entry for *kist*, Stevenson and Waite (2011:785) list it as a variant spelling of *cist* and describe it as a northern English form for *chest*, which entered Middle English and exists in Scottish. Stevenson (2007:1510), however, cites the Old Norse form *kista* as the source for *kist*. It's possible, then, that this does qualify as a North Germanic-English doublet, even if the pronunciation varies.

Table 3a: [Revised] Doublet Showing North Germanic /k/ and English /ʧ/ Alternation

North Germanic	*English*
kirk	church
kist	chest

Kennedy (1935:406) lists *dike, ditch*; *stick, stitch*; *wake, watch*; *hunk, hunch* as doublets that contain the same phonetic alternation. These forms end in /-ʧ/ and are preceded by a front vowel, so this phonological change has taken place when such a vowel is adjacent to, either preceding or following, the velar /k/. Kennedy (1935) does not claim that they are alternating forms between North Germanic and English, but these still warrant a discussion to determine whether they are doublets or not of this sort. For example, *dike* and *ditch*, in the sense of a trench, are widely considered as doublets (e.g. Myers 1966, Robertson 1954). They both come from the root √*dhīg*^{w}- 'to stick, fix' ultimately from √*dheigh*- 'form, build' (Watkins 2011:18, 20). However, the origin of *dike* is not agreed upon. Robinson (1999:410) traces it back to Old English *dīc*. This is the same source for *ditch* (Robinson 1999:387). Stevenson and Waite (2011:417) state that Old English *dīc* is the source for *ditch* but not for *dike*. *dike* is from the Old Norse form *dīk* which entered Middle English (Stevenson and Waite 2011:447). Since the source for one member of this pair is disputed, we cannot easily classify this as a North Germanic-English doublet, even though it's possible that it is (similar to *kist* and *chest* above). However, we may still consider them doublets within English because they are varying forms from the same root source. In either case, we see that *dike* was affected by The Great Vowel Shift since its lengthened *ī* collapsed into the diphthong [ɑɪ]. *ditch* has undergone vowel laxing, and the final /-k/ sound was palatalized to /ʧ/ after the front vowel.

The other pairs listed by Kennedy (1935) also show the English change from the velar to the palatal consonant in the environment of front vowels. For example, *stitch* is from Old English *stīce* (Stevenson and Waite 2011:1419). *stick* comes from another Old English form, *sticca* (Robinson 1999:1382). Stevenson (2007:3025) cites *stician* as the Old English source for *stick*. This is from the Germanic expressive **stikkōn* while *stice* is from PIE **stig-i-* from Germanic **stikiz* (Watkins 2011:88). *wake* and *watch* may also be from a shared Old English source. Robinson (1999:1601) lists *wæccan* and *wacian* as possible sources for *watch*. Stevenson and Waite (2011:1631) identify *wæcce* and *wæccende* as these source words. *wake*, on the other hand, is recorded as *wōc*, the past tense form, which was influenced by *wacian* but not enough to undergo the change of /k/ to /ʧ/ (Stevenson and Waite 2011:1625). The other influential source was *wacan* (Robinson 1999:1594). Stevenson (2007:3565) states that *wōc* corresponds to an Old Norse verb in the past participle: *vakinn* 'awake.' The origin of *hunch* is unknown while *hunk* may be from a Dutch or Low German source (Stevenson and Waite 2011:695). In all these cases, except for this final one where the origin is uncertain, /k/ changes to /ʧ/ when a front vowel (/e/ or /i/) follows it, as in *stice* and *wacian*. *wake* does not show /ʧ/, even though it was subject to the influence of *wacian*. Since it was derived from the past tense form *wōc*, however, there was no conditioning vowel so it retained /k/.

These forms, however, do not qualify as North Germanic-English doublets since their etymologies contain no North Germanic influence. *wake* may be influenced by Old Norse, but this is not the consensus. Furthermore, we should be hesitant to call these doublets, as neither member of the pair is from a foreign language. Instead, they come from different word-forms in Old English, so they should be excluded from our definition of doublets.

A final North Germanic-English doublet to consider that has a consonantal alternation is the pair *egg* and *edge*. In this case, *egg* has the meaning ‘to egg on,’ and its source is different from the source for ‘egg,’ which an animal lays. Both *egg* and *edge* came from the root √*ak-* ‘sharp’ which was suffixed to become **ak-yā-* (Watkins 2011:2). The Old English form *eċg* ‘sharp side’ is from Proto-Germanic **agjō* while *egg* is from Old Norse *eggja* ‘to incite, goad’ from Proto-Germanic **agjan* (Watkins 2011:2).

Vowels also show a degree of phonological variation when we compare English to its northern neighbor’s influence. For example, Germanic */ai/ changed to /ei/ in words borrowed from North Germanic languages and to /ou/ in words inherited from Old English (Myers 1966:110-111). This can be seen in the following doublets:

Table 4: Possible Forms Showing North Germanic /ei/ and English ou/ Alternation

North Germanic	*English*
hail	whole
kale	cole
nay	no

The first pair can be expanded to include an additional doublet from a northern dialect of English: *hale* (Stevenson and Waite 2011:643). *whole*, *hale*, and *hail* (borrowed from Old Norse *heill*) all originated from Proto-Germanic **hailaz* which was from the PIE adjective **kailo-* (Watkins 2011:37). The Old English form *hāl* produced many forms when affixed with suffixes, which will be discussed in Chapter 5. The vowel in *whole* is pronounced /ou/. *hail*, a form of greeting or toasting, has since become fixed in the archaic expression “All hail so-and-so” and

the holiday carol *The Wassail Song* but still shows the North Germanic vocalic outcome of /ei/ (Stevenson and Waite 2011:642).

Kennedy (1935:405) also includes *kale* and *cole* as English doublets. The source for these words was Latin *caulis* ‘stem, cabbage’ which became *cāwel, caul* in Old English (Stevenson and Waite 2011:280). *cole* is found in the group name “cole crops,” which includes kale, and in “coleslaw.” Stevenson and Waite (2011:774) state that *kale* is a northern English form of *cole*. Neither Stevenson and Waite (2011) nor Robinson (1999) cite a North Germanic source for the /ei/ variant *kale*, and Watkins (2011) does not provide a source root for either form. Therefore, we should be hesitant to include this with our North Germanic-English alternation.

The doublet *nay*, *no* contains a collocation of two different sources. Watkins (2011:2) cites √*aiw*- or √*h*$_2$*eyw*- ‘vital force, long life,’ which was extended to **aiwi* in Proto-Germanic, as one of the two sources. Old English shows *ā* from this form and Old Norse *ei*, both meaning ‘ever’ (Watkins 2011:2). Another root √*ne* ‘not’ was collocated with these forms (Watkins 2011:59). From *ne* ‘not’ + *ā* ‘ever’ Old English produced *nō*, *nā* (Stevenson and Waite 2011:970). Old Norse *nei,* which was borrowed into Middle English, is from *ne* + *ei*, the North Germanic outcome of **ai* (Stevenson and Waite 2011:956). Since this and the first pairing do exhibit the diphthong alternation in North Germanic and English, we may qualify these as doublets of this type:

Table 4a: [Revised] Doublets Showing North Germanic /ei/ and English ou/ Alternation

North Germanic	*English*
hail	whole
nay	no

A number of other forms are considered doublets, and their etymologies reveal if this is in fact true. Denning et al. (2007:28) include *lend*, *loan* and *rear*, *raise* in their collection of North Germanic-English doublets. Kennedy (1935:403) lists *girdle*, *girth*; *road*, *raid*; *stake*, *stack*. And Robertson (1954:162) counts *from* and *fro* as a Germanic doublet. Since these show sound changes that have not yet been examined, we will look at each case individually to determine whether they are doublets or not.

The first pair, *lend* and *loan,* are from the root √*leik*^{w}- 'to leave' (Watkins 2011:49). Proto-Germanic **laihwniz* became *lān* in Old Norse from the suffixed o-grade form **loik*^{w}*-nes-* (Watkins 2011:49). *lān* entered Middle English to become *loan* (Stevenson and Waite 2011:835). *lend* is from the Germanic denominative **laihwnjan* (Watkins 2011:49). This became *lǣnan* in Old English (Stevenson and Waite 2011:815). Since the forms are derived from the same root and consist of a native English word as well as a borrowed one from North Germanic, they are doublets. The second pair *rear, raise* may also be considered as such. Both forms come from Germanic **raizjan* from the extended form **h*$_3$*rei-s-* from the root √*h*$_3$*er-* 'to move, set in motion' (Watkins 2011:24). In Old English the form became *rǣran* (*rear*) while in Old Norse it became *reisa* (*raise*) (Watkins 2011:24). The Old English form shows rhotacism (*s > *z > r) due to Verner's Law where the unstressed initial syllable caused **s* to become **z* then *r*.

The root √*gher-* 'to grasp, enclose' in the zero-grade with a suffix (**ghṛ-dh-*) is the source for *girth*, *girdle*, and *gird* (Watkins 2011:30). In Old English, *gyrdan* yielded *gird* and *gyrdel* yielded *girdle* (Watkins 2011:30). In Old Norse the form *gjördh* produced *girth* (Watkins 2011:30). Stevenson and Waite (2011:601-602) list them as related forms instead. Middle English borrowed Old North *gjörth* 'belt' (Robinson 1999:566). We may call this a doublet

where the Old Norse form is cognate with both English forms, and the English forms are derivational variants from the base.

The forms *stake* and *stack* come from √*steg*- 'pole, stick' whose o-grade form **stog*- had outcomes in Old English *staca*, yielding *stake*, and in Old Norse *stakkr* 'haystack,' which produced *stack* (Watkins 2011:87). We may also consider *fro* and *from* a doublet, although they are from different root formations. The source root is √*per*- (Watkins 2011:67). The word *fro* is from Old Norse *frā* (Stevenson and Waite 2011:570). *from* is from a form of the root with the suffix *-*mo*- which became **fram* in Germanic (Watkins 2011:67). This was inherited as *fram* in Old English (Robinson 1999:534).

The remaining pair may also be considered a doublet of the North Germanic-English sort. *road* and *raid* are both from Old English *rād* which came from the o-grade **roidh*- of √*reidh*- (Watkins 2011:73). *raid* is a Scottish variant instead of a North Germanic loanword (Stevenson and Waite 2011:1187). As in our treatment of *whole* and *hale*, we may consider them doublets whose two forms are of West Germanic origin.

In the above cases, we have seen that doublets whose members are native English and North Germanic may be grouped into phonological correspondence sets. On the other hand, some cases may be isolated, although a more thorough study of the English language in perhaps its entirety may find groups in which to place those isolated forms. We may only count as North Germanic-English doublets those whose etymologies reveal cognate forms from both languages. In some instances, this has contradicted previous beliefs. The members of the doublets that have survived did so because they not only differed in phonological shape but also in meaning; one typically became specialized. Having examined these examples that constitute doublets from English and North Germanic, we now look at cognate forms from outside the Germanic family.

CHAPTER 3

BORROWINGS FROM LATIN AND FRENCH

Prolonged contact with Latin and French has resulted in a highly Latinate vocabulary in English, rendered even more so by the fact that Latin and French themselves stand in a lineal mother-daughter relationship. The periods and circumstances of borrowings from these languages have produced several cases of doublets: there are coexisting French forms from the regional variants, Norman and Parisian, forms from the mother and daughter languages, and native English forms alongside Latinate ones. Prior to contact between English and Latinate peoples, French was influenced by another Germanic language: Frankish. This contact spanned the four centuries prior to the Old-English period (Rickard 1989:11). Later on, British culture became bilingual during the time of the Norman occupation, and French loanwords entered English fairly easily. Parisian replaced Norman French as the major source for borrowings, and Latin words continued to be borrowed even after the language had become fossilized and was no longer spoken in daily usage. Much like what we saw in the previous chapter, those forms that may qualify as doublets exhibit differences in phonological form and meaning.

Norman and Parisian French Forms

As discussed earlier, French had one of the most significant impacts on the English vocabulary due to the Norman Conquest in 1066 and the later influx of Parisian French in the Middle English period, which produced two regional dialects. These competing variations of French yielded doublets in English because both dialects had enough dominance and prestige to embed words into the language at different times. These doublets give evidence of both dialectal

variation in French and phonological development within the history of French. The following doublets are instances of a correspondence in the two dialects between initial segments:

Table 5: Norman French /k-/ and Parisian French /ʧ-/ Alternation

Norman French	*Parisian French*
cattle	chattel
catch	chase

These re-borrowed forms show a phonological change in French, which occurred in the Parisian region but not in the northern dialects, whereby /k/ became /ʧ/ when it preceded the vowel *a* (Strang 1970:253). In this and many of the following cases, variants in Old French were the sources for the Norman and Parisian doublets. This suggests that the sound change had occurred during the Old French period (Pope 1952:76). For example, *cattle* and *chattel* exhibit this sound change. The lexical source for them was **kaput-* ‘head’ which was realized as *caput* in Latin (Watkins 2011:38). In Old French, the form that produced *chattel* was the highly reduced *chatel* from medieval or late Latin *cap*(*i*)*tāle*, where the medial /p/ was lost and the final syllable lost, which was from Latin *capitāle* (Stevenson and Waite 2011:241). Robinson (1999:236) agrees with this derivation and defines *capitāle* as ‘wealth.’ English *capital*, which also refers to wealth, is from the Old French form *capitel* from Latin *capitālis* (Schwarz et al. 1988:211). This also qualifies as a member of this triplet set, although it doesn’t come from one of the Old French variants that yielded competing dialectal forms. *cattle* is from the Norman French form *catel* (Stevenson and Waite 2011:225). A semantic split occurred here, according to Robertson (1954:156). Since both forms are from a source that meant ‘wealth,’ they now contain

slightly different meanings, which is why they were able to coexist. *cattle* is considered a specific kind of possession, but *chattel* is more broadly defined as any personal possession.

Similarly, *catch* and *chase* come from the same root √*kap-,* which meant 'to grasp' (Watkins 2011:38). *chase* developed from the Old French verb *chacier* and the Old French noun *chace* which was based on Latin *captāre* 'continue to take' from *capere* 'take' (Stevenson and Waite 2011:240). Robinson (1999:235) cites thirteenth-century French *chasser* as the source for *chase*. *catch* was derived from Old Northern French *cachier* which was a variant of *chacier* (Stevenson and Waite 2011:223). Robinson (1999:220) adds Latin *captiāre* 'to try to catch' as the source for the variant *cachier*. It is clear that the Norman French forms show the older segment, the initial /k-/ which is found in Latin forms, instead of the Parisian innovation to /ʧ-/.

Another phonological difference between Norman French and Parisian French is the alternation between /w-/ and /g-/, respectively:

Table 6: Possible Forms Showing Norman French /w-/ and Parisian French /g-/ Alternation

Norman French	*Parisian French*
warrant, warranty	guarantee, guaranty
ward, warden	guard, guardian
reward	regard
werre > war	guerre
wage	gage
wile	guile
wise	guise

Here, the Norman words show the original Germanic /w-/ where Central French shows an innovated /g-/ (Robertson 1954:156). The members of the doublets show separate outcomes in dialectal developments from Old French, as was seen with the previous set of doublets. Rickard

(1989:12) explains that initial /w-/ became /gw-/ and then /g-/ in French. This occurred in initial position, so we may break up the forms *reward* and *regard* into the morpheme *re-* and their respective bases (*re-ward*, *re-gard*).

The root √*wer-* 'to cover' in the o-grade form **wor-* is the source for the first doublet set (Watkins 2011:102). In Proto-Germanic the weak verb form **warōjanan* became *biwarōn* 'to protect' in Old High German (Orel 2003:450-451). This became Frankish **wār* whose derivatives mean 'protector' or 'protecting' and passed into Old Northern French while the Parisian dialect changed to /gw-/, which simplified to /g-/. *warrant* is from the Old French variants *warant* and *warantir* (Stevenson 2007:3578-3579). *warranty* came from the variant *warantie* (Stevenson 2007:3579). Their Parisian counterparts came from *garantie* from *garantir* (Stevenson and Waite 2011:632). The more common word *guarantee* is also related to these /w-/ Norman words but is from a Spanish source. Stevenson and Waite (2011:632) cite Spanish *garante*, which correspondences to French *garant*, as the seventeenth-century source for *guarantee*, and it was influenced by the French form *garantie*. These may still be considered doublets of the Norman-Parisian type, even with this intermediate Spanish influence, because Old French variants are the source for all four words.

A different root √*wer-* 'to perceive, watch out for' was the source for Norman *warder* 'to guard' (*warden* and *reward*), the Old English word *weard* (*ward*), and Old French *guarder* which became *guard* and *regard* (Watkins 2011:102). Orel (2003:447) provides the Proto-Germanic form **waraz* and the Old High German form *giwar* 'aware.' *ward* is from Old English *weard, weardian* 'to keep safe, guard,' and its phonological shape was bolstered later by the Old Northern French forms *warde* (noun) and *warder* (verb) (Stevenson and Waite 2011:1628). *warden* came from the Norman and Old Northern French form *wardein*, a variant of Old French

guarden (Stevenson and Waite 2011:1628). While *guard* may be cited from French *garder* and *garde*, *guardian* is from fifteenth-century Anglo-French *gardein* (Robinson 1999:595). Stevenson and Waite (2011:632) confirm *guard*'s etymology but disagree with *guardian*'s, stating that it is from Old French *garden*. Stevenson (2007:1172) lists both forms as the source for *guardian*, supporting the claim that these are doublets. *regard* is traced back to Old French *regarder* 'to watch' from *re-* and *garder* (the source for *guard*) (Stevenson and Waite 2011:1210). *reward* is from the Norman French *reguard* (Stevenson and Waite 2011:1233).

Modern English does not have French *guerre* in its lexicon, but it does have *guerrilla*, a Spanish diminutive of *guerra*, which is the equivalent of French *guerre* (Stevenson and Waite 2011:633). Enough Germanic terms for warfare entered French during the Old French period to form a category of Germanic loanwords within French vocabulary (Rickard 1989:11). Northern French *werre* is likely the source for Modern English's *war.* Stevenson and Waite (2011:1628) state that *werre* is an Old English word from the Norman variant of Old French *guerre* which is from a Germanic base. The root for these forms is √*wers*- 'to confuse' (Watkins 2011:103). Schwarz et al. (1988:1665) traces *war* back to Old High German *werra* which became *werre* in Old Northern French. Aside from the absence of *guerre* in English, we may still qualify these as doublets if we count *guerrilla* as a more distant related form.

Kennedy (1935) considers the last three pairs in Table 6 doublets. Indeed, *wage* is from a Norman and Old Northern French word *wagier* which became *wagen* in Middle English (Schwarz et al. 1988:1659). Both *wage* and *gage* come from the root √*wadh-* 'to pledge' (Watkins 2011:97). *gage* is from the Old French form *guage* (Schwarz et al. 1988:578). *gage* is only found today in *engage* 'pledged' from French *engager* or *en gage* 'in pledge' (Schwarz et al. 1988:470). We may consider this a doublet of the two French variants.

However, the last two pairs are less certainly doublets of this sort. In *guile, wile*, there was an intermediate stage in Old Norse. *guile* may be a borrowing from Old Norse that then entered Old French (Stevenson and Waite 2011:633). However, there was a Frankish word for 'trick' that would have yielded *guile* in English. Stevenson and Waite (2011:1651) also cite the Old Norse form *vēl* 'craft' as a possible source for *wile*. The late Old English term may have been borrowed from Norman French, which could have kept the Old Norse form in English. Robinson (1999:1624) on the other hand cites Old English *wīl* as the source. Since these members' etymologies are disputed and may not show a Norman-Parisian alternation, we cannot include them in this group of doublets. However, since *guile* is a borrowing from French, we see the French sound change to /g-/ so this may belong to a Germanic-French alternation.

Similarly, *wise* and *guise* may be cases of inherited English and borrowed Old French correspondences between /w-/ and /g-/, respectively. Stevenson and Waite (2011:634) link *guise* to Old French with a Frankish influence and state that it is related to *wise*. *wise* comes from the Old English form *wīse* (Stevenson and Waite 2011:1656). This pair's members do not contain a Norman French counterpart, so we should be hesitant to classify this as a doublet belonging to the Norman-Parisian alternation. However, like *wile, guile*, they show an alternation between French and Germanic initial segments.

Table 6a: [Revised] Doublets with Norman French /w-/ and Parisian French /g-/ Alternation

Norman French	*Parisian French*
warrant, warranty	guarantee, guaranty
ward, warden	guard, guardian
reward	regard
(werre > war)	(guerre)
wage	gage

While these doublet forms may not clearly show a distinction between different social classes, other pairings do reveal this. For example, *salon* and *saloon* are both borrowings from French, but the former has a more sophisticated meaning. They both come from the root √*sel*- in the o-grade form **sol*- (Watkins 2011:77). While *saloon* is a direct borrowing from French, *salon* was borrowed into French from Italian *salone* (Robinson 1999:1241). *saloon* was borrowed a century after *salon*, and it may have seemed less stylish or cosmopolitan than the earlier borrowing so it was allowed to exist in English (Stevenson and Waite 2011:1270).

This semantic distinction can also be found in *liquor, liqueur*. The first loanword to enter English was *liquor* in the Middle English period from Old French *lic*(*o*)*ur* from Latin *liquor* (Stevenson and Waite 2011:831). Later, in the eighteenth century, *liqueur* was borrowed from Modern French (Stevenson 2007:1613). This later borrowing has a more sophisticated meaning than its earlier counterpart, and it is also specialized in its meaning, referring to more flavorful beverages. A similar situation occurred with *hostel*, *hotel*. *hostel* was borrowed from Old French *hostel*, *hostellerie* from Latin *hospitāle*, and *hotel* is from French *hôtel* (Schwarz et al. 1988:688-689). The latter loanword is used to designate finer lodgings than the earlier one. This loss of /s/ before a /t/ in *hostel* to *hôtel* occurred in the eleventh through thirteenth centuries in French (Pope 1952:151). Another word forms a triplet with these two words: *hospital*. This word was borrowed during the period of late Latin and is from the Old French word *hospital* (Schwarz et al. 1988:688).

Finally, if we extend our scope to Modern French, we can find another instance of a doublet in English that, additionally, reveals the chronology of French phonetic segments due to re-borrowings at different periods. The Germanic form **karlaz* produced *kar*(*a*)*l* in Old High German, which became *Charles* in Old French (Watkins 2011:38). This French name was later

re-borrowed into English in its feminine form as *Charlotte*. The initial consonant, represented the same way in the orthography by <Ch>, underwent a sound change in French, and this is made clear by the repeated borrowings into English where the first instance shows [ʧ-] and the second shows [ʃ-]. Because of the doublets, we can assign *Charles* and *Charlotte* to different periods within the history of English, the former preceding the latter.

We also see this in the pair *chair, cathedral*. *cathedral* is a borrowing from medieval Latin *cathēdra* which was from Greek *kathedrā* 'seat' and contains a phonological shape faithful to the source (Schwarz et al. 1988:226). *chair* is also from this Greek source, but it passed through Latin as *cathedra* and then became *chaire* in French (Schwarz et al. 1988:235). This French borrowing predated the sound change to /ʃ-/. However, it was re-borrowed into English as *chaise* [ʧ-] in the eighteenth century (Robinson 1999:230). The two borrowings are further contrasted by the /r/ and /z/ sounds.

Latin and French Forms

The next step in our survey of Latinate forms to determine doublets will extend to phonological differences in Latin, French, and English. As they did with regional dialect variants within French, doublets in English have captured linguistic change from Latin to French. One of these instances invokes the previous phonological correspondence found in Table 5: /k-/ and /ʧ-/:

Table 7: Latin /k-/ and French /ʧ-/ Alternation

Latin	*French*
calix, calyx	chalice
camera	chamber
capital	chapter
castle	chateau
calumny	challenge

The Parisian loanwords in the previous discussion were innovated forms while the Norman ones retained the original /k-/ before /a/ found in Latin. The forms on the left in Table 7 are considered direct borrowings from Latin and do not exhibit the French sound change to /ʧ-/ before /a/. Additionally, since we are now comparing languages instead of dialects, the descendant French forms will have passed through stages within its history that altered the forms' phonological shapes enough to be, at least on the surface, not clearly recognizable as doublet forms with their Latin ancestors. The direct Latin borrowings entered English later than the French loans; we can therefore see the original forms of the French words before they underwent French sound changes.

The first pair, *calix, calyx* and *chalice* are from the root √*kal*- 'cup' (Watkins 2011:37). The Latinate forms came from Greek *kalyx* 'covering, husk' (Robinson 1999:203). As a direct borrowing from Latin, *calix* (a spelling alteration) and *calyx* do not show further changes. However, *chalice* passed through Old French into Middle English, and it shows the change to /ʧ-/ (Stevenson and Waite 2011:235). Latin *camera* 'chamber' was directly borrowed into English in the eighteenth century. We still have this sense of *camera* as a private room in the legal term *in camera*. *chamber* was an earlier borrowing from Old French *chambre* in the thirteenth century (Robinson 1999:231). In addition to the initial segment's change, an excrescent /b/ was inserted in Old French after the vowel of the second syllable of the Latin word was lost.

The final three pairs show French forms that contain a slightly longer history of change within the language. From the source **kaput*- 'head' we have *capitale* from Latin entering Old French to give way to *capital* where the final vowel of the neuter adjective already was lost in Latin (Stevenson and Waite 2011:209). *chapter* is from the same source **kaput*- 'head' but is

instead traced back to the diminutive *capitulum* in Latin, which developed in Old French to *chapitre* (Stevenson and Waite 2011:238). Stevenson (2007:384) states that *chapitre* is from *chapitle*, which contains the original /l/ that later changed to /r/. *castle* is directly from Latin *castellum*, a diminutive form of *castrum* 'fort,' and was borrowed via Norman French *castel* (Stevenson and Waite 2011:221). A word that most English speakers would recognize as French is *chateau* from Old French *chastel* borrowed in the eighteenth century (Stevenson and Waite 2011:241). *calumny* is directly from Latin *calumnia* 'false accusation' borrowed in the sixteenth century (Robinson 1999:203). *challenge* is from Old French *c*(*h*)*alengier* from Latin *calumniārī* (Stevenson 2007:379). Despite the different avenues of borrowing in these forms' histories, they may all still be considered doublet forms of Latin and French words.

Latin loanwords borrowed into English, either directly or via French, generally exhibit reduction from their original form. Due to sound changes within the language as it descended from its mother tongue, French words are typically shortened in relation to their Latin sources. The final syllables of Latin words, which included inflectional endings, were reduced or often lost in French, and intervocalic consonants were weakened and/or deleted (Denning et al. 2007:210-212). If the endings were retained, French speakers often replaced the Latin sounds with Old French phonology (Denning et al. 2007:211). Reduction of form also occurred in English when it borrowed Latin words directly (Denning et al. 2007:210).

These different avenues of borrowing yielded two types of Latin words: popular and learned. Popular or Vulgar Latin words were inherited forms in French that underwent French sound changes as they were already integrated into French at an early stage (Denning et al. 2007:212). These were the sources for the reduced forms found throughout French. Their counterparts were "learned borrowings," which were introduced into French or English by

scholars after Latin had become a dead language, and their phonological shape was very similar to Latin's (Denning et al. 2007:288). The principal reason for the survival of these was precisely because they were scholarly and differed from any popular counterparts (Denning et al. 2007:211). Consequently, we have doublets whose members split between popular French and learned Latin, seen in Table 7 above and in the following:

Table 8: Possible Latinate Triplets

Latin	*Old French*	*Modern French*
captain	chief	chef
candle	chandler	chandelier
cant	chant	chantey

Denning et al. (2007:11) list these as triplet forms that exhibit the phonological changes from Latin to Old French to Modern French (/k/ to /ʧ/, /p/ to /f/, then /ʧ/ to /ʃ/). However, upon further examination, we can see that this list is incomplete in a few ways. First, *captain* comes from Late Latin *capitāneus* 'chief' (a scholarly borrowing) which became *capitain* in Old French and supplanted the earlier form *chevataigne* 'chieftain' (Stevenson and Waite 2011:209). Another form from Old French, *chevetaine*, is cited as the descendant from late Latin *capitāneus* and the source for *chieftain*, which was respelled on the basis of *chief* (Stevenson and Waite 2011:246). Since *captain* and *chieftain* are from the same Latin source word, *capitāneus*, these are closely related doublets, and *chieftain* should be included among this first set of forms. We must also consider the ordering of *chief* and *chef*. *chef* was a late borrowing, in the early nineteenth century, and exhibits the later French change from /ʧ-/ to /ʃ-/ (Stevenson 2007:391). This change occurred in the later part of the Old French period (Pope 1952:93). *chief* was from

the Middle English period and it descended from Old French *chief*, *chef* when the initial consonant was still pronounced [ʧ-] and the spelling varied between the two forms (Stevenson and Waite 2011:246). The later borrowing, *chef*, has a more cultured connotation to it rather than its counterpart, *chief*.

The Latin word *candēla* from the verb *candēre* ‘to be white, glisten’ was borrowed directly into Old English as *candel* (Stevenson and Waite 2011:204). A later direct borrowing, in the nineteenth century, gave English *candelabrum, candelabra*, which were derivatives of *candēla* so they are excluded from the doublet group (Stevenson and Waite 2011:204). The Vulgar Latin form **candēlārius* came from *candēla* and passed into fourteenth-century French as *chandelier*, which became *chandler* (Robinson 1999:232). Stevenson (2007:381) cites the Norman French form *chaundeler* as the origin of *chandler*. Stevenson and Waite (2011:236) state that *chandelle* was the source for Old French *chandelier* which was the same source word for *chandler* and for the later, eighteenth-century borrowing *chandelier*. We see in these French borrowings reduced forms whose bases have been preserved but have undergone the change from /k-/ to /ʧ-/ and then to /ʃ-/.

In the final posited triplet, *cant* is not certainly but likely a direct borrowing from Latin *cantāre* ‘to sing’ (Stevenson and Waite 2011:206). Robinson (1999:207) dates it as a sixteenth-century borrowing whose musical meaning is now obsolete and has changed to denote slang or derogatory talk. In the fourteenth century, Old French *chanter* was borrowed and became *chant* in English (Robinson 1999:233). A *chanty*, or a *shanty*, was borrowed later, in the nineteenth century, from *chanter* (Robinson 1999:1289). With some modifications, we can restate the sets of doublets, expanding two groups into quadruplets:

Table 8a: [Revised] Latinate Triplets/Quadruplets

Direct Latin Borrowing	*Old French Borrowing*	*Modern French Borrowing*
captain, chieftain	chief	chef
candle	chandler	chandelier
cant	chant	chantey (chanty), shanty

Re-borrowings of French and Latin forms occurred in additional instances other than the preceding three doublets. Robertson (1954:156) also cites Modern French *corps* as a re-borrowing of Old French *corpse*, which is considered a doublet pair. This should be expanded to a triplet that includes the direct borrowing *corpus* from Latin in the Middle English era (Stevenson and Waite 2011:321). Both *corps* and *corpse* are derived from Latin *corpus* 'body' (Watkins 2011:48). *corpse* was borrowed first, in the fourteenth century (Robinson 1999:305). The later borrowing, *corps*, entered English through French in the sixteenth century (Stevenson and Waite 2011:320). Robinson (1999:305) dates *corps* even later, in the eighteenth century.

This change in phonological form is also apparent in the quadruplet set: *gentile, genteel, gentle, jaunty*. The last three forms are borrowings from French, but *gentile* is a direct borrowing from Latin. They all come from the root √*genə-* in the zero-grade form **gn̥ə-ti* which, from the oblique stem *gent-*, became *gentīlis* in Latin (Watkins 2011:27). Oblique stems are often the source for borrowed words from Latin and Greek. The oldest borrowing in English was *gentile* from Latin in the Middle English period (Stevenson and Waite 2011:594). The previous triplet and quadruplet examples exhibit reduction in form if the borrowing was from French and a preserved Latin form in the direct Latin loans. This can be seen in the following sets as well:

Table 9: Earlier and Later Latin Borrowings Examples

Latin	*Middle English*	*Later English Period*
armātūra	armor	armature
speciēs	spice	species
extrāneus	strange	extraneous

Stevenson and Waite (2011:71) trace both *armor* and *armature* to the Latin form, but while *armor* is from Old French *armure*, *armature* is from an unspecified stage of French. This French influence must have been very slight because the original Latin shape is still preserved in English. *armature* is from the late Middle English period (Stevenson 2007:119). Latin *specere* 'to see' is cited as the source for the Latin word *speciēs* 'kind' (Robinson 1999:1348). *spice* is traced back to *speciēs* which passed through and was shortened in Old French to *espice* (Stevenson and Waite 2011:1389). *species* is also a late Middle English borrowing (Stevenson 2007:2944). Finally, the later borrowing of Latin *extrāneus* with the French suffix *–ous* in the seventeenth century yielded *extraneous* (Stevenson and Waite 2011:505). *extraneous* was borrowed during the Modern English period (Stevenson 2007:909). *strange* is a shortened form of Old French *estrange* from Latin *extrāneus* borrowed during the middle English period (Stevenson and Waite 2011:1425). In all instances, the later borrowing of a direct Latin form has preserved the Latin structure while those popular borrowings from French have undergone French sound changes.

Reduced forms are also the result of intervocalic consonantal weakening in French, as can be seen in the following doublets:

Table 10: French Intervocalic Consonant Lenition

Latin	*French*
regal	royal
legal	loyal

The direct borrowings from Latin retain the intervocalic /g/, which the French forms have lost. Latin *rēx* 'king' and its derived form *rēgālis* were the sources for both *regal* and *royal* (Robinson 1999:1173 and 1225). Likewise, Latin *lēx* from which came *lēgālis* is the origin of *legal* and *loyal* (Watkins 2011:48). *royal* comes from Old French *roial*, which exhibits the consonantal deletion (Stevenson and Waite 2011:1255). Old French *loial* was the source for *loyal* (Stevenson and Waite 2011:846). *regal*, directly from Latin in the fourteenth century, became *regal*, which shows reduction in the final syllable in English (Robinson 1999:1172). Stevenson and Waite (2011:813) state that *legal* passed through French from Latin before entering Middle English, in which case French did not alter the form. Robinson (1999:779) dates the borrowing later, into the Early Modern English period, and does not consider this as a French loanword but rather a direct Latin borrowing.

We can also see the preserved and reduced Latin forms in a set of triplets like *mint*, *money*, and *monetary*, whose source's meaning is uncertain. It may be that the words originated from the root √*mon-* '(nape of the) neck' (Watkins 2011:58). If this is the case, then the original source is the alias for Juno, Latin "Monēta," which describes the goddess as wearing a necklace, and it was in her temple where money was minted (Watkins 2011:58). Stevenson and Waite (2011:923) support this idea. An alternative interpretation is reading "Monēta" as 'the admonisher,' which would describe the goddess's role in Roman culture. *monetary* was borrowed from Latin *monētārius* from *monēta* 'money, mint' from the nineteenth century as a

learned borrowing (Robinson 1999:883). *mint* was also a direct borrowing from Latin, reflected in the Old English word *mynet* ‘coin’ which was borrowed from Latin *monēta* (Stevenson and Waite 2011:912). Robinson (1999:872) cites Anglo-Saxon as the version of English that adopted *mint*. *money* came from Old French *moneie* from *monēta* and was borrowed into Middle English (Stevenson and Waite 2011:923). In this triplet, we have a direct Latin loan that entered Modern English, an earlier borrowing from Latin during the Pre-Old English era when the Germanic tribes were still on the continent, and a borrowing through French. Görlach (1997:152) argues that these later borrowings, as in other cases of re-borrowings, were permitted because speakers did not recognize the similarity between them and the already existing forms. They also differed in meaning, which was another reason for their admittance.

Finally, a few other individual cases that have been cited as doublets will be examined. First, Millward (1989:244) identifies *envious* and *invidious* as doublets that entered English during earlier and later historical periods, respectively. However, neither Stevenson and Waite (2011) nor Robinson (1999) provide an etymology for *envious*. They do, on the other hand, cite *invidiōsus* from *invidia* ‘envy’ as a Latin borrowing into Modern English (Stevenson and Waite 2011:747, Robinson 1999:715). *envy* is also from this source word and has undergone reduction from *invidia*, as is clear from its form, and is from Old French *envie* (Stevenson and Waite 2011:478). It goes back to the Latin form *vidēre* ‘to see’ with the prefix *in-* ‘into’ meaning ‘to look at with ill will’ (Stevenson and Waite 2011:478). We may, therefore, consider *envy* and *invidious* doublets. Stevenson (2011:845) lists *envious* as an Anglo-Norman form that is equivalent to Old French *envieus* from *envie*. Since it’s possible that all three forms came from the source *invidia*, we may consider them doublets, even though *envious* does not have a full etymological description.

paper and *papyrus* form a Norman French-Latin doublet. The Norman word *papir* is from the Latin source *papyrus* which came from Greek *papuros*. (Stevenson and Waite 2011:1036-1037). Greek *papyros* was borrowed in the fourteenth century as well (Robinson 1999:998).

Görlach (1997:152) claims *inch* and *ounce* are doublets from the Latin source *ūncia*. Both Stevenson and Waite (2011) and Robinson (1999) support this. *ounce* is from Old French *unce* (Stevenson and Waite 2011:719). *inch* is from Old English *ynce* from the same Latin source *ūncia* (Robinson 1999:683). Since these two forms are originally from the same source, they are doublets where one form is native and the other passed through French.

A final doublet to consider is *pipe* and *fife* which allegedly is a French and popular Latin doublet (Robertson 1954:148). *pipe* is from Latin *pīpāre* 'to chirp, peep' and passed through a stage in Germanic to become *pīpian* 'to play a pipe' which then became *pīpe* in Old English (Stevenson and Waite 2011:1090). *fife*, however, is from either French *fifre* from Swiss German *Pfifer* 'piper' or from German *Pfeife* (Stevenson and Waite 2011:528). Since one member of the pair's etymologies is not certain, and it's possible that there was no French influence, we cannot confidently call this a French-Latin doublet. They may be either that type of doublet or a Latin-Swiss German one.

Modern Romance languages have also lent cognate forms that have created doublets. For example, Italian *portico* is related to *porch* from Old French *porche*, and both are from Latin *porticus* (Stevenson and Waite 2011:1117 and 1119). It's likely that future Latinate borrowings will also result in doublet forms, but they will need to have a significant differentiation in form or meaning, like these past borrowings, in order to remain in English.

CHAPTER 4

DOUBLETS AND TRIPLETS IN GREEK, LATIN, AND ENGLISH

Greek loanwords entered English mainly through Latin, since Greek culture was revered by the Romans (Denning et al. 2007:33). While Latin surpasses Greek in the number of loanwords in English, both of these classical languages have been the principal sources for scholarly and scientific terminology in English, and Greek cognates tend to be associated with learning even more so than Latin. Greek and Latin morphology has even become productive alongside native English elements. The results we see are many instances of triplets as well as doublets.

For example, *monastery* and *minster* are from the root √*men-* 'small, isolated' (Watkins 2011:56). The former is from Latin *monastērium* from Greek *monastērion* which came from the Greek form *monazein* 'live alone,' a derivative of *monos* 'alone' in the late Middle English period (Stevenson 2007:1820). This borrowing retains a phonological shape faithful to the source. *minster* is from Old English *mynster* from Latin *monastērium* from the Greek source (Stevenson and Waite 2011:911). As we saw in the discussion on Latin, English has shown a tendency to reduce Latin forms, which we can see in *minster*, but the later borrowing closely reflects the original phonological shape.

Following other sound changes, such as Latin vowel weakening in medial syllables, Latin and Greek cognate forms differed enough to be retained as doublets in English. For example, Greek *onom-* and its two allomorphs *onomat-* and *onym-* have served as the bases for words such as *onomatology* and *synonym* (Denning et al. 2007:88). *onomatology* is from the oblique stem

onomat- ‘name’ with a combining form *onomato-* (Stevenson 2007:2004). *synonym* is a borrowing from Latin *synonymum* from Greek *sunōnumon* (Stevenson 2007:3152). The Latin weakened stem form from *nomen*, from the PIE noun **n{ō/ŏ}-mn̥* ‘name,’ was *nomin-* which is the base for the Latin words *nominal* and *nominate* (Watkins 2011:61). Here the Greek words, specifically *onomatology*, designate an area of scholarship while the Latin forms from the same root are employed for less-scientific usages.

Other doublets are formed by earlier and later Greek loanwords (Robertson 1954:156). They may have been borrowed directly from Greek or through another language, as we saw with Latin:

Table 11: Earlier and Later Greek Borrowings

Greek Source	*Earlier*	*Later*
balsamon	balsam	balm
blasphēm(e)ein	blame	blaspheme
adamās/adamant-	(adamant)	(diamond)

In the first pair, the Latin derivative from Greek *balsamon* was *balsamum*, which served as the basis for Old French *basme*, the source for Middle English *balm*; the Latin form was also the origin of Old English *balsam* (Stevenson and Waite 2011:102-103). Contrary to what Robertson (1954) claims, the earlier borrowing shows a less reduced form than the later one. Robinson (1999:140-141) orders *blaspheme* later than *blame*. *blame* is from Greek *blasphēmeein* which became *blasmer* in Old French and *blâmer* in French (Schwarz et al. 1988:147). *blaspheme* entered Middle English through Old French from Latin *blasphemare* which was borrowed from Greek *blasphēmein* from *blasphēmos* (Stevenson and Waite 2011:143).

The Greek source *adamās*/*adamant-* for *diamond* is given by Robinson (1999:369) but not by Stevenson (2007) nor by Stevenson and Waite (2011). Instead, the latter two list medieval Latin *diamās, diamant-*, variants of Latin *adamāns*, as the source for Old French *diamant* (Stevenson and Waite 2011:396). The initial *a-* had been lost before passing into Old French. The initial syllable was changed in medieval Latin to reflect Greek *dia-* 'through, across' (Robinson 1999:368). The older borrowing, *adamant*, is cited as having the Greek form as its source via Latin and later Old French *adamaunt-* (Stevenson and Waite 2011:14). Not every older borrowing reflects the Greek source better than the more recent loan in Table 11, despite what Robertson (1954) claims.

In addition, Greek and Latin morphemes have remained in English, even alongside the English derivative. As a result we see triplets, such as the following forms:

Table 12: Triplets: Greek, Latin, English

Greek	*Latin*	*English*
odont- (orthodontist)	dent- (dentist)	tooth
pha- (aphasia)	fa- (fable)	ban- (banal)
patēr (patriot)	pater (paternal)	father
a-/an- (agnostic, anonymous)	in- (inaccurate)	un- (unfortunate)
di- (dioxide)	bi- (bicycle)	twi- (twice)
eno-/oen- [(o)enophile]	vine	wine

The sources for these forms go back to their respective Proto-Indo-European roots. For example, **dent-* 'tooth' is the source for the first triplet set. As is clear from the competing Greek and Latin forms *orthodontist* and *dentist,* Denning et al. (2007:88-89) state that English speakers designated Greek forms for occupational or medical contexts while Latin forms served as the

bases for common things. The root √*bhā*- 'to speak' is the source for the second set of triplets (Watkins 2011:7). Again, Greek and Latin differ semantically in the forms *aphasia* and *fable*. For the next set of triplets, **pəter*- produced the fatherly terms in all three languages (Watkins 2011:69). The PIE compositional negative prefix **n̥* became *un*- in English, *in*- in Latin, and *a-/an-* in Greek (Watkins 2011:59). The adverbial form **dwis*, which is the source for *di-, bi-,* and *twi*-, was from a compositional form of **dwo*- 'two' (Watkins 2011:22). The final triplet comes from the source **wīn-o-* with the Greek form from **woino*- (Watkins 2011:104).

Table 13: Greek Sound Changes: /h-/ from PIE */s-/

hēmi- (hemisphere)	sēmi- (semicircle)	sām- (sandblind)
hexa- (hexagon)	sex- (semester)	six
hepta- (heptagon)	septa- (September)	seven
herp- (herpes)	serp- (serpent)	

We also see the Greek development of /h-/ from PIE */s-/ in the remaining forms. **sēmi*- 'half' was the basis for the prefix in all three languages. The English form has been folk etymologized from the original 'half-blind' form with *sām* to *sandblind*. That is, speakers remade the form to sound like a more familiar one (Anttila 1989:92). **s*(*w*)*eks* is the source for the forms meaning 'six' (Watkins 2011:91). **septm̥* is the source for 'seven' (Watkins 2011:78). Finally, **serp*- 'to crawl, creep' is the source for the last doublet.

Greek and Latin were also responsible for doublets that exceeded two or three members. Our definition of doublets allows us to include these related forms. If we were to extend what we consider doublets even further to include differently derived or compound roots, we would have the following quintuplet:

Table 14: Five Doublet Members from √g^{w}*eiə*- ‘to live’

PIE Source	*Greek*	*Latin*	*English*
*g^{w}*iə-wo*		vivid	quick
*g^{w}*iə-o*	bio(logy)		
*g^{w}*yō-*	zoo(logy)		
**əyu-*g^{w}*iə-es-*	hygiene		

The shared source is the root √g^{w}*eiə*- ‘to live’ (Watkins 2011:34). *vivid* and *quick* come from the suffixed zero-grade form of the root (Watkins 2011:34). *vivid* was borrowed into Modern English from Latin *vīvidus* ‘lively’ from *vīvere* ‘to live’ (Stevenson and Waite 2011:1618). *quick* is from Old English *cwic* ‘alive’ (Robinson 1999:1137). *bio-* is from Greek *bios* ‘life,’ and *biology* was borrowed in the nineteenth century (Robinson 1999:133-134). *zoo-* is from Greek *zōion* ‘animal,’ and *zoology* is a seventeeth-century borrowing (Robinson 1999:1652). *hygiene* is from Greek *hygieia* ‘health’ which came from two roots (Robinson 1999:661). The zero-grade form **əyu-* from the root √h_2*eyw-* ‘long life’ combined with the zero-grade of the root √g^{w}*eiə*- (Watkins 2011:2).

Another example of many outcomes in English from the same source is the Greek form *diskos* which passed into Latin as *discus* and served as the source for the following forms:

Table 15: Cognate Members from Greek *diskos*

Latin	*French*	*French*	*Old English*	*Middle English*
discus	dais	disk	dish	desk

Latin borrowed its form directly from Greek *diskos*, and the other forms were borrowed from the Latin source (Stevenson and Waite 2011:410). The more recent French loanword is *disk*

in the seventeenth century (Stevenson and Waite 2011:408). Old English *disc*, borrowed by the Anglo-Saxons on the continent, was the source for *dish* (Stevenson and Waite 2011:411). Only *desk* stands apart as the form that contains an intermediate stage in Italian (*desco*) or Provençal (*desca*) between the Latin form *discus* and the medieval Latin form *desca* (Stevenson and Waite 2011:388). The other forms are more directly related as doublet members.

Proto-Indo-European roots served as sources for doublets, triplets, and groups of more than two or three members whose outcomes can be found in Modern English. Greek and Latin loanwords were both borrowed directly into the language at certain points in its history as well as borrowed indirectly through intermediate languages. These two languages are largely responsible for augmenting English's vocabulary not only with full lexical items but also with bound morphemes. This concludes our overview of doublets in English, and we now move on to forms that should be excluded from this phenomenon by our definition.

CHAPTER 5

EXCLUDED FORMS

By including etymology in our examination of doublets, it becomes clear that knowledge of the history of forms is necessary in determining whether they may be considered doublets or not. This should prevent the inclusion of synchronic cases that might be considered doublets but are actually not, like the suppletive forms *be* and *was/were* that make up the 'be' paradigm. Other excluded forms have resulted from processes like ablaut or allomorphy where systematic alternation within the language, rather than borrowing, has produced varying forms from a single source. Analogized forms are also omitted since analogy has altered their shapes in favor of uniformity within paradigms. This means we have old and new forms coexisting, suggesting a doublet occurrence, but analogy has stepped in to remake a form on the basis of a regular pattern. In general, our definition of doublets excludes forms that show systematic alternations or whose histories do not contain a single original source.

Our definition should leave out instances where various forms have been derived from the same base. This means we will exclude word families. These are examples of regular derivations and not cognate forms. For example, the outcomes of Old English /ā/ are numerous. Thus, if we begin with the Proto-Germanic base **haila-*, the outcome of this in English is *whole* from Old English *hāl* (Watkins 2011:37). This forms a doublet with *hale* (from a Northern dialect) as well as with *hail*, which is from Old Norse *heill* (Chambers 1960:278). Since the native word and the borrowed words come from the same source **haila-* and exist in English at this time, they may be considered doublets. However, the other native outcomes in English, such

as *heal*, *health*, *holy*, and *hallow* should not be considered doublets because there existed a grammatical or morphophonemic alternation within English that yielded them. This alternation was the Germanic phenomenon of **umlaut**, where the segments *i* or *j* conditioned preceding vowels in the same words to become fronted. Two main sources for umlaut were the abstract noun-forming suffix *–iþ*, which produced *health*, and the denominal suffix *–jan* (*heal*). The *i* in *–iþ* and the *j* in *–jan* triggered umlaut, resulting in *ā* becoming *ǣ*, followed by laxing of the vowel to *ɛ* in *health* and the Great Vowel Shift application changing *ē* to *i* in *heal*. At a later time, *i* and *j* were lost, eliminating the conditioning environments for the fronted vowel. As a result, the phonemes split, and the vowel *ǣ* became a distinct phoneme. Earlier, *ǣ* could be considered an allophone of *ā* because it alternated with *ā* in different environments. However, from a synchronic point of view, this alternation has become obscured and speakers regard *whole* as a separate, unrelated form from *health* and *heal*. Speakers have maintained the morphophonemic unity of *heal* and *health* in the orthography, so it's possible they recognize the relationship between these forms. From a historical perspective, it's tempting to call these doublets, since they arose from the same source, but due to the morphophonemic alternation, we should not consider them as such. The same can be said for related sets like *doom, deem* and *foul, filth, defile*.

The causative derivation is another example of what should be excluded from the definition of "doublets" on the basis of its historical derivation. For example, **p{ō/ŏ}l-* produced *fall* and *fell*, which in Proto-Germanic were **fallan* and **falljan* (with the causative suffix *–jan* attached), respectively (Watkins 2011:71). The causative verb *fell* underwent umlaut due to the *–jan* suffix. Unlike doublets, these forms are historically related based on grammatical processes.

Suppletive Forms

Suppletive forms are not related historically, and their phonological shapes are radically different from each other. A lexeme's paradigm contains suppletive forms if the word-forms are historically from two or more roots (Strang 1970:310). In English, suppletive forms occur frequently, such as *good* and *better*, and therefore avoid being remade on the basis of a regular pattern. Another example of a suppletive pairing is *be* and *were/was*. The present conjugation is from *bēon*, which roughly translates to 'exist' (Strang 1970:310). The past-tense stem, *wesan*, meant originally "dwell," and its paradigm was reduced in the Northern dialects to *was* and *were* in the Middle English period (Strang 1970: 310). *bēon* lost its sense of 'becoming' and paired up with *wesan* to complete the present-day 'to be' paradigm. Since these two stems are unrelated historically, we cannot call their current forms doublets. Also, Strang (1970:310) claims that the present-tense word-forms within the *be* paradigm (*am*, *is*, *are*) are doublets, but they fall under conjugation. *is* and *am* are from the same source, but *are* is not cognate with them. Watkins (2011:24-25) notes that Old English *aron* (a plural present form of *bēon* in Northern dialects) is from √*h*$_3$*er*- 'to move, set in motion' whereas *is* and *am* are from the inflected forms of √*es*- 'to be.'

Allomorphy

In the cases of phonological or grammatical allomorphy, it is difficult to determine which pairs constitute doublets. This decision is further complicated by the fact that English borrowed both Latin and Latinate words as well as morphemes. Denning et al. (2007:88) argue that there must be a clear distinction between allomorphy and doublets. For example, English shows French and Latin allomorphy in words such as *angle* and *angular* where the morph –*le* is French and the morph –*ul*- is Latin (Denning et al. 2007:87). If we consider the French morph as an

alternating form of the Latin one, this would constitute allomorphy within English, and indeed, Denning et al. (2007:87) do classify it as such. However, this might take allomorphy too far, so in order to clarify, Denning et al. (2007:88) state, "At some point we need to stop describing these alternations as allomorphy and instead describe them as doublets." They modify their earlier definition of "doublets" by adding that there should be no participation "in any systematic alternations" (Denning et al. 2007:88). This would exclude allomorphic forms consisting of the same element borrowed once from Latin and another time from French where it underwent changes in the daughter language.

Denning et al. (2007:87) provide *faculty, facultative* as an example to illustrate that doublets do not alternate systematically while allomorphy does. They argue that suffixes of French origin typically occur at the end of English words while suffixes from Latin do not. For example, the Old French morpheme *–té* alternates with the Latin morpheme *–tāt-*, which Denning et al. (2007:87) claim is the source for *–té*. Indeed, Stevenson (2007:917) traces both *faculty* and *facultative* to the French form *faculté* which is from Latin *facultās*. Stevenson and Waite (2011:510) support this. The French morpheme *–ty* is traced back to Latin *–tāt-*, which Denning et al. cite (Stevenson 2007:3391). *–ty* is an abstract-noun forming suffix, but the function of *–tāt* is not certain. Since these two forms do seem to have a derivational relationship, even though a semantic one is not as clear, we may still use this as an example of an alternating form in English. However, we do not see this alternation in other pairs (*novelty, *noveltative* and *penalty, *penaltative*) so it does not appear to be productive in English. This may be a unique case.

The pair *faculty, facultative* shows the allomorphic variation between the two suffixes; when the suffix occurs at the end of the word, it is in the French form (*faculty*), but when it does

not occur at the end, it is in its Latin form (*facultative*). Another example to support this claim is *generous, generosity*. The forms are traced back to Latin *generositas* from *generōsus* (Stevenson 2007:1090). The French suffix is from Latin *–ōsus* (Stevenson and Waite 2011:1014). The Latin form's etymology is not provided by either Stevenson (2007) nor Stevenson and Waite (2011). Unlike *faculty, facultative*, we do have other forms showing this alternation: *pompous, pomposity* and *monstrous*, *monstrosity*. This suggests that the pattern is productive with these alternating suffixes, and we should therefore exclude them from our list of doublets. They alternate based on position within the word, which is predictable to a certain degree, so it is systematic. Doublets, therefore, must involve some form of borrowing but show no systematic alternation.

We must classify varying forms like *–ous* and *–os-* as allomorphic alternations. This includes extended allomorphs, such as *nec, necr* and *noc, nox* as well. Other examples of these allomorphic suffixes are the following:

Table 16: Latin and French Allomorphic Suffixes

Latin	*French*
-ul-	-le
-il-	-le
-os-	-ous
-ent-i-	-ence
-ant-i-	-ance
-fic-	-fy

Ablaut

Since our definition specifies cognate forms that do not alternate systematically, we will also exclude instances of ablaut from doublet forms. As stated earlier, ablaut is a grammatical

process whereby the root vowel alternates to fulfill a grammatical function, as in *sing*, *sang*, *sung*. The vowel grades change along the pattern of e-grade (*sing*), o-grade (*sang*), or zero-grade (*sung*). While it's true that all three are from the same source √*seng*^{w}*h-*, their varying forms are due to this grammatical process and are therefore not included in the phenomenon of doublets (Watkins 2011:78). We can see ablaut differentiate verb transitivity as well in such verbs as *sit* and *set*, which are both from the root √*sed-* 'sit;' the intransitive verb is from the e-grade and the transitive one is from the o-grade (Watkins 2011:76).

Analogy

Some scholars have considered intermediate stages during processes of phonological change to be doublets. According to Hock (1991:168-169), doublets are cases where old and new, innovated forms coexist and are part of the transition in analogical change. Typically, analogy will erase an older form and replace it with a new one. But sometimes the first form survives, and if it does it is generally specialized in meaning (Hock 1991:169). Hock and Joseph (1996:236) offer the following as examples:

Table 17: Older and Innovated Forms in English

Old	*New*
brethren	brothers
elder	older
orient	orientate

Anttila (1989) offers an alternative explanation for these coexisting forms by way of analogy. For example, *brethren* and *brothers* are nearly synonymous, as they are both the plural form of *brother*; *brethren* is the original plural form. However, by the process of analogy the

plural was remade following the regular plural pattern with the morpheme /-z/, which orthographically is <-s> (Anttila 1989:90). As a result, *brethren*'s meaning was specialized for certain contexts, such as within religious groups.

Hock and Joseph (1996:236) add that there is a tendency for speakers to minimize their lexicon in order to make use of fewer words for more purposes. In this way, old forms may survive if they are not considered synonyms of an already existing word. However, when old and innovated forms do coexist, we should not confuse their semantic differentiation with the phenomenon of doublets.

CHAPTER 6

CONCLUSION

In this study of English doublets, our definition was able to accommodate several different types of phenomena. At times the source for doublets were word-forms (e.g. Latin *armātūra* yielded *armor* and *armature*) while in other cases the source was a root that had been suffixed differently in two instances (e.g. *score* from **skur-,* where the suffix is uncertain, and *shore* from **skṛ-ā-*). While specifying in our definition that the source must be a word would reflect the importance of borrowing in this phenomenon, it would exclude other related forms that could qualify as doublets. However, our definition does need a modification: in all of the examples in this thesis, doublets contained at least one borrowed word-form. Therefore, our definition should be altered to say that among the related varying forms, at least one must be a borrowed cognate.

Members of a doublet may be borrowed from a single language, either once or through multiple borrowings, or from more than one language. They may be foreign cognates or pairings of both native and foreign words. In English, native words coexist with forms from North Germanic. Regional dialect variants in French form doublets within English. Repeated borrowings from Latin or Greek are the sources for English doublets as well. Doublets may capture sound changes within a foreign language, as we saw in the case of French /ʧ-/ to /ʃ-/. They may also be grouped according to sound changes that have happened in one or more language. While the phonological correspondences between languages may seem to be systematic because they occur in so many pairings (such as North Germanic /sk-/ and English

/ʃ-/), the reason for their alternations is that English has borrowed heavily from those foreign sources; there is no grammatical rule causing these alternations (Anttila 1989:165). In all instances of doublets, the cognate forms must differ enough in phonological shape and semantic meaning in order to successfully form a doublet within English.

By recognizing "varying forms" as "cognates" from loanwords, we are able to distinguish doublets from forms resulting from other phenomena, such as ablaut, analogy, and allomorphy, that do show systematic alternations. This modified definition excludes these language-internal processes in addition to derivational variants. In the cases where we saw doublet forms within English, such as *kirk*, *church* or *whole*, *hale*, there may be a dialectal borrowing (*kirk* and *hale* are from northern dialects). However, *wake* and *watch* are cited to be from different verbs in Old English, and this would omit them from our definition of doublets, even though they come from the same source root. They should instead be considered derivational variants from a base form. It is therefore necessary to know the forms' etymologies to verify that they are in fact related and that one is a borrowed cognate.

The level at which forms are determined to be related may seem arbitrary, but designating a single stage in a language's history would exclude too many related forms that should be considered doublets. For example, if we only considered attested word-forms as sources for doublets, we would omit forms that have an earlier pre-historic relationship. While it may be unsatisfactory not to have a single stage from which to trace doublets, it's necessary to leave that criterion of our definition open in order to account for as many qualifying instances as possible.

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APPENDIX A

NORTH GERMANIC ETYMOLOGICAL TABLES

Table 18: Summary of North Germanic /sk-/ and English /ʃ-/

North Germanic	English	Source
skirt	shirt	√(*s*)*kerd*- 'to cut' (**skerd- ; *skṛd-o-*) > **skurtaz-* > ON *skyrta* , OE *sċyrte*
scot	shot	√*skeud*- 'to throw' > **skutaz-* > ON *skot* / OFr *escot* , OE *sċeot*
scabby	shabby	√(*s*)*kep*- 'to cut' > **skabb-* > ON *skabb* (L *scabiēs influence*) , OE *sċeabb*
scatter	shatter	√*sked*- 'to split' (**skod*) > **skat-* > ?
scale	shale	√(*s*)*kel*- 'to cut' > **skalō* > ON *skál* > OFr *escale* , OE *sċealu* or Gr *Schale*

Table 19: Summary of North Germanic /g-/ and English /j-/

North Germanic	English	Source
garth	yard	√*gher*- 'to grasp, enclose' > **gardaz* > ON *garðr* , OE *ġeard*

Table 20: Summary of North Germanic /k-/ and English /ʧ-/

North Germanic	English	Source
kirk	church	Gk *kuriakon* > ON *kirkja* > ME kirke, OE *ċiriċe*
?kist	chest	Gk *kistē* > L *cista* > ON *kista or* Welsh *cist* [k-] or [s-]

Table 21: Summary of North Germanic /ei/ and English /ou/

North Germanic	English	Source
hail	whole, hale (northern dialect)	√*kailo*- 'whole' > **haila* > ON *heill* , OE *hāl*
nay	no	√*aiw*- 'long life' > **aiwi*- > ON *ei* , OE *ā* 'ever' + √*ne* 'not' > ON *ne* + *ei* , OE *ne* + *ā*

APPENDIX B

FRENCH ETYMOLOGICAL TABLES

Table 22: Summary of Norman French /k-/ and Parisian French /ʧ-/

Norman French	Parisian French	Source
cattle	chattel	**kaput-* > L *caput* > L *capitāle* > Med. (late) Lat. *cap*(*i*)*tāle* > OFr *chatel* , *catel*
catch	chase	√*kap-* 'to grasp' > Lat. *captāre* 'continue to chase' > OFr *chace /chacier* > *L. captiāre* 'to try to catch'> *cachier*

Table 23: Summary of Norman French /w-/ and Parisian French /g-/

Norman French	Parisian French	Source
warrant		√*wer-* 'to cover' > Fk **wār* >OFr *warant, warantir*
warranty	guaranty	√*wer-* 'to cover' > Fk **wār* > OFr *warantie* > OFr *garantir* > *garantie*
	guarantee	√*wer-* 'to cover' > Fk **wār* > Sp *garante*
ward	guard	√*wer-* 'to perceive' > OE *weard* (NFr *warde, warder*) > *garder*, *garde*
warden	guardian	√*wer-* 'to perceive' > NFr *wardein* > *guardein* or *garden*
reward	regard	√*wer-* 'to perceive' > OFr *regarder* / *rewarder*
war	(guerre)	√*wers-* 'to confuse' > OHG *werra* > ONFr *were* , > Sp *guerra*
wage	gage	√*wadh-* 'to pledge' > OFr *gage* , ONFr *wagier*

APPENDIX C

LATIN AND FRENCH ETYMOLOGICAL TABLES

Table 24: Summary of Latin /k-/ and French /ʧ-/

Latin	French	Source
calix, calyx	chalice	√*kal*- ‘cup’ > Grk *kalyx* ‘covering, husk’
capital	chapter	**kaput*- > L *capitale* > OFr *capital* **kaput*- > L *capitulum* > OFr *chapitre*
camera	chamber	L *camera* > OFr *chambre*
calumny	challenge	L *calumniārī* > OFr *c*(*h*)*alengier*

Table 25: Summary of Triplets in Latin and French

Latin [k-]	Old French [ʧ-]	Modern French [ʃ-]
captain, chieftain < L *capitāneus*	chief	chef
candle	chandler	chandelier
cant	chant	chantey (chanty), shanty

APPENDIX D

GREEK, LATIN, AND ENGLISH ETYMOLOGICAL TABLES

Table 26: Greek and Latin Doublet Example

Greek	Latin
monastery < L *monastērium* < Grk. *monastērion*	minster < OE *mynster* < L *monastērium* < Grk. *monastērion*

Table 27: Earlier and Later Greek Borrowings

Earlier	Later
blame < Fr *blâmer* < OFr *blasmer* < Grk *blasphēmeein*	blaspheme < Grk *blasphēmiā*

Table 28: Summary of Triplets (Greek, Latin, English)

Greek	Latin	English
odont- (orthodontist)	dent- (dentist)	tooth
pha- (aphasia)	fa- (fable)	ban- (banal)
patēr (patriot)	pater (paternal)	father
a-/an- (agnostic, anonymous)	in- (inaccurate)	un- (unfortunate)
di- (dioxide)	bi- (bicycle)	twi- (twice)
eno-/oen- [(o)enophile]	vine	wine
hēmi- (hemisphere)	sēmi- (semicircle)	sām- (sandblind)
hexa- (hexagon)	sex- (semester)	six
hepta- (heptagon)	septa- (September)	seven
herp- (herpes)	serp- (serpent)	

Table 29: Quintuplet (Possible Doublet)

PIE Source	*Greek*	*Latin*	*English*
$*g^w$iə-wo		vivid	quick
$*g^w$iə-o	bio(logy)		
$*g^w$yō-	zoo(logy)		
$*$əyu-g^wiə-es-	hygiene		