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Mini-Course in Demystifying American Spelling: An Historical And Comparative Perspective

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MINI-COURSE IN DE-MYSTIFYING AMERICAN SPELLING:
AN HISTORICAL AND COMPARATIVE PERSPECTIVE

by

Ingrid Prouty

Submitted in partial fulfillment
of the requirements for the
Master of Arts in Teaching degree at the
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Brattleboro, Vermont

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This project by Ingrid Prouty is accepted in its present form.

Date 25 Nov 85 Principal Advisor Dwight R. Lora
Project Advisor/Reader Karen Knapp

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Abstract:

This paper is intended as a practical guide to presenting selected areas of spelling problematic for ESL students and native English speakers. The focus is on the history of the English language and comparison with other Indo-European languages as a means of clarifying English spelling "idiosyncrasies".

The study begins with an explanation of the historical and comparative viewpoint and suggestions for its application. The chapters are presented in lesson format and followed by several activity possibilities. The appendices provide a compendium of background information and classroom materials relating to the individual chapters. The glossary and annotated bibliography are provided for further reference.

ERIC Descriptors: EFL, ESL, ESOL, Language Instruction,
Second Language Learning, Spelling, TEFL

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INTRODUCTION

Personal reasons

Languages in general have held a great allure for me from my earliest school years. Foreign languages especially I always viewed as fun puzzles to be put together. Somehow the rules-- grammar, spelling and sentence formation, for example-- so intensely disliked or feared by many people, appear to me as intriguing puzzles to be solved. Thus, from the start, languages have attracted me rather than "scared me off".

Two main reasons have made my study of languages fascinating and positive. First, starting with German at home, and French from fourth grade on, I was exposed to more than one means of communication at a young age. This provided me with the seeds of a comparative context in which to experience language, one of the focal points of this mini-course. Later a second important impetus to my language awareness occurred in the form of a Latin teacher who greatly stimulated my curiosity to delve into historical relationships between English and Latin. From this broad interest I have developed a more specific involvement with spelling patterns and backgrounds. One major contribution to my own ease with spelling has been my approach towards it, developed mainly through the influences mentioned above. I have a tendency to notice spelling pat-

terns when I read, and my understanding of the historic backgrounds of words allow me to see the logic in spelling "quirks".

The value of a knowledge of Latin, Greek and French as an aid in the comprehension of English is obvious to most language teachers. In researching the pertinence of language history and comparison to English spelling, however, I have discovered very little available information on the topic and none at all on ways to implement such information in the language classroom. This state of affairs, coupled with my own pleasurable spelling experience, has sparked my enthusiasm to formalize, in thesis form, the useful insights I have gathered during years of fascination with this subject.

Purpose, format and progression

The lessons in this project have been designed as an aid to ESL teachers in presenting the spelling system of American English. The primary purpose of this presentation is to provide historical information about words and languages to increase students' understanding of English spelling and thus help them become better spellers. Rather than focusing on spelling rules, which are amply covered in other texts, I have selected seemingly irrational spellings and attempted to demonstrate their logic and consistencies- wherever existent- by investigating their origins and their cognates in other Indo-European languages.

This information is organized in lesson format. The structure of these lessons encourages students to recognize and use the knowledge about language they already possess (which can be especially extensive and diverse in a multi-cultural ESL class) and then expand upon this information. Accordingly, each lesson consists of an historical explanation and accompanying examples, followed by suggested activities to discover and support further examples.

The primary purpose of this project is to stimulate students to develop an inquisitive approach to spelling mastery. Thus, although speakers of other Indo-European backgrounds will have the most previous applicable knowledge for these lessons, students with non-Indo-European backgrounds should benefit by becoming more aware of English language origins and that the

numerous spelling patterns are based on linguistic history and development. Similarly, this topic has relevance for both native and non-native students of English. Both must acquire the same spelling system.

The level and style of the lessons is directed at high school or junior high school age students, and by varying how much time is spent on each and which activities are applied, each topic can be pursued to the desired or required depth.

The writing of this thesis is based on the assumption that the study of language history and comparisons is a valuable factor in contributing to spelling success. The emphasis on relationships and patterns pertaining to spelling is a key means of illuminating the fact that English (or most any language) does not exist in isolation, but has innumerable ties to other languages through its own history. In this study, those spellings which tend to pose the most difficult obstacles for English students are examined in their historical and comparative contexts.

This mini-course can be integrated into classes in a variety of ways, and some possibilities and suggestions for time allotment, sequencing, content adaptation and overall presentation are considered in the next section of the introduction.

A secondary purpose of this study is to provide groundwork for students and teachers to extend this historical and comparative approach to other areas of language learning, such as semantics and grammar. The final part of this introduction

touches on these wider applications and how teachers can further inform themselves on the topics examined.

Appendices and references which support and can supplement the preceding chapters are provided following the individual lessons. The appendices aim to furnish teachers with ready-to-use class materials pertaining to the various lessons; the annotated references serve as a time-saving guide in locating additional information.

Integration of material into class

The purpose of this section of the introduction is to provide concrete suggestions as to how to implement the contents of the following chapters into one's curriculum. Some of the suggestions stem from my own experience with the material, others from discussions with educators and students, and also from envisioning situations where this approach to language learning could be applied.

The following are factors in making the contents a functional and successful part of a language program: time allotment, sequencing, content adaptation, and overall presentation.

Time allotment. The amount of time devoted to each chapter and the scheduling of chapters into a curriculum can vary, making the content highly flexible. Depending on how one wants to include word history and comparison in lessons, one has the choice of building entire lessons around this topic, making brief class presentations the basis for student projects, or simply spending five to ten minutes on it every time vocabulary is introduced. In general I have found that short and frequent presentations work better with younger students, whereas with older students sessions can be longer and more in-depth.

Another option is to conduct bi-weekly 30-minute lessons, perhaps one lesson per chapter or one week per chapter, depending on the degree of understanding aimed for.

Sequencing. The sequencing of these chapters need not be

rigidly adhered to; rather, teachers should select pertinent aspects and fit them into the rest of their teaching plan. Nonetheless, I would make a few recommendations for the sake of maximum clarity in the presentation. Before embarking on specific spelling problems in comparative/historical fashion, the student ought to have a general overview of what the comparative/historical approach is and how it can be used to his/her best advantage. In other words, I suggest acquainting students with the broader historical background provided in Chapters 1 through 5 before tackling the particular spellings outlined in Chapters 6 through 10. The first two chapters serve as a general introduction to define the "historical/comparative view" and to give a sense of how this pertains to English. The remaining chapters can be combined in the way most useful to the class. For example, if Latin and Greek vocabulary is the focus of attention, Chapters 4, 7 and 8 will be the most relevant. Chapter 6 discusses a feature of English that would complement Chapter 3 on Germanic Elements. French Influences (Chapter 5) are most readily seen through further examples in Chapters 8, 9 and 10.

Content adaptation. It is possible to apply the contents of the chapters in various ways, and below are ideas on some of the possibilities.

As the title suggests, these chapters can be presented as a cohesive "mini-course", or unit, on the background of English and its relationship to other languages. The course can be a subject unto itself, based primarily on the chapter material

and any materials used for the activities.

If greater depth or coverage of any topic is desired, these chapters can serve more as "jumping-off" points and/or summaries for outside student research. With the explanation and a few examples as a guide, the student can thus discover patterns and occurrences for himself.

These chapters, either singly or as the proposed mini-course, are designed so that students can work through them individually. Time or students' backgrounds might dictate a more individualized approach to spelling instruction. Rather than devoting class time to an area which would benefit only a small percentage of the class, students needing work in a specific area of spelling could pursue relevant chapters on their own, with or without the teacher's guidance. The chapters have been purposely designed to be concise and clear in their organization, explanations and instructions- for both the teachers' and the students' benefit.

Chapter explanations could also function as starter material and impetus for individual or small group projects related to the spelling feature at hand. If students culminate these projects via oral presentations, they could even provide the teaching to the class in this area, rather than having the teacher always be the source of the material.

Overall presentation. A teacher's final decision on the overall presentation of this material will depend on what will aid which students most in mastering English spelling. If the class is relatively homogeneous in its needs, then the whole class can cover the material together, and one has the greatest number of options in selecting activities. If needs are more diverse and specific, on the other hand, small-group or individual self-study might be the most productive route to take. This choice must be made by the teacher.

In general, I would encourage teachers to draw as much knowledge from their students and into the lesson as possible before giving them information, much of which they may be able to produce themselves. In other words, use the explanations and examples sparingly, to fill in areas that the students do not bring up. This avoids redundancy and the students' feeling that their time is being wasted.

Underlying these chapters is an approach to language learning which is important to bear in mind- a way to understand all of English spelling better, rather than a fixed set of rules restricted to isolated elements. Thus, in the long run, these lessons, which here are treated as individual units, would ideally blend into spelling lessons, thus becoming a natural and integral component rather than merely supplementary material.

Wider applications

Spelling is only one aspect of language which can be viewed from a historical and comparative perspective. The more familiar one becomes with language history and relationships, the more difficult it is to speak about each aspect separately. Even in this brief introductory look at spelling, word meaning has shown its importance as a key to understanding spelling.

Etymology is a useful tool in areas other than spelling, as well. Through it the origin and development of a word's meaning, construction and use become clear, and one gains a sense of the context in which the word is best used. Frequently vocabulary words are learned as isolated entities, with little or no connections to the language that students already know. Thus, if students learn the etymology of their vocabulary words in conjunction with the usual spellings and meanings, this contextual background can help the words to establish themselves far more concretely in students' minds. In most dictionaries that provide etymologies, cognates are also listed. This one source of comparison with other languages can stimulate even the most monolingual English speaker into realizing how much we know of foreign languages just through our own. Likewise, ESL students familiar with another Indo-European language can see how much they already know of English from other languages! Any use of etymologies can only bring about a heightened awareness of the English

language and is an easily accessible means of expanding this awareness.

From my own experience, I have found on countless occasions how a basic understanding of the relationship of English to other Indo-European languages has given me the ability to use foreign languages more fluently and to an increased extent. The principal way is through recognition of corresponding sound patterns in different languages, enabling one to "create" vocabulary. For example, many English and German verb cognates are conjugated similarly, and a verb in one language can often serve as an indicator for the type of conjugation to be used in the other, as in sing-sang-sung/German singen-sang-gesungen (both strong and with the same vowel changes); also in laugh-laughed-laughed/German lachen-lachte-gelacht (both weak and having no vowel change). On the other hand, between German and Norwegian certain vowels or consonants are consistently different:

German:	Tag,	Zeit,	rasch,	Haus
Norwegian:	dag,	tid,	rask,	hus
English:	day,	tide,	rash,	house

In this case, English cognates correspond closely to the other two Germanic language examples, with the consonants tending to match the Norwegian, and the vowel sounds the German. Among the Romance languages and English there also exist many such patterns, such as the ones underlined below:

French:	école,	chanter,	fumée,	lait
Spanish:	escuela,	cantar,	humo,	leche
Italian:	scuola,	cantare,	fumo,	latte
English:	school,	chant,	fume,	lactic

This procedure is certainly not foolproof, and at worst a non-existent creation will evoke chuckles from native listeners- but the point is that the more one recognizes inter-language connections and patterns, the better able one becomes at accurately applying this process and making a game of language learning.

This idea of pattern recognition extends to yet another area of language- namely grammar. An understanding of grammatical concepts in one language can greatly facilitate their understanding in another one. Once grammatical concepts are understood, patterns are easily recognized, e.g. -lich in German, -lig in Norwegian, -lijk in Dutch and -ly in English, all denoting adverbs or adjectives. Likewise, -ment in French and -mente in Spanish and Italian are corresponding adverb indicators. Verb endings and classes frequently correspond within the Romance languages and within the Germanic languages. The only remnant of verb endings in modern English is the -(e)s in the present third person singular, but a glance at Old and even Middle English will show this language's highly inflected past, as well as its similarities to other Germanic grammatical structures.

My intention in all of these chapters is to present a means of looking at and learning English spelling in a broad context, namely that of using this language's historical and comparative relationships to advantage. Since excellent,

thorough and technical texts abound on the origins and development of the English language, this study is more concerned with supplying the information needed to actually implement this perspective in the classroom. To achieve this I have aimed to make the explanations and examples complete enough to be usable as presented, yet concise enough for a person unfamiliar with the material to gain an overview of the topic quickly. It would be a mistake, however, to view this introductory study as a complete or final compendium of information on the topic; more accurately its purpose is to provide some background knowledge on spelling in an historical and comparative context, and at the same time to show the means by which teachers could add to this information on their own.

In this final introductory segment some extensions of the historical/comparative approach indicate how variously the English language background can contribute to a more effective and total understanding of English- whether as a foreign or native tongue. Spelling, word meaning, and the structure of words and grammar are all intertwined, not only within one language or at a single point in time, but with their linguistic relations and over a great span of time. May this viewpoint encourage teachers and students alike to allow their curious and creative natures greater access to and success with the language learning game!

1: INTRODUCTION TO HISTORICAL/COMPARATIVE VIEW

Summary

In mastering English spelling, it is helpful to realize a few points about language in general. These key points are outlined below and will provide a clearer sense of what is meant by "historical/comparative view", the history and comparison of language as it pertains to our English spelling system.

Key Points

1. Language is alive. English has come from somewhere, and it is going somewhere, although we may not perceive that process in our daily use of it. In other words, English is constantly changing in many ways.

There are a number of ways to observe this language development. Pronunciation, grammar and spelling are a few easily recognizable areas of variation. For example, travel to different regions of Great Britain or the United States reveals some widely differing dialects, noticeable in contrasting pronunciation, grammar and vocabulary usage. Certain differences in spelling convention and vocabulary are another example of language change and development. A further means of observing development in language is by looking at the English literature of various eras.

One obvious characteristic of modern English is the disparity between its pronunciation and spelling. This phenomenon is in part a result of two varying rates of development- a

spelling system which has remained relatively constant throughout the past few hundred years, versus a pronunciation which has continued to change and diverge from the established spellings.

2. Languages are related. All languages have a history, and languages that have developed from the same historical roots are classified as a language family. Thus English does not exist as an island among languages; it has many characteristics, including vocabulary, in common with other members of the Indo-European language family.

Familiarity with another Indo-European language besides English can be a great aid in recognizing related words (called cognates) between the two languages. Many similarities- and differences- in spelling repeat themselves. Discovering these relationships with other languages helps one to become aware of the numerous patterns that exist and make English spelling more understandable and logical.

3. Advantages to existing spellings. Much criticism has been voiced against the "irrationality" of English spelling and the fact that it does not reflect the pronunciation of the language. On the other hand, there are some distinct advantages to many of the existing spellings. In particular, these lessons will focus on roots of words that are spelled consistently in their various forms and functions, despite widely divergent pronunciations. Another area of focus is silent, i.e. unpronounced, letters in words, which are not nearly as mysterious when studied in their historical and

comparative contexts. Appendices C through H illustrate some of these historical and comparative relationships.

INTRODUCTION TO HISTORICAL/COMPARATIVE VIEW

Activities

Show dialects in English. Play tapes or records (or make a tape!) exemplifying numerous dialects in the English language (e.g. American southern, Boston, N.Y., Texan, down-east, British cockney, Oxford, Midlands, Scottish, Irish, Australian, Indian, etc.).

Study/fill in Indo-European language chart. Pick one of the I.E. language charts from Appendix G that best suits your purposes, and use it as a study guide, worksheet, or quiz.

Brainstorm cognates. Drawing upon students' familiarity with other I.E. languages, select English words (e.g. from Appendix E) and find cognates for them in other languages.

Look at examples of English literature from different eras and pinpoint changes (e.g. loss of inflections, vowel changes, later appearance of French influence).

2: GENERAL HISTORIC OVERVIEW

Summary

In this and the next three chapters we will investigate the predominant sources of our vocabulary and the spelling systems which have formed them. This chapter provides an overview of the numerous influences on English.

Key Points

1. The diversity of influence on English distinguishes it from other Indo-European languages. The English language as we know it today has truly become a blend of diverse sources of vocabulary, grammar and spelling. Over the past two thousand years different groups of wanderers and invaders have made their way to Great Britain and brought their own languages with them. As a result of outside political dominance and different cultures living side by side, a variety of lasting influences changed English in numerous ways. One major and logical area of influence was vocabulary.

2. Different rules of spelling apply to words of differing origins. Anyone who studies a foreign language knows that words and letter combinations that look the same in two languages are pronounced very differently from each other. In other words, English spelling rules and patterns are dependent on and reflect the origins of a word when it becomes part of the English language. This statement is valuable for the understanding of English in its historical

and comparative contexts. The idea that several distinct sets of spelling rules apply in English opposes the popularly held notion that our spelling is too varied and irregular to have consistent spelling rules. An example of a sound that is spelled differently depending on word origin is /n/- which has the possibility of being spelled pn in Greek words, gn in some French and Germanic words, kn in Germanic words, as well as the most common plain n representation. Appendix I supplies further examples of this Key Point.

3. The major contributors to modern-day English vocabulary are the Germanic, Latin, Greek and French languages. Although all are part of the Indo-European family of languages, each has its own special spelling characteristics which have influenced our English spelling system. By becoming familiar with these most prevalent traits, it is possible to de-mystify many a source of spelling uncertainty! Until the Norman invasion in 1066, the English language only reluctantly admitted foreign vocabulary, which (except for some Latin religious words and a few Roman terms) kept the language more uniformly Germanic in nature. Since that time English has become a language rich in adopted vocabulary, words borrowed from other languages, most importantly the ones mentioned above. However, the influence of other languages on English extends far beyond these four, and in Appendix J are some examples to demonstrate the variety of cultures, languages and spelling systems which make up modern English.

GENERAL HISTORIC OVERVIEW

Activities

Etymology search. Have students use a dictionary containing etymologies to research the background of list of words given to them by the teacher. (Include words from minor contributing languages.)

Organize letters and sounds by origin, using Appendix I as a guide, i.e. under the headings Germanic, Latin, Greek, French.

Make a list of words for each of the sound/letter categories provided in Appendix I.

Spell-a-sound. Think of and list the numerous ways in which different sounds can be spelled in English. An English Silent Way chart can serve as a check and organized guide. With as many of the letter combinations as possible,
a. identify the languages that contributed them, and
b. provide example words for each.

3: GERMANIC (NATIVE) ELEMENTS

Summary

The purpose of this chapter is twofold: one, it traces the geographical and social contexts and development of the English language, and two, it points out some of the distinguishing features of the Germanic segment of our language.

Key Points

1. The basis of English is Germanic. This chapter describes Germanic Elements rather than Influences, because Old English of 1000 years ago had developed along the same lines as the other Germanic language branches of Indo-European languages. At that time, its grammatical structure and vocabulary were closely related to- in many cases even identical to- the other Germanic languages. These languages included the Norse (Scandinavian), High German and other Low German languages. (Refer to the Indo-European language charts in Appendix G for more specific relationships!) Thus the core of English remains Germanic, and later contributors to these original elements are more accurately labeled influences on the language.
2. The Germanic peoples consisted of many migrating tribes. Geographically speaking, these peoples now occupy much the same areas as 1000 years ago. The several centuries preceding that, however, contained abundant movement of peoples, mostly in the form of invasions. The name of the language, English, derives from one of the Germanic tribes,

the Angles, who traveled to England from what is now northern Germany and southern Denmark. The Saxons came from the North Sea coast, or modern-day Germany. Anglo-Saxon is one name for the language spoken before the Norman invasion of 1066; it is also known as Old English. One more tribe, the Jutes, invaded the south-east corner of England from the part of Denmark called Jutland (or Jylland in Danish). The effect of this influx of people was to push the original inhabitants northward (to present-day Scotland) and westward (to present-day Wales). A few centuries following the three tribes mentioned above, the Scandinavian Vikings made England their first stop in their well-known raids on other lands.

3. All the Germanic languages developed common features which distinguish them from other Indo-European languages. At the time of the Viking migrations to England (800-1000 A.D.), all the various tribes mentioned above had developed their own particular Germanic dialect, but at that time they could still understand one another, because the Great Vowel Shift (which affected the length of vowels) and other sound and spelling changes had not yet occurred and made English distinct from the other Germanic languages.

Since Germanic elements still form the core of our language, this vocabulary covers a broad range of topics, making it difficult to generalize about its nature. Nonetheless, it is possible to describe certain features which pertain especially or exclusively to native English words. Below are some useful guidelines to recognizing and becoming familiar

with Germanic features in vocabulary and spelling patterns in English:

a. primary stress is usually placed on the first syllable, e.g. fa'ther, may'be, wa'gon, or on the root if it is preceded by a prefix, e.g. be come', a live'.²

b. sound changes occurring as a result of the First Consonant Shift (systematic consonant changes) differentiate Germanic from other Indo-European languages. An example of this is the word fish. The Latin cognate is pisces; with the First Consonant Shift p became f, resulting in English fish, Norwegian fisk, and German Fisch. The Romance languages, on the other hand, have retained the p in French poisson and Italian pesce. See Appendix K for more specific sound changes.³

c. many core English words relate to everyday occurrences, places, names- the home, the animals, the family, the countryside.

d. the underlying grammatical structure of our language is Germanic. This native base consists of all pronouns, demonstrative and possessive adjectives, articles, auxiliaries, strong verbs, almost all prepositions and conjunctions, most adverbs of time and place, and numerals (except dozen, million, billion, and milliard). Appendices L and M list these native elements.⁴

4. Following the Norman invasion, the great social upheaval profoundly affected the development of English. English became the language of the common people, while French was

adopted by the upper classes and the government, and was used to refer to activities or things remote to peasants' lives. In modern English we can see this in the following example. The names for farm animals, while still alive and tended on the farm, are Germanic- cow, sheep, calf, goat, swine. On the other hand, the terms for these animals when they are served at the dinner table are derived from French- beef(from F boeuf), mutton(from F mouton), veal(from F veau), chevon(from F chèvre), and pork(from F porc).

The more one's vocabulary increases, the more one will discover how rich English vocabulary has become as a result of the many influences on it. English is abundant in synonyms- words the same or similar in meaning- often with one of Germanic origin and another of French and/or Latin origin, e.g. hard/difficult; often/frequently; right away/immediately; maybe/possibly; eat/dine; the list goes on/continues!

GERMANIC (NATIVE) ELEMENTS

Activities

Germanic word search. Study various kinds of texts (different types of literature, newspapers, magazines, specialized articles, comics, etc.) and pick out words of Germanic origin. Compare/contrast proportions of various word origins in each type of text.

Brainstorm Germanic cognates, working from as many Germanic languages as the class has its disposal.

Be a linguistic sleuth! Have students take a group of similarly spelled words and work backward in time with them, determining earlier forms by using their knowledge of basic sound changes and an etymological dictionary, or reverse the above procedure, supplying students with older forms of English words and having students work through sound changes to current forms.

Match Germanic words with appropriate sound change patterns, using words found in the Germanic Word Search activity.

4: LATIN AND GREEK INFLUENCE

Summary

Latin and Ancient Greek are two languages considered "dead", because they are no longer spoken by any group of people. However, as soon as we look at any Indo-European language, we can see how very alive Latin and Ancient Greek still are by the countless influences they have exerted on modern-day tongues. In this chapter, we will investigate the aspects of Latin and Ancient Greek influence which most broadly affect English spelling: the affixes and roots of words.

Key Points

1. Roots of words and affixes form the basis of Latin and Greek vocabulary in English. Roots are the base, or main part, of words. Affixes are attachments to, or something "fixed to", a word at the beginning or end of it. In trying to determine which words derive from Latin and Greek, it is helpful to note that:
 - a. many Latin and Greek words can be broken into roots and affixes, for example: in/con/spic/uous, anthropo/soph/ical.
 - b. a large proportion of the vocabulary related to the sciences, to medicine, to law and to formal studies of any kind, has Latin and Greek origins.
2. Asking specific questions can unravel long and complicated-looking words. The questions and steps outlined below are a helpful way to tackle unfamiliar words.

What are the component parts (roots and affixes) of this word? Example: influence---> in - flu - ence
prefix - root - suffix

This step in tackling a new word has various purposes:

- a. it makes a word less threatening because it breaks it down into smaller, more recognizable units;
- b. many of the individual word parts become familiar and "spellable" when divided in this way;
- c. it provides clues to the meaning of the word.

What are the meanings of the different parts of this word?

Example: in - flu - ence
just like - flow - ending to indicate
English in a noun or verb

So, the word means either flow in(to) or something that flows into something else, bringing about a change or a result. If students do not know the meaning of -flu-, for example, often they can think of another word that has the same root or affix in it, e.g fluid (either a noun meaning liquid, which we know flows, or an adjective that describes something smooth-running and graceful) or fluent, which is used about someone who speaks a language so well it flows!

3. Determining the meanings of the parts of a word can aid with the spelling of the word in the following ways:

- a. meanings often produce one constant spelling, so if a certain sound has several spellings, the meaning will help you decide which spelling is appropriate.

Example: ante- (=before) vs. anti- (=against, opposite)

An antechamber must be walked through before arriving in the

LATIN AND GREEK INFLUENCE

Activities

Word breakdown! Give students (or select from students' reading) words of Latin or Greek origin. Have students break them down into prefix, root, suffix, and determine the meaning.

Create-a-word. Have students create new words based on affix and root study, by giving specific affixes and roots to work from. The students cross-check with other students, the teacher or dictionary to verify their accuracy.

Expand the example lists. Find more example words for each of prefixes, suffixes and roots supplied in Appendices N and O. Encourage students to use resources available- books, dictionaries, people, news media, etc. Make this into a game, and share the results (e.g. write up and pass out list, or make on-going wall chart).

5: FRENCH INFLUENCE

Summary

The French language, from the time the Normans conquered England in 1066, has contributed significantly to the vocabulary of English. One part of this chapter presents the broad categories into which the majority of French borrowings fall. The second part explains how these French words affect English spelling.

Key Points

1. The nature of French vocabulary taken into English has been determined by the roles of the Normans and later the French in English life. The first French borrowings came from the dialect of the conquering Normans, but later, when their influence and prestige had lessened, the Parisian (or Central) dialect became the source of further French borrowings. When the Normans invaded England, they took over the government (from the French gouvernement), and so French became the language of government officials and documents, of the military and of the aristocracy. Courtly living and elegance contributed vocabulary in the areas of dining etiquette (e.g. restaurant menus), clothing and fashion, aspects of art and architecture and skilled trades. Some religious terms also entered the English language through French.
2. French influence has left its mark on English spelling in several ways:

a. the greatest influx of French additions to English was during the two centuries after the Norman Conquest. French has continued to contribute vocabulary on a smaller scale into the present. In some cases therefore, we have doublets, i.e. two differently spelled words (often with the same or related meanings in English) that we received twice from two separate French dialects. Moral/morale and warden/guardian are examples of such doublets.

b. the entrance of French into English brought about many spelling reforms during the Middle English period (1100-1500), resulting in the Great Vowel Shift, among other spelling and pronunciation changes, as well as a drastic loss of inflections. Thus, the appearance of English was altered considerably in this period. Spellings from the French, such as -gue (rogue) and -ion (region), and dropping the verb endings -est (thou goest) and -eth (she speaketh) are small examples of these far-reaching changes.

c. typical of many words from French are their Latin roots. It can be difficult to tell whether these words have been borrowed directly from Latin or via French. Sometimes the subject matter gives a clue; sometimes the form of the word makes its path to English clear. This point is illustrated by the French/Latin word pairs frail/fragile and sure/secure. Further examples of all these areas of influence are located in Appendices P, Q and R.

FRENCH INFLUENCE

Activities

French word hunt. Brainstorm as many words deriving from French as possible, using categories as a helpful focus (e.g. by topic- dining, arts, fashion, religion, or by spellings as provided in Appendix R).

Enact real situations where words of French origin are most apparent, e.g. ordering a meal in a restaurant, signing up for a ballet class, going shopping for elegant clothing, being promoted in the military (using ranks). See how many French words can be used in each scene, list them and trace their histories.

Identify French borrowings. From a list of vocabulary including French words and other words with similar/same spelling combinations, identify the French words by using pronunciation and topic as guides. One group of words could consist of: chapter, much, chicken, choke, ache, chase, chagrin, cheese. The -CH- words followed by a and/or pronounced /sh/ are of French origin. Areas in which the French contributed vocabulary include: literature (chapter), royalty (chase, in the sense of a hunt), delights and sorrows (chagrin).

6: -GH- (INCLUDING -IGH, -EIGH, -OUGH, -AUGH)

Summary

This chapter defines the occurrence of -GH- in English spelling and its development and relationships to cognates in other Germanic languages.

Key Points

1. -GH- is a spelling combination which occurs either in the middle or at the end of words. Weight, fright, sigh and inveigh are examples.
2. Words with -GH- are for the most part quite commonly used and therefore important to know, despite the fact that proportionally they constitute only a small part of the overall vocabulary.
3. All have Germanic origins but inveigh and caught, and most also have cognates in other Germanic languages. Inveigh has its origins in Latin invehere, and caught- the past participle of catch- in Old Norman French cachier. An illustration of cognates is the word sight- German Sicht, Norwegian sikt.
4. -GH- goes unpronounced in all but a handful of words. This mostly silent -GH- spelling is an indicator that some sound existed here earlier which has since vanished in English. In fact, by looking at cognates in other languages (primarily Germanic) we immediately get an idea what these sounds probably were. In modern German cognates such as richtig(right), we find ch (pronounced as if clearing one's

throat) most often; in other German, Scandinavian and Dutch words g is common (Danish rigtig, Dutch regt), and occasionally k (Norwegian riktig) or ck corresponds to English gh. Dutch g is pronounced like German ch; g, k and ck in Scandinavian cognates are pronounced as in English. Interestingly, some Scandinavian cognates no longer pronounce the guttural sound either, and in these cases, unlike the English examples, the spelling reflects this; a doubled consonant then is used where previously a kt or gt existed. For example, the Norwegian word for light (as in weight) is lett, having assimilated the kt into tt. The handful of words with pronounced -GH- include seven with /f/ pronunciation and one alternate spelling with /p/ pronunciation. See Appendix S for these and the other -GH- words discussed here.

-GH- (INCLUDING -IGH, -EIGH, -OUGH, -AUGH)

Activities

Historical word analysis. Work through Appendix S to see where English words and cognates differ other than in -GH-spelling (e.g. laughter/G Gelachter/N latter) and with the help of the Germanic Elements chapter, analyze historical and comparative developments.

Brainstorm -GH- words. Before even looking at the Appendix S list, brainstorm as many -GH- words as students can muster then any cognates they know. In groups or all together, organize words into groups as shown above. Let students look up Middle and Old English forms as an exercise in finding etymologies in a dictionary. Encourage students to discover relationships and patterns and verbalize them. The Appendix S list can then be handed out as handy reference or to complete the students' lists, if desired.

Construct-a-cognate! Before the teacher supplies students with a complete list of cognates, students can try to "build" cognates from English words based on a few examples. Even if the resulting cognates do not agree 100% with actual words, the exercise is useful to increase students' awareness of the existing patterns.

*Remember that a cognate does not mean that the word must have the exact same meaning as in English (though often they are the same or obviously related), only that the words are historically related, i.e. they spring from the same original source.

7: PS-, PN-, MN-, KN-, GN-, -PH-

Summary

This chapter deals with an assortment of letter combinations that distinctly show their Greek or Germanic heritage.

Key Points

1. This chapter addresses words beginning with the letter combinations PS-, PN-, MN-, GN-, and KN-. Psychic, gnome and knot exemplify such words. -PH- does not follow all the same generalizations as the other spelling combinations, but it is included in this chapter because of its frequent occurrence in Greek-derived vocabulary.

These six letter combinations always form part of the same syllable. This, in addition to their word-initial position, makes them easy to distinguish from words with the same letter combinations in medial or final position. Some examples of such words not discussed here are tipsy, shrapnel, hymn, indignant, design and haphazard. Their derivations are also unrelated to those of the vocabulary covered in this chapter.

2. Only the second letter of each letter combination is pronounced (except for -PH-). This is a common feature of words that begin with these letters. The unpronounced letters are remnants of the pronunciation in the Greek or Germanic source languages.

3. -PH- represents the /f/ sound in Greek words (only!). It can pop up in any part of a word, most frequently at the

beginning of Greek roots (which might start a word- e.g. phonograph- but can just as well be in the middle of a word- e.g. telephone). Within these six letter combinations, -PH- forms the largest group of words, since the basic roots are numerous and can be used in so many combinations.

4. GN- and KN- occur primarily in words of Germanic origin. Pronunciation and occurrence are the same as for Greek-derived vocabulary. In both cases, these letters let us know that both sounds have been pronounced at one time- in Ancient Greek and Old English, and still are pronounced- the Greek words in Modern Greek and the Germanic words in modern German, the Scandinavian languages and Dutch.

Someone may wonder about the origin of that uniquely-horned antelope, the gnu. Its name comes from the Kaffir (south African tribe) word nqu, in which the q represents a click- a kind of sound that is part of some African tribal languages. It looks like the n and q may have just traded places when the word was brought into English!

A list of words with the six letter combinations discussed here can be found with their sources and cognates in Appendix T.

PS-, PN-, MN-, KN-, GN-, GN-, -PH-

Activities

Using contextual clues for meaning. Have students study a text or an article on the following topics and pick out terms that have spellings discussed in this chapter: medicine (psych-, psor-, pneu-, phys-, -phobia, mnemonics), philosophy (-phil-, -soph-, pseudo-), religion (-gnostic, pseudo-, psil-). From the text, students attempt to deduce the meaning.

Act-a-word! Have students use mime to act out vocabulary from the list in Appendix T, or additional vocabulary which they have thought of.

Determine word origin. Students look up unfamiliar words from the Examples list and break them into their component parts, determining the meanings of the roots.

Word construction. Given a list of roots (and typical Greek word endings as an extra aid, if wished), students construct as many vocabulary words as possible. This can be used either as an introductory or review activity.

Summary

This chapter tackles an often-occurring spelling obstacle: confusion about when to use which of the above letter combinations. Below are some considerations for presenting and clarifying them.

Key Points

1. Words containing -XC-, -CQ-, and -CC- are of Latin or Greek origin (often taken into English via French). That is, they all consist of an affix and a root and can be broken down into these parts. This breakdown always occurs between the two letters, e.g.

ex/cept ac/qaint ac/cept

2. The meanings of the affixes and the roots provide clues for the proper spelling of a word. The key to distinguishing two similar-sounding words is to first determine the meaning of the whole word. This enables one to select the root and/or affix which makes sense. An example of this process is seen with the words ac/cept and ex/cept.

Both words' roots derive from the same Latin word capere, to take. One word means to "take to (oneself)", the other "to take/leave out". By knowing that ac-, from the Latin preposition ad, means "to, toward", and e(x) means "out, out of", the decision of which spelling for which word becomes clear.

3. Ad- often changes form to assimilate with the initial root sound or letter. This assimilation (letter agreement) is apparent with the -cq- and -cc- spellings and leads to the common error of omitting one or the other letter. Address for address and acount for account are examples of this. Again, by breaking the words down, each part becomes visible and thus the spelling also becomes more logical.

4. Pronunciation indicates whether spelling is -cq- or -cc-. -CQ- always has a /k/ sound; -cc- can be pronounced either /k/ or /ks/, depending on the root. (C followed by e, i or y is almost without exception pronounced /s/, otherwise /k/.) When faced with deciding between using the -cq- or the -cc- spelling for the /k/ sound, one distinction makes the decision simple: -cq is always followed by the /w/ sound; -cc never is. Acquire and acquaintance exemplify this pronunciation for -cq, and accept and accomplishment do the same for -cc.

For further examples, refer to Appendix U.

-XC-, -CQ-, -CC-

Activities

Identification of word parts with Latin/Greek source words. Given lists of: a. English -xc-, -cq- and -cc- words and b. Latin/Greek root forms with meanings, students will match the Latin/Greek with its English derivative. If the student knows the meaning of the English word already, identification will be simpler. Conversely, the Latin/Greek list with English meanings will aid students in defining the English words whose meanings they do not know.

Brainstorming words. Have students brainstorm and list as many words as they can think of with -xc-, -cq- and -cc-.

Word breakdown and etymology. As a follow-up to the Brainstorming words activity, or with a teacher-supplied list of words, students break English words into their component parts as described in Key Point 2. They identify the meanings of words from Chapter 4, students' knowledge, or an etymological dictionary.

Etymological spelling bee or quiz. After some practice with roots and affixes, supply students with word definitions and/or Latin/Greek roots and have them give the corresponding English word. E.g.:

Teacher supplies	"close/shut out" and/or
	"ex + claudere"
Students supply and spell	"exclude"

This exercise can easily be applied to any words of Latin and Greek origin.

9: -CH-

Summary

This chapter addresses the three different pronunciations for the -CH- spelling: /č/ as in chop, /š/ as in attache, and /k/ as in stomach. Guidelines are given to avoid confusion with -sh-, -c-, -k-, and -ck- spellings.

Key Points

1. /č/ is the most common pronunciation for this spelling. The Germanic elements in English and some of our adopted vocabulary, especially words that have been part of English for a long time, use this pronunciation.

Examples: child, chart, cheat, impeach

2. The /š/ pronunciation occurs in words of French origin. These words have retained the same pronunciation (and spelling) they had in French. They make up only a fraction of our vocabulary. Otherwise the /š/ sound is generally represented by sh (or t or c in -ion words.)

Examples: charlatan, attache, cache, chartreuse, echelon, chauvinist

3. -CH- pronounced /k/ indicates Greek origin. The majority of words with this spelling and pronunciation came into English directly from Greek; otherwise via Latin and/or French (as in stomach). The English -CH- spelling in words of Greek origin is a transcription of the original χ (chi) spelling in Greek.

Ex: chemistry, Achilles, cholera, archipelago, archangel, alchemy, choir, chorus, Christian

Exception: Ache is the exception, a Germanic word coming from the OE acan and ME ake.

Activities

Linguistic analysis. Given a list of -CH- words with various pronunciations, students group them according to -CH- pronunciation. Before the teacher provides an explanation, students can try to analyze words' origins by their appearance, topic and students' own knowledge. They can then expand upon the list.

Sound matching and comparison. Students think of other possible spellings for each -CH sound and examples for each of them. With the teacher's help, they determine the most usual origins of each category of words, e.g. for /č/ sound the tch spelling (watch, match, catch, botch, latch, hatch, satchel, hatchet)- either taken from French, or an older Germanic word given a new spelling with French influence; /š/ sound, represented by sh in words primarily of Germanic origin (shake, wish, fish, shot, etc.) or c, t, s in -ion words from Latin via French (conception, tension, coercion, etc.); /k/ sound, spelled c(k) following a short vowel in words of varying origin (track, traction, back, sick, hectic), k(e), often Germanic origins (make, cink, croak, poke, honk, spike, tank, trek), q in words from Latin, sometimes via French, or Germanic origin with adopted French spelling (queen, quit, inquire, etc.).

Summary

The question of whether to use -IE- or -EI- can in most instances be satisfactorily solved using a few broad rules. The best known of these is "i before e except after c" and applies well to words of Latin-via-Old French origin. This chapter focuses on the "exceptions" (-EI- words not preceded by c) to this rule, identifying the features they share and explaining them historically and comparatively.

Key Points

1. Most exceptions to the "i before e except after c" rule have a common pronunciation /ey/. The backgrounds of these words are a mixture of Germanic and Old French. In the case of Old French borrowings, the -EI- spelling comes to us directly from the French verb forms, often the third person singular. The Germanic words show less consistency in derivation. One pattern, however, is apparent with the words eight, freight and neighbor, for which the corresponding vowel in other Germanic languages is a (e.g. German acht, Fracht and Nachbar). Middle English especially had many spelling variations for one word, and this has sometimes led to inconsistencies in Modern English spelling.

2. Only a small list of words cannot be easily categorized. This is primarily because the pronunciation does not correspond to the word's historical development. Seize and leisure, for example, can both be traced back similarly to the aforementioned Old French borrowings.

Height reflects a pronunciation that agrees with right, sight and its adjective form high, yet has retained the -EI- spelling from Middle English height(h)e.

Neither has followed the form of either, which stems from ME either, aither. Formerly (in the 17th century) the pronunciation of either was /eyðr/ and belonged in the /ey/ group, but has since developed into /iyðr/ or /ayðr/.

Looking at weird's history, one can see that the word used to be pronounced /ey/, but has gone a similar route to near and fear in its pronunciation. Some of the older pronunciations can still be heard in Scottish English, e.g. Have you heard is pronounced /Hev ye heyrd/.

3. There are a few general rules that apply to words with -IE- and -EI-. Whenever in doubt about whether to use -IE- or -EI-, use -IE- unless the word:

- a. belongs to the -CEI- group;
- b. is pronounced /ey/ as in weigh; or
- c. belongs to the short list of "weird" words.

Some examples are: friend (common mistake!), belief, chief, fiend.

Refer to Appendix V for a more complete list of -EI- words with their cognates.

-IE- vs. -EI-

Activities

Word observation. Students look up a selection of -IE- and -EI- words, noting origins and spelling patterns. They determine when words use -IE- spelling, how -c- affects spelling and pronunciation possibilities. From these observations, they categorize words into logical units.

Take your pick. Students fill in blanks with -IE- or -EI- spelling for list of words grouped by sound or origin. After having completed spelling of words, students figure out and name the common features of each group. Have them identify cognates for as many of the words as possible.

Cognate recognition and reconstruction. Give the students a cognate chart with some blanks to be filled in based on existing patterns, e.g.

freight	-	OE	----	-	G	Fracht
eight	-	OE	_____a	-	G	_____
_____	-	OE	neáhgebur	-	G	_____

APPENDIX A: ABBREVIATIONS

AS	Anglo-Saxon
D	Dutch
Dan	Danish
F	French (modern)
G	German (modern)
Germ	Germanic
Gk	Greek
Icel	Icelandic
IE	Indo-European
Ir	Irish (Gaelic)
It	Italian
L	Latin (classical)
LL	Late Latin
ME	Middle English
MHG	Middle High German
ModE	Modern English
N	Norwegian
OE	Old English
OF	Old French
OHG	Old High German
Per	Persian
Port	Portuguese
Sp	Spanish
Sw	Swedish

Summary

The question of whether to use -IE- or -EI- can in most instances be satisfactorily solved using a few broad rules. The best known of these is "i before e except after c" and applies well to words of Latin-via-Old French origin. This chapter focuses on the "exceptions" (-EI- words not preceded by c) to this rule, identifying the features they share and explaining them historically and comparatively.

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3. There are a few general rules that apply to words with -IE- and -EI-. Whenever in doubt about whether to use -IE- or -EI-, use -IE- unless the word:

- a. belongs to the -CEI- group;
- b. is pronounced /ey/ as in weigh; or
- c. belongs to the short list of "weird" words.

Some examples are: friend (common mistake!), belief, chief, fiend.

Refer to Appendix V for a more complete list of -EI- words with their cognates.

-IE- vs. -EI-

Activities

Word observation. Students look up a selection of -IE- and -EI- words, noting origins and spelling patterns. They determine when words use -IE- spelling, how -c- affects spelling and pronunciation possibilities. From these observations, they categorize words into logical units.

Take your pick. Students fill in blanks with -IE- or -EI- spelling for list of words grouped by sound or origin. After having completed spelling of words, students figure out and name the common features of each group. Have them identify cognates for as many of the words as possible.

Cognate recognition and reconstruction. Give the students a cognate chart with some blanks to be filled in based on existing patterns, e.g.

freight	-	OE	----	-	G	Fracht
eight	-	OE	_____a	-	G	_____
-----	-	OE	neáhgebur	-	G	-----

APPENDIX A: ABBREVIATIONS

AS	Anglo-Saxon
D	Dutch
Dan	Danish
F	French (modern)
G	German (modern)
Germ	Germanic
Gk	Greek
Icel	Icelandic
IE	Indo-European
Ir	Irish (Gaelic)
It	Italian
L	Latin (classical)
LL	Late Latin
ME	Middle English
MHG	Middle High German
ModE	Modern English
N	Norwegian
OE	Old English
OF	Old French
OHG	Old High German
Per	Persian
Port	Portuguese
Sp	Spanish
Sw	Swedish

APPENDIX F: COMPARISON OF THE LORD'S PRAYER

The Lord's Prayer is presented below in various Indo-European languages (and one non-Indo-European one) to demonstrate cognates.

GERMANIC LANGUAGES

English Our Father, who art in heaven, hallowed be thy name. Thy kingdom come, thy will be done, on earth as it is in heaven. Give us this day our daily bread, and forgive us our debts, as we forgive our debtors. And lead us not into temptation, but deliver us from evil.

Middle English Ōure fādir that art in heuenes, halwid bē thī nāme. Thī kyngdōm cumme tō; bē thī wille dōn as in heuen and in ērthe. Gif tō ūs this day ōure brēēd quer ōther substaunce; and forgēue tō ūs ōure dettis, as we forgēue tō ōure detttōurs; and lēēde ūs nat in tō temptaciōūn, but delyuere ūs frō yuel.6

Old English Faeder ūre, þū þe eart on heofonum, sīe þīn nama gehālgod. Tōbecume þīn rīce. Geweorde þīn willa on eardān swā swā on heofonum. Ūrne gēdaeghwāmlīcan hlāf sele ūs tō daeg. And forgief ūs ūre gyltas, swā swā we forgiefad ūrum gyltendum. And ne gelaēd þū ūs on costnunge, ac āllīes ūs of yfele.7

German Unser Vater im Himmel, dein Name werde geheiligt, dein Reich komme, dein Wille geschehe auf Erden wie im Himmel. Unser täglich Brot gib uns heute, und vergib uns unsere Schulden, wie wir unsern Schuldigern vergeben, und führe uns nicht in Versuchung, sondern erlöse uns vom Übel.8

Swedish Du vår Fader, som är i himmelen! Må ditt namn hållas heligt. Låt ditt rike komma; ske din vilja på jorden, såsom den sker i himmelen. Giv oss i dag vårt dagliga bröd, och förlåt oss vad vi hava brutit, såsom vi förlåta dem som hava brutit mot oss. Och för oss icke in i frestelse, utan fräls oss från det onda.9

Norwegian Fader vår, du som er i himmelen! La ditt navn holdes hellig. La ditt rike komme. La din vilje skje på jorden som i himmelen. Gi oss idag vårt daglige brød. Forlat oss vår skyld som vi òg forlater våre skyldnere. Led oss ikke inn i fristelse, men frels oss fra det onde.10

APPENDIX F: COMPARISON OF THE LORD'S PRAYER

ROMANCE LANGUAGES

Latin Pater noster qui es in coelis, sanctificetur nomen tuum, adveniat regnum tuum, fiat voluntas tua sicut in coelo et in terra. Panem nostrum supersubstantialem da nobis hodie, et dimittit nobis debita nostra sicut et nos dimittimus debitoribus nostris. Et ne nos inducas in tentationem, sed libera nos a malo.11

Italian Padre nostro che sei nei cieli, sia santificato il tuo nome; venga il tuo regno, sia fatta la tua volontà, anche in terra com'è fatta nel cielo. Cacci oggi il nostro pane quotidiano, e rimettici i nostri debiti come anche noi li abbiamo rimessi ai nostri debitori; e non ci esporre alla tentazione, ma liberaci dal maligno.12

French Notre Père qui es aux cieux! Que ton nom soit sanctifié, que ton règne vienne, que ta volonté soit faite sur la terre comme au ciel. Donne-nous aujourd'hui notre pain quotidien; remets-nous nos dettes comme nous-mêmes avons remis à nos débiteurs. Et ne nous soumet pas à la tentation, mais délivre-nous du Mauvais.13

Spanish Padre nuestro, que estás en los cielos, santificado sea tu nombre; venga tu reino, sea hecha tu voluntad, como en el cielo así también en la tierra. Danos hoy nuestro pan cotidiano. Y perdónanos nuestra deudas, como también nosotros perdonamos a nuestros deudores. Y no nos metas en tentación, mas líbranos del mal.14

Portuguese Pai nosso, que estás no céus, santificado seja o teu nome. Venha a teu reino. Seja feita a tua vontade, assim na terra como no céu. O pão nosso de cada dia nos dá hoje. Perdoa-nos, as nossas ofensas assim como nós perdoamos aos que nos têm ofendido. E não nos deixes cair em tentação, mas livra-nos do mal.15

APPENDIX F: COMPARISON OF THE LORD'S PRAYER

Ancient Greek pater hemon ho en tois ouranois hagiastheto to onoma sou, eltheto he basileia sou, genetheto to thelema sou hos en ourano kai epi tes ges, ton artn hemon ton epiouision dos hemin semeron, kai aphes hemin ta tois opheiletais hemon, kai me eisenegkes hemas apo tou tonerou.16

Czech Náš Otče, který si v nebesích, nech sa posváti tvoje meno! Nech přijde tvoje království! nech sa stane tvoja vůle jako v nebi, tak aj na zemi. Daj nám dnes náš každodenný chléb a odpusť nám naše viny, jako aj my odpusť ame našim vinníkom, a neuvod' nás v pokušení, ale nás zbav zlého.17

As a striking contrast, a non-Indo-European language is included:

Finnish Isä meidän, joka olet taivaissa! Pyhitetty olkoon sinun nimesi, tulkkoon sinun valtakuntasi; tapahtukoon sinun tahtosi myös maan päällä niinkuin taivaassa; anna meille tänä päivänä meidän jokapäiväinen leipämme; ja ann meille meidän velkamme anteeksi, niinkuin mekin annamme anteeksi meidän velallisillemme; äläkä saata meitä kiusaukseen; vaan päästä meidät pahasta.18

Sources: see Endnotes 6-18.

APPENDIX I: ORIGINS OF DIFFERENT SOUND/LETTER CORRESPONDENCES
IN ENGLISH

One sound represented by several letter combinations (with linguistic source)- partial list of vowels

Sound	Letter Combination
/ə/	u (G) must, up iu (L) nasturtium
	io (F) question ia (F) martial, partial
	eo (F) pigeon y (Gk) ethyl
	iou (L) anxious ai (F) portrait
	eou (L) righteous ei (F) forfeit
/i/	i (G) pit is (F) chassis
	a (F) climate ois (F) chamois
	ia (F) marriage
/a/	o (G) off, mop augh (G) daughter
	a (G) walk, all ough (G) thought
	aw (G) saw, claw oa (G) broad
	au (F) cause, haul
/uw/	oo (F) too, boot ui (F) fruit
	ou (F) soup, troupe ue (F) clue, blue
	ew (G) new, curfew eu (F, Gk) pneumatic
/ey/	a (G) late, came aigh (G) straight
	ai (G) mail, wait eigh (G) eight
	ay (G) play, day et (F) ballet, bouquet
	ei (F) vein, feign ee (F) fiancée
/iy/	ee (G) seed, creep ei (F) ceiling, receive
	ea (G) steal, peak ie (F) field, relief
	y (G) story, friendly
/ör/	er (G, L) her, deter ear (G) pearl, learn
	or (G) work, worm our (F) courtesy
	ir (G) girl, whirl yr (Gk) myrrh

**APPENDIX I: ORIGINS OF DIFFERENT SOUND/LETTER CORRESPONDENCES
IN ENGLISH**

One sound represented by several letter combinations (with linguistic sources)- partial list of consonants

Sound	Letter Combination					
/t/	t	(G)	top, test	bt	(F)	debt, subtle
	th	(Gk)	thyme	pt	(F, Gk)	receipt, ptarmigan
/s/	s	(G)	see, pass	sc	(L)	ascent, science
	c	(F)	city, deceit	ps	(Gk)	psalm, psychic
/ʒ/	ge	(F)	beige, genre	z	(F)	azure
	s	(F)	leisure, lesion	t	(F)	equation
/n/	n	(G)	in, not	mn	(Gk)	mnemonic
	kn	(G)	knot, knee	pn	(Gk)	pneumonia
	gn	(F, G)	sign, gnaw	gne	(F)	champagne
/f/	f	(G)	if, foot	gh	(G)	laugh, cough
	ph	(Gk)	photo			
/k/	k	(G)	kiss, skirt	q	(F)	quit, queen
	ck	(G, F)	sick, jacket	que	(F)	clique
	c	(G, F)	cat, cable	cq	(L, F)	acquire, lacquer
	ch	(Gk)	chorus	kh	(Per)	khaki
/g/	g	(G)	goose, gate	gue	(F)	rogue, league
	gu	(F)	guard	gh	(L, Gk)	ghost, ghoulish
/ʃ/	sh	(G)	shoe, ship	ci	(F)	coercion
	ch	(F)	machine, cache	si	(F)	tension
	s	(F)	sugar, sure	ti	(F)	appreciation

**APPENDIX I: ORIGINS OF DIFFERENT SOUND/LETTER CORRESPONDENCES
IN ENGLISH**

One letter/letter combination representing several sounds (with linguistic sources)- partial list

Letters	Sounds		Letters	Sounds	
c	/k/	(G, F)	ough	/o/	(G) dough, though
	/s/	(F)		/ɔ/	(G) fought
	/ç/	(It)		/uw/	(G) through
ch	/ç/	(G)	/əf/	(G) enough, tough	
	/s/	(F)	/ɔf/	(G) cough, trough	
	/k/	(Gk)			
g	/g/	(G)			
	/z/	(F)			
	/j/	(F)			

Source: Caleb Gattegno, Key for "The English Language Fidel"
(New York: Educational Solutions, 1977).

APPENDIX J: INTRODUCTORY LIST OF WORDS FROM LANGUAGE BRANCHES
OTHER THAN MAIN LINE OF ENGLISH DESCENT

<u>Aborigine</u> (Australia)	<u>Dutch</u>	<u>Indian</u>	<u>Malayan</u>
kangaroo	boss	beryl	bamboo
boomerang	bowsprit	camphor	
dingo	brandy	emerald	<u>Native American</u>
koala	coleslaw	ginger	chipmunk
vallaby	cruller	musk	hominny
wombat	duck(cloth)	opal	moccasin
billabong	gin	pepper	moose
dillybag	golf	rice	opossum
dinkum	knapsack	sandal	persimmon
	mart	sugar	potato
<u>African</u>	Santa Claus	safflower	raccoon
voodoo	uproar	catamaran	skunk
hoodoo	wagon	curry	tomato
goober		mango	wigwam
cooter	<u>Eskimo</u>	pagoda	squash
	igloo	veranda	hickory
<u>Arabic</u>	<u>Italian</u>	mandarin	tamarack
alcohol	balcony	monsoon	pecan
alcove	brigade	calico	papoose
algebra	cavalry	chintz	succotash
alkali	cello	jute	chocolate
cipher	colonel	seersucker	
cork	duet	dungaree	<u>Persian</u>
magazine	granite	bungalow	check
sofa	infantry	punch	checkers
so long	miniature	toddy	chess
zenith	model	sari	divan
zero	opera	bangles	jasmine
	piano	hashish	khaki
<u>Celtic</u>	sonnet	cheetah	lemon
bin	umbrella	mongoose	lilac
crag	volcano	pundit	paradise
curse		sahib	shawl
dun		pariah	spinach
ass		coolie	
whisky		cash	<u>Yiddish</u>
clan		loot	schlemiel
shillelagh		tattoo	chutzpah
brogue		pajamas	schmaltz
bog		shampoo	
bard		guru	
place names		karma	
and rivers,		nirvana	
e.g. Thames		yoga	

Source: Barnett, The Treasure of Our Tongue

APPENDIX K: GERMANIC SOUND CHANGES AND SPELLINGS

First Germanic Consonant Shift: Proto-Indo-European > Germanic

Proto I.E. (Latin examples)	>	Germanic
p pater	>	f E father, G Vater, N far
t mater	>	th E mother, OHG muother
k cordis	>	h E heart, G Herz, N hjerte
b labium	>	p E lip, G Lippe, N leppe
d duo	>	t E two, N to, Sw två
g genu	>	k E knee, G knie, N kne

Second Germanic Consonant Shift: Germanic > German
(th>d/t also Norwegian, Swedish, Danish)

Germanic	>	German
f/v E over, N over	>	b (between vowels) G über
th E think	>	d/t G denken, N tenke
E weather	>	G Wetter, Sw väder
p E apple, N eple	>	pf/f G Apfel
E pepper, N pepper	>	G Pfeffer
t E two, N to, Sw två	>	z G zwei
E water, N vatn	>	ss (after vowels) G Wasser
d E deep, N dyp	>	t G tief
s E snore, N snorke	>	sch (before l, m, n) G schnarchen
E smear, N smøre	>	G schmieren
E sly, N slu	>	G schlau

Typically Germanic Spellings (with cognates):

- sh - sheep, shield, ship
(G Schaf, Schild, Schiff; N skilt, skip)
- sk - skin, skirt, sky, ski
(N skinn, skjørt, sky, ski)
- th - thaw, thin, thanks, thief
(G auftauen, dünn, Dank, Dieb; N to, tynn, takk, tyv)
- gh - laughter, light, through, tight
(G Gelächter, Licht, durch, dicht; N latter, lys, tett)
- w - ware, wasp, wash
(G Ware, Wespe, waschen; N vare, vespe, vaske)

Sources: Peters, Linguistic History of English, p. 48 and
Bodmer, Loom of Language, p. 221, 226.

APPENDIX L: NATIVE GRAMMATICAL ELEMENTS

Pronouns: I, you, he, she, it, we, they; me, him, her, us, them; my, your, his, her, its, our, their; mine, yours, hers, his, ours, theirs; myself, yourself, himself, herself, ourselves, yourselves, themselves; this, that, these, those; who, whom, whose, that, which, what, how, why, when; nobody/-one, anybody/-one, everybody/-one, somebody/-one

Articles: a, an; the

Auxiliaries/Modals: have, be; may, can, shall, will, must; might, could, should, would

Strong verbs(vowel change): e.g. sing-sang-sung; come-came-come; teach-taught-taught; find-found-found; ride-rode-ridden; fly-flew-flown; see-saw-seen

Prepositions: about, above, across, after, against, along, around, at, before, below, beside, between, beyond, by, down, for, from, in, inside, instead of, into, near, of off, on, onto, out of, outside, over, past, since, through, till, to, towards, under, until, up, with, without

Conjunctions: e.g. (al)though, and, as, both...and, but, else, however, (n)either...(n)or, nevertheless, nonetheless, nor, or, so, still, than, that, therefore, when(ever), whereas, where(ver), whether...or, while, yet

Adverbs of time/place: e.g. ago, already, always, everywhere, here, lately, never, now, often, seldom, sometimes, soon, then, there, today, tomorrow, twice, yesterday

Numerals: e.g. one, two, three, four, five, six, seven, eight, nine, ten, twenty to 999,999; first, third, fourth, etc. (not second)

APPENDIX M: GERMANIC AFFIXES WITH EXAMPLES

PREFIX	MEANING	EXAMPLES
a	in, on, at, back	afire, alight, arise, ago, alive, aboard, ashore, asleep
be	make, take away, affect	before, belong, behead, become, behave, bedraggled, belated
for	not, from	forbid, forlorn
fore	before, toward	foretell, forward
forth		forthcoming
mis	wrong	mistake, misdemeanor
out	beyond, more than	outshine, outstanding, outward
to	the, this	today, tomorrow
un	not, undo	unjust, uncouth, unlikely
with	from, against	withdraw, withhold, withstand

SUFFIX	MEANING	EXAMPLES
ar	one who, that which	beggar, liar
ard		haggard, bastard
er		farmer, lawyer, heater
ster		youngster, jokester
d	did	freed, made, said
ed		laughed, walked, cried
dom	subject to, state of	kingdom, fiefdom, martyrdom
el	small, little	satchel
en	make, made of	deepen, lessen, wooden
	diminutive, feminine of	kitten, maiden, vixen
er	greater than	bigger, brighter, livelier
est	most	greatest, meanest, shadiest
fast	firm	steadfast
fold	times	manifold, twofold
ful	full of	beautiful, careful
hood	state of	motherhood, neighborhood
head		godhead, maidenhead
ing	continuing	making, hoping
ish	quality of	selfish, reddish
kin	diminutive	lambkin, bumpkin
less	without	hopeless, faultless, heartless
let	diminutive	eyelet
ling	diminutive	duckling, inkling, gosling
ly	like, as	friendly, lovely, quickly
ness	state of being	sadness, ripeness, helpfulness
ock	diminutive	hillock, bullock
ship	state, form, condition	lordship, hardship, worship
scape		landscape
some	somewhat	lonesome, wholesome
teen	and ten	fourteen, teenager
tide	time, to happen	eventide
ty	times ten	sixty
ward	direction	toward, upward, eastward
wise	manner of, direction of	likewise, otherwise
y	full of, made of	honesty, doughy, sorry, sunny

APPENDIX M: GERMANIC AFFIXES WITH EXAMPLES

English-Germanic Affix Comparison

English	Norwegian	Swedish	Danish	Dutch	German
be-	be-	be-	be-	be-	be-
-er	-er	-are	-er	-er-	-er
-dom	-dom	-dom	-dom	-dom	-tum
for-	for-	för-	for-	ver-	ver-
fore	fore-	före-	fore-	voor-	vor-
-ful	-full	-full	-fuld	-vol	-voll
-hood/head	-het	-het	-hed	-heid	-heit
-ing	-ing	-ing	-ing	-ing	-ung
-ish	-isk	-isk	-isk	-isch	-isch
-less	-løs/laus	-lös	-løs	-loos	-los
-ling	-ling	-ling	-ling	-ling	-ling
-ly	-lig	-lik	-lig	-lijk	-lich
mis-	mis-	miss-	mis-	mis-	miss-
-ness	---	---	---	-nis	-nis
-ship/ -scape	-skap	-skap	-skab	-schap	-schaft
-some	-som	-sam	-som	-zaam	-sam
un-	u-	o-	u-	on-	un-
-ward	---	---	---	-waarts	-warts
-wise	-vis	-vis	-vis	-wijze	-weise
-y	-ig	-ik	-ig	-ig	-ich/ig

Sources: Bell, An Orthoepy and Orthography, p. 48-49, 52-53
and Bodmer, Loom of Language, p 269.

APPENDIX N: LATIN PREFIXES, SUFFIXES AND ROOTS

LATIN PREFIXES

<u>Prefix</u>	<u>Meaning</u>	<u>Examples</u>
ab	from, away	absent, abduct
a		avert
ad	to, at	adapt, adequate
a		agree
a + assimilation		accept, affluent, allay, announce, arrogant, assimilate, attend
ambi	around, both	ambiguous, ambidextrous, ambiance
am		amputate
ante	before	antedate
anti		anticipate
bene	well	beneficial, benefit
beni		benificent, benign
bi	two	bisect, biscuit, bicycle
circum	around, about	circumference, circumnavigate
circu		circuit, circulate
con	with, together	contract, concept
com		compound, computer
cog		cognate, cognizance
co		copilot, coexist
co + assimilation		colleague, connect, corrode
contra	against	contraband, contradict
contro		controversy
counter		counterbalance, counterpart
de	down, away from	deduct, decline, depart, define
demi	half	demigod, demitasse
dis	parting from, apart	disappear, disagree, disperse
di		divert, different, dimension
ex	out of, former	exit, ex-wife, expatriate
ef		effect, efficiency
e		elect, eject
extra	beyond	extraordinary, extraneous
in(vbs)	in, into, on	investigate, inform, inquire
im		impale, impair, improve
in(adj, nouns)	not	injustice, infamous
im		impossible, impotent
i + assimilation		illegal, irregular, ignoble
inter	between	interstate, interrogate
intel		intelligent, intellect
intro	within, into	introduction, introspection
intra		intravenous
juxta	near	juxtaposition
male	ill, bad	malevolent
mal		malpractice, malicious
non	not	nonsense, noncommittal
ne		negate, negative

APPENDIX N: LATIN PREFIXES, SUFFIXES AND ROOTS

Latin Prefixes

<u>Prefix</u>	<u>Meaning</u>	<u>Examples</u>
ob	against	obstruct, obscene, obstinate
o		omit
o + assimilation		occasion, offend, oppose
omni	all	omnipresent, omniscient
pen	almost	peninsula, penultimate
per	through	permanent, perspire, permeate
plen	full	plenary, plenty
post	after	postpone, postdated
pre	before	previous, prenatal, present
pro	for, forward	procrastinate, propeller
re	back, again	renew, return, relax, repeat
retro	backward	retroactive, retrograde
se	aside, apart	seclude, segregate
semi	half	semi-solid, semi-conscious
sub	under, after	submit, submarine, subconscious
sus		sustain, suspend, suspect
su + assimilation		succumb, suffer, suggest, summon, support
super	over, above, beyond	superhuman, superfluous, supersede, supervise
supra		suprasegmental
sur		surmount, surface, survive
trans	across	transport, translate, transmit
tra		traverse, traffic
ultra	beyond	ultraviolet
uni	one	unique, unicycle, unisex
vice	in place of	vice-president, viceroy

APPENDIX N: LATIN PREFIXES, SUFFIXES AND ROOTS

LATIN SUFFIXES

<u>Suffix</u>	<u>Meaning</u>	<u>Examples</u>
able	that may be	endurable, tolerable, potable
ible		feasible, possible, edible
ble		soluble
acious	having the quality of	fallacious
aceous		herbaceous, crustaceous
acy	condition	supremacy, diplomacy
age	condition	bondage, brokerage, leverage
al	relating to, act of	personal, colonial
an	relating to, one who	African, Mohican
ance	state of, quality of	endurance, repentance
ancy		discrepancy
ant	being, one who	militant, blatant
ar	relating to, one who	muscular
er		publisher, commissioner
or		counselor, doctor, conductor
ary	relating to, place where	apiary, planetary, stationary
ery		cemetery, monastery, grocery, brewery, stationery, bakery
ate	agent, quality, cause	carbonate, collegiate, appropriate
cle	small	vehicle, follicle
cule		molecule, miniscule
ee	one to whom	employee, lessee, addressee
eer	one who	mountaineer
ier		financier
ence	state of, quality of	prominence, permanence
ency		potency, clemency
ent	being, one who	agent, dependent,
escence	state of, becoming	adolescence, luminescence
escent	becoming	crescent
ess	female	lioness, actress, waitress
ette	diminutive	marionette
ferous	bearing	vociferous
fic	causing	terrific
fice	something made	orifice, edifice, sacrifice
fy	make	rectify, justify, stupefy
ice	that which	notice
id	being	florid, lucid, humid
ile	relating to, apt for	infantile, docile, servile
ine	relating to, like	canine, supine

APPENDIX N: LATIN PREFIXES, SUFFIXES AND ROOTS

Latin Suffixes

<u>Suffix</u>	<u>Meaning</u>	<u>Examples</u>
ion	act of, state of being	expulsion, dominion, relation
ish	make	publish, polish, finish
ite	one who is, being	favorite, definite
ity	state/quality of being	security, equity, quantity
ty	being	liberty, honesty
ive	one who is, having power or quality	captive, cohesive, active
ment	state of being, that which	atonement, testament
mony	state of, that which	matrimony, harmony
ory	place where, that which	memory, promontory
ous	full of, abound-	nervous, superfluous
ose	ing in	verbose, fructose
tude	condition/quality of	solitude, aptitude
ule	minute, tiny	globule, ovule
ulent	abounding in	corpulent, succulent
ure	act/state of, that which	pleasure, measure, tenure

APPENDIX N: LATIN PREFIXES, SUFFIXES AND ROOTS

LATIN ROOTS

<u>Latin Source</u>	<u>Eng. Roots</u>	<u>Meaning</u>	<u>Examples</u>
acer	ac acer	sharp	acid acrid, acerbic
aequus	equ iqu	equal, just	equality, equanimity iniquity
anima, animus agere	anim ag act	life, soul, mind move, do, drive, set in motion	animated, animal agitate, agile, agent act, actor, transaction
annus	ann enn	yearly	annual, anniversary biennial, perennial
audire cadere	audi cad cid	hear fall	audible, audience, audio decadent deciduous
caedere	cid	cut off, kill	suicidal
capere	cide cap(t) cept cip ceive ceit	take, seize, grasp	decide, homicide capable, capture intercept, exception recipient receive, deceive conceit, receipt
caput cedere	capit ced(e) cess cease	head yield, move, go	capitulate, capital cede, succeed, recede recess, concession cease, deceased
civis, civitatis clamare	civ cit clam claim	state, citizen, city cry out	civilization, civil, civic citizen, city exclamation, clamor claim, proclaim
claudere	clude clus	close, shut	preclude, exclude inclusion, seclusion
corpus	corpor corp	body	corporal, corporation corps, corpse, corpulent
credere	cred cree(d)	believe	incredible, credit decree, creed
currere	cur curs course	run	occur, current cursive, excursion course, recourse
dicere dignus ducere	dict dign duc duct	say worthy lead, take, draw	dictation, dictionary dignity, dignified reduce, producer aqueduct, duct, conduct
facere	fac fic fect fy feat feas	do, make	fact, deface, facsimile classification, efficient defect, perfect deify, simplify feat, defeat feasible
felix	felic	happy	felicitations

APPENDIX N: LATIN PREFIXES, SUFFIXES AND ROOTS

Latin Roots

<u>Latin Source</u>	<u>Eng. Roots</u>	<u>Meaning</u>	<u>Examples</u>
ferre, latus	fer lat	bear, carry	ferry, transfer, offer translate, elation
flectere	flect flex	bend	reflect, inflection flex, flexible, reflex
fluere	flu fluc flux	flow	influence fluctuation influx
forma	form	shape	form, reform, formation
frangere	fract fring	break	fracture, infraction infringe
fundere	fus(e) fund	pour	infusion, fuse, confuse refund, fund
gradi	grad gress	step, walk	graduate, grade progress, aggression
haerere	hes her	stick	adhesive adhere, coherent
ire	it	go	exit, itinerary
jungere	unct join jug	join, unite, connect yoke	junction, conjunction joint, join, rejoinder conjugal, jugular
litera	liter	letter	literature, literal
magnus	magn	great	magnify, magnitude
manus	man	hand	manual, manipulate
mergere	merg mers	plunge, dip	merge, emerge, submerge immerse
migrare	migr	wander	migration, immigrant
mittere	mit miss	send, let go	permit, admittance mission, missile
mors	mort	death	mortal, mortuary
mutare	mut	change, move	mutation, commute
pars	part	part	part, partition, particle
pes	ped	foot	pedestrian, pedicure
plicare	plic pli	fold	complicated, implicate pliable, compliant
ponere	pon pos pound	put, place	component, postpone deposit, oppose, position compound
portare	port	carry	portable, import, portfolio
rumpere	rupt	break	interrupt, corruption
scandere	scend scent	climb	ascend, descend ascent, descent
scribere	scrib script	write	scribe, scribble, describe script, transcript
secare	sect	cut	section, intersect
sedere	sed sess sid sedat	sit	sedentary, sediment session, assess, obsession president, residue sedate, sedative
		calm, bring to rest	

APPENDIX N: LATIN PREFIXES, SUFFIXES AND ROOTS

Latin Roots

<u>Latin Source</u>	<u>Eng. Roots</u>	<u>Meaning</u>	<u>Examples</u>
sentire	sens sent	feel, think	sensitive, sensible consent, sentiment
sequi	sequ secut suit sue	follow	sequel, subsequent consecutive, execute suitor, pursuit ensue, pursue, sue
servare	serv servat	save, keep, bind	preserve, serve conservative
signum	sign	sign	sign, signal, signature
similis	simil	like	similar, simile
spirare	spir	breathe, blow	inspire, respiratory
stare	sta stat statut stitut sist	stand cause to stand	stable, constant state, statue, status statute constitution, institute insist, resist, persist
tempus	temp	time	temporary, extemporaneous
tendere	tend tens	stretch	tendon tension, intense
tenere	ten tent tin tain	hold	tenable, tenure content, detention continent, pertinent container, maintain
trahere	tra tract	draw, pull	train, trailer attract, contract
tribuere	tribut	allot, give	tribute, tributary
venire	ven vent	come	intervene, avenue adventure, event
verbum	verb	word	verb, verbal, verbose
vertere	vert vers	turn	convert, vertical verse, inversion
vincere	vinc vict	conquer	invincible, convince victory, evict
vivere	viv vit	live	vivid, vivisection vitality, vital
vocare	voc	call	vocal, vocation
volvere	volv volu	roll, turn around	revolve, evolve, involve revolution, convoluted

Sources: Bell, An Orthoepy and Orthography, p. 49-57; Smelt, Speak, Spell and Read English, p. 142 and Monson, "An Introduction to Word Analysis", p. 183-187.

APPENDIX O: GREEK PREFIXES, SUFFIXES AND ROOTS

GREEK PREFIXES

<u>Prefix</u>	<u>Meaning</u>	<u>Examples</u>
a	not, without	atom
an		anesthetic
amphi	around, both	amphitheater, amphibian
ana	up, again, throughout	analogy, anabaptist, anachronism
anti		antithesis, antiseptic, antiwar
ant	against	antagonist
apo	away, from	apothecary
auto	self	autogenic, autobiography
cata	down, by,	catacomb, catastrophe
cath		catharsis, catholic
deca	ten	decathlon
dia	through, across	diameter, diachronic
di	two, double	dichotomy, dioxide
dys	ill	dysentery, dyslexia
ec	out of, forth	eclectic, ecstasy
ex		exodus
en	in	engrave, endemic
em		emphasis
el		ellipsis
epi	on	epitomy, epitaph, epidemic
ep		ephemeral
eso	within	esoteric
eu	well, good	euphemism, euthanasia
ev		evangelist
hemi	half	hemisphere
hepta	seven	heptameter
hetero	different	heterosexual, heterogeneous
hexa	six	hexagonal
homo	same, similar	homonym, homogenized, homosexual
hyper	above, over&beyond	hyperactive, hyperventilate
hypo	below	hypothesis, hypoglycemia
iso	equal	isosceles, isotherm
macro	long, large	macrobiotic
meta	beyond, trans- ference	metaphysical, metamorphosis
micro	small	microscope, microcosm
mono	alone, single	monogamy, monologue
neo	new	neon, neolithic
octo	eight	octopus
oct		octagonal
ortho	right, straight	orthodontist, orthography
paleo	old	paleographic
pan	all	pantheism, Pan American
para	beside, near	paralegal, paradox
penta	five	pentagon
peri	around	perimeter, periphrastic
poly	much, many	polygamy, polygon
pro	before	prophet, prologue

APPENDIX O: GREEK PREFIXES, SUFFIXES AND ROOTS

Greek Prefixes

<u>Prefix</u>	<u>Meaning</u>	<u>Examples</u>
pros	to	proselytize
proto	first	protocol, prototype, protoplasm
pseudo	false	pseudonym, pseudoreligion
syn	with, together	synthesis, synagogue, synergy
sym		symbol, symphony, symptom
syl		syllable, syllogism
sy		system, systemic
tri	three	tricycle, tripod, trigonometry

GREEK SUFFIXES

<u>Suffix</u>	<u>Meaning</u>	<u>Examples</u>
ac	relating to, resembling	cardiac, maniac
ic(s)	science of, one who	dialectic, phonics, comic
ical	relating to	comical, logical
ism	state of, act of	socialism, heroism, Confucianism
ist	one skilled in	artist, botanist
ize	render, make	criticize, civilize, finalize
ise		supervise
yze		analyze

APPENDIX O: GREEK PREFIXES, SUFFIXES AND ROOTS

GREEK ROOTS

<u>Greek Source</u>	<u>Meaning</u>	<u>Examples</u>
aer	air	aerobics, airplane, aerial
agoge	training	pedagogical, demagogue
agon	contest	protagonist, antagonism
agros	field	agriculture
andros	male	androgynous
anthropos	human being	anthropology, philanthropist
arch	beginning, origin	archaic, archetype
archon	ruler	monarchy, patriarch, anarchy
aristos	best	aristocratic
arithmos	number	arithmetic
aster	star	astrology, astronomy, asteroid
atmos	vapor	atmosphere
ballo	throw	ball, ballistic
biblos	book	bibliography, bible
bios	life	biology, biographer
chloros	green	chlorine, chlorophyll
chroma	color	Kodachrome, chromosome
chronos	time	synchronize, chronological
cineo	move	cinema, kinetic
cline	bed	clinic, recline
cosmos	world	cosmic, cosmos, microcosm
crateo	govern	technocrat, democracy
crites	judge	critic, criticism
cyclos	circle	cycle, cyclone, tricycle
demos	people	democracy, epidemic
derma	skin	dermatologist, epidermis
diskos	dish	discus, disc, discotheque
doxa	opinion	orthodox, doxology
dromos	race, running	velodrome, dromedary
dynamos	power	dynamic, dynamite
epos	speech	epic
eros	love	erotic
gala, galaktos	milk	galaxy, lactic, lactation
gameo	marry	gamete, monogamous
ge	earth	geography, geologist
genesis, genete	origin, birth	genesis, genetic
genos	kind, race, offspring	genealogy, photogenic
gnosis	knowledge	agnostic, diagnostic
gonia	angle	polygon, trigonometry
gramma	letter	telegram, grammar
grapho	write	graphic, calligraphy
gyne, gynaecos	woman	androgynous, gynecology
hekaton	hundred	hectogram
historia	narrative, research	history, story
holos	whole	holistic, hologram
homos	similar	homonym, homogenous

APPENDIX O: GREEK PREFIXES, SUFFIXES AND ROOTS

Greek Roots

<u>Greek Source</u>	<u>Meaning</u>	<u>Examples</u>
hora	hour	horoscope
hydor	water	hydrogen, hydrophobia
hygia	health	hygiene
iris	rainbow	iris, iridescent
kilioi	thousand	kilogram, kilocalorie
laos	people	lay, laity
lithos	stone	monolith, lithograph
logos	word, reasoning	eulogy, dialogue, apology
mania	frenzy	maniac, mania, kleptomania
mater	mother	matriarch
megas	big	megaphone
melanos	black	melancholy
metreo	measure	metric, meter, thermometer
mimesis	imitation	pantomime, mimicry
morphe	shape, form	amorphous, metamorphosis
mysterion	secret, sacrament	mysterious, mystic
nausia	seasickness	nauseous, nauseating
nautes	sailor	nautical, aeronautics
nomos	law, custom	astronomy, autonomous
odos	way, journey	period, anode, ode
oikonomos	steward	economy, economics
oikos	house	ecology
onoma	name	onomatopoeia, anonymous
organon	tool, instrument	organ, organic
paidos	child	pedagogical, pediatrician
papyros	paper	paper, papyrus
pater	father	patriarch
pathos	suffering, passion	sympathy, pathological
phallos	penis	phallic
phantasia	appearance, imagination	fantasy, fancy, phantom
pharmakon	drug	pharmacy, pharmacology
phileo	love	philosophy, philharmonic
phobos, phobeo	fear, frighten	phobia, acrophobia
phone	sound, voice	telephone, cacophony
photos	light	photography, telephoto
physis	nature	physical, physics, physique
plastos	modeled	plastic, chloroplast
platys	flat	plate, platitude
pleos	full	plethora, pleopod
pneuma	lungs, breath	pneumonia, pneumatic
poeo	create, compose	poetry, poem, onomatopoeic
podos, pous	foot	podium, tripod
polemos	war	polemic

APPENDIX O: GREEK PREFIXES, SUFFIXES AND ROOTS

Greek Roots

<u>Greek Source</u>	<u>Meaning</u>	<u>Examples</u>
polis	city, state	metropolis, policy, police
polites	citizen	politics
psyche	mind, soul	psychic, psychology
pyr	fire	pyromaniac, pyre, pyrex
schema	plan	scheme, schematic
schizo	split	schism, schizophrenic
schola	school	scholar, scholastic
scopeo	look at	telescopic, microscope
sema	sign, symbol	semantics
sophia	wisdom	philosophy, sophomore
sphaera	sphere, globe	spherical, stratosphere
stasis	posture, standing still	ecstasy, static, apostasy
strophe	twist	apostrophe, catastrophe
tele	afar	telescope, television
techne	art	technical, technique
theke	box	discotheque
theoria	reflection, contemplation	theory, theoretical
theos	god	polytheism, theology
therapeia	attendance, care	therapy, therapeutic
thermos	hot	thermal, thermos
thesis	arrangement, order	thesis, parenthesis
tonys	stretching	tone, tonic, tonal
topos	place	topography, topic
typos	model, impression	type, typewriter, stereotype, typical
zyme	yeast	enzyme

Sources: Bell, Orthoepy and Orthography, p. 49-57; Smelt, Speak, Spell and Read English, p. 142 and Monson, "An Introduction to Word Analysis", p. 183-187.

APPENDIX P: SOUND AND SPELLING INDICATORS OF FRENCH ORIGIN

Sounds (with spellings) that give clues to French origin:

/š/	spelled	-ch-	as in	nonchalant, cheri, chaperone
	"	-ti-	"	action, potential
/sk/	"	-sc-	"	scale
/ž/	"	-si-	"	vision
	"	-s- before u	"	leisure, treasure
	"	-ge-	"	garage, prestige, genre
/j/	"	-j-	"	jam, juice, joy, jacket
	"	-g- before e+i	"	gentle, gem, message
/ɔy/	"	-oi-	"	boil, moisture
/uw/	"	-ou-	"	soup, tour
/č/	"	-ch- before a	"	challenge, change
/k/	"	-q-	"	quarter, question
	"	-que-	"	brusque, critique
/silent/	"	-s- in final pos.	"	debris, chamois
	"	-t- in final pos.	"	ballet, croquet
end stress in	polysyllabic words	"	"	saloon, campaign, elite

Suffixes: see the Latin and Greek suffix lists (Appendices N and O) for English examples.

able	F able	fy	F fier
ade	F ade	gue	F gue
al	F ale	ic	F ique < Gk ikos
ance	F ance	ish	F ier, ire
ary	F aire	ism	F isme < Gk ismos
ee	F é	ize	F iser
ery	F ier	ment	F ment
esque	F e(s)que	ose	F ose
	< G isch	our	F eux, euse
ess	F ette	ion	F ion < L ione

Sources: Bennett, The Treasure of Our Tongue, p. 144-145 and Bodmer, Loom of Language, p. 233.

APPENDIX Q: DOUBLETS FROM FRENCH

French Doublets: these include words with a common source stemming from different time periods and French dialects.

Older (anglicized)	Time		Dialect	
	Newer (French pronun.)	Norman (conquest)	Central (Parisian)	
chair	chaise	cap	chaplet	
satchel	sachet	catch	chase	
chaplet	chapeau	case(box)	enchase	
damsel	mademoiselle	cant(jargon)	chant	
rout	route	market	merchant	
crotchet	crochet	caldron	chaldron	
moral	morale	castle	chateau	
negligent	negligee	cattle	chattel	
critic	critique	reward	regard	
gender	genre	warden	guardian	
liquor	liqueur	warrior	guerrilla	
tablet	tableau	wile	guile	
		wicket	guise	

Latin/French Doublets: in the list below, one word comes to us directly from Latin and one from Latin via French. The words coming to us via French are usually more contracted than their Latin counterparts; this contraction has frequently resulted in a diphthong where the Latin derivative retains its consonants.

via French	direct Latin	Latin original
conceit	concept	conceptu
deceit	deception	deceptio
constraint	constriction	constrictione
dainty	dignity	dignitate
frail	fragile	fragili
strait	strict	stricto
trait	tract	tractu
defeat	defect	defecto
feat	fact	facto
treason	tradition	traditione
couch	collocate	collocare
count	compute	computare
coy	quiet	quieto
loyal	legal	legali
mayor	major	majore
royal	regal	regali
penance	penitence	poenitentia
poor	pauper	pauperi
rule	regulate	regulare
sir	senior	seniore
sure	secure	seculo

Sources: Algeo, Problems in the Origins..., p. 268-269 and Bodmer, Loom of Language, p. 233.

**APPENDIX R: STARTER LIST OF FRENCH VOCABULARY CONTRIBUTIONS
BY TOPIC**

CHURCH: preach, pray, prayer, relic, friar, clergy, parish, baptism, sacrifice, homily, honor, glory, chaplain, procession, nativity, cell, miracle, charity, archangel, religion, service, trinity, saviour, virgin, sermon, virtue, vice, evangelist, passion, paradise, sacrament, saint, chaste, covet, desire, pity, discipline

GOVERNMENT: court, crown, council, counsel, empress, legate, govern, reign, realm, sovereign, country, power, minister, chancellor, authority, parliament, exchequer, people, nation, fief, feudal, vassel, liege, peer, baron, viscount, marquis, duke, prince (but not king, queen or knight), sergeant, lieutenant, captain, major

LAW: just, justice, judge, jury, suit, sue, plaintiff, defendant, plea, plead, summon, cause, assize, session, attorney, accuse, crime, felony, traitor, damage, dower, heritage, property, real estate, tenure, penalty, injury, case, marry, marriage, oust, prove, false, heir, defend, prison, robber, rich, poor, poverty, money, interest, rent

ART AND ARCHITECTURE: art, beauty, color, image, design, figure, ornament, paint, arch, tower, pillar, vault, porch, column, aisle, choir, transept, abbey, cloister, palace, castle, manor, mansion

PLEASURES: pleasure, joy, delight, ease, comfort, flower, fruit, falcon, quarry, scent, chase, leisure, sport, cards, dice, ace, deuce, partner, suit, trump

COOKING: cuisine, sauce, boil, fry, roast, pastry, soup, sausage, jelly, dainty, feast, viand, chef, dinner, supper, dine, beef, veal, pork, mutton, bacon, venison, menu, hors d'oeuvres, appetite

Source: Barnett, Treasure of Our Tongue, p. 132-133.

APPENDIX S: -GH- WORDS WITH GERMANIC COGNATES

ModEnglish	Mid Eng	Old Eng	German	Norwegian	Dutch
might	might	meaht, miht	Macht	makt	magt
nigh	n(e)igh	neah, nēh	nah/nach	naer/na	na
night	ni(g)ht	neaht, niht	Nacht	natt	nacht
knight	knight, cniht	cniht, cneocht	Knecht	knekt	knecht
fight	fight, feht	feoht	fechten	fekte	vechten
right	ri(g)ht	riht	Recht/ richtig	rett/ riktig	regt
sight	si(g)ht	gesiht	(Ge)sicht	sikt	(ge)ziht
light	liht	léoht	Licht/ leicht	lys/ lett	licht
tight	tight, thiht	---	dicht	tett	dicht
slight	slizt, sleght	---	schlicht	slett	slecht
plight	pliht	pliht	Pflicht/ pflegen	plikt/ pleie	plicht
blight (bleak)	?blechen	blāēcan	bleich	ble(i)k	bleek
high	high, hegh	héah	hoch	høy/høg	hoog
flight	fliht, fluht	fliht, flyht	Flucht/ Flug	flukt/ flyging	vlucht
fright	frigt, freyht	fyrhto	Furcht	frykt	vrees
alight	alihten	ālīhtan	---	---	---
tonight	(see night)				
wright (work)	wri(g)hte	wyrhta	(Werk)	(verk)	(werk)
sigh	siken, sighen	sīcan	---	sukk	---
thigh	thi, pih	þéoh	---	---	dij, dije
freight	F fret	OHG frēht	Fracht	frakt	vracht
eight	eight	eahta	acht	átte	acht
neighbor	neighbor	néahgebūr	Nachbar	nabo	buur
neigh	neien	hnāēgan	---	knegge	---
sleigh	(slede)	---	(Schlitten)	(slede)	slee
weight	weght, wight	gewiht	Gewicht	vekt	gewigt
weigh	weien,	wegan	wägen	veie	wegen
height	height(h)e	híehdu, héahdu	Höhe	høyde/ høgd	hoogte
sleight (sly)	slei(g)hte	---	schlau	slu	---
straight	streizt	streht	gestreckt	(ut)strakt	---
inveigh	L invehere,	invectum			
laugh(ter)	laghen, lauhen	hl(i)ehhan	Gelächter	latter	gelach
slaughter	sla(u)ghter, slautir	sleahht, sliht	Schlacht	slakt	slacht
fraught	fra(u)ght	OHG frēht	Fracht	frakt	vracht

APPENDIX S: -GH- WORDS WITH GERMANIC COGNATES

ModEnglish	Mid Eng	Old Eng	German	Norwegian	Dutch
taught	ta(ug)hte	tāēhte, tāhte	zeigte	---	---
thought ought	þoght, þouht aughte, oughhte	geþoht āhte	gedacht eigen	--- eget/egen	gedachte eigen
dough yacht naught	dagh, dogh --- naught	dāh --- nawiht, nauht	Teig Jacht/Jagd ---	deig jakt ---	deeg jagt/jacht ---
daughter caught draught (draft)	do(u)ghter cacchen draught	dohter OF cachier dragan	Tochter --- tragen	datter --- drage	dochter --- dragen
sought fought nought wrought enough	souhte (see fight) nought (see wright) inoh, inow, enogh	--- --- nōwiht ---	(ge)sucht (ge)fochten nicht genug	søkt --- --- nok	gezoekt --- --- genoeg
through, thorough borough plough (plow) bough slough drought	thurgh, þur(u)h burgh, boru plou(h) bogh slo(u)gh droght, drougth	þurh burh, burg plōh bōg, bōh slōh, slōg drūgað	durch Burg Pflug Bug Schluck (ge)trock-	--- borg plog bog slukk (ut)torkt	door burg ploeg boog --- droog
sough furlough rough slough cough trough clough (cleft) hiccough	swo(u)gh --- rou, ru(g)h slughe, slouh co(u)ghen, couwen trough cloghe, clewch hiccup	swōgan --- ruh --- --- --- ?clōh ---	saugen Verlaub rauh Schlauch keuchen Trog ?Klinge ---	suge forlov rå --- --- trug kløft ---	zuigen verlof ruw --- kuchen --- ---

Source: Webster's New International Dictionary (Springfield: G. & C. Merriam Company, 1913), vols. 1 & 2.

APPENDIX T: PS-, PN-, MN-, KN-, GN-, -PH- WORD LIST
WITH SOURCES AND COGNATES

ENGLISH EXAMPLE

SOURCE/COGNATES

PS pseudo-	Gk <i>pseudes</i> (lying, false)
pseudonym	Gk <i>pseudes</i> + <i>onuma</i> (name)
psilanthropy	Gk <i>psilos</i> (bare, mere) + <i>anthropos</i> (man)
psilology	Gk <i>psilos</i> + <i>logos</i> (word, discourse)
psilosopher	Gk <i>psilos</i> + <i>sophos</i> (wise)
psoriasis	Gk <i>psora</i> (skin disease, itch) + <i>osis</i> (abnormal condition)
psyche	Gk <i>psyche</i> (soul, mind, understanding)
psychology	Gk <i>psyche</i> + <i>logos</i> (word, discourse)
psychiatry	Gk <i>psyche</i> + <i>iatreia</i> (healing)
psychic	Gk <i>psychē</i>
psychopath	Gk <i>psyche</i> + <i>pathos</i> (suffering, passion)
PN pneumatic	Gk <i>pneuma, pneumatos</i> (wind, air, breath, spirit)
pneumonia	Gk <i>pneumon</i> (lung) + <i>ia</i> (suffix denoting disease, among other things)
MN mnemonics	Gk <i>mnemon</i> (mindful, remembering, memory)
KN knack	Germ; G <i>knacken</i> (break), Dan <i>knage</i> (crack, crash), E <i>knock</i>
knapsack	D <i>knapzak</i> < <i>knappen</i> (eat) + <i>zak</i> (bag)
knave	ME (boy, servant) < AS <i>cnafa</i> (boy, youth); G <i>Knabe</i> (boy), D <i>knaap</i> , Icel <i>knapi</i>
knead	ME <i>knedan</i> < AS <i>cnedan</i> ; D <i>kneden</i> , G <i>kneten</i> , N <i>kna</i>
knee	ME <i>kne</i> < AS <i>cnéo(w)</i> ; G+D <i>Knie</i> , Icel+N <i>kne</i> , L <i>genu</i>
kneel	ME <i>knelen, cneolien</i> < AS <i>cnéowlian</i> ; D <i>knielen</i> , Dan <i>knaele</i>
knife	ME <i>knif</i> < AS <i>cnīf</i> ; D <i>knijf</i> , Icel <i>knifr</i> , N <i>kniv</i>
knight	ME <i>knight, cniht</i> < AS <i>cniht, cneht</i> (boy, youth, milit. follower); D+G <i>Knecht</i> , N <i>knekt</i>
knit	ME <i>knitten, knutten</i> < AS <i>cnyttan</i> ; Icel <i>knyta</i> , N <i>knytte</i>
knob	ME <i>knobbe</i> ; LG <i>knobbe</i> , N <i>knopp</i> , G <i>Knopf</i>
knock	ME <i>knokken</i> < AS <i>cnocian</i> ; Icel <i>knoka</i> (see <i>knack</i>)
knoll	AS <i>cnoll</i> ; G <i>Knolle</i> (clod, lump), Dan <i>knold</i>
knot	ME <i>knot(te)</i> < AS <i>cnotta</i> ; D <i>knot</i> , G <i>Knoten</i> , N <i>knute</i>
know	ME <i>knowen, knawen</i> < AS <i>cnāwan</i> ; Icel <i>knā</i> (be able), Russian <i>znat'</i> (know)
knowledge	ME <i>knowlege</i> ; L (g) <i>noscere</i> , Gk <i>gignoskein</i> ; see <i>know</i>
knuckle	ME <i>knokel, knokil</i> < AS ? <i>cnucel</i> ; D <i>knokkel, kneukel</i> , G <i>Knochel</i> , N <i>knocke</i>
knurl	ME <i>knorre</i> ; see <i>gnarl</i>

APPENDIX T: PS-, PN-, MN-, KN-, GN-, -PH- WORD LIST

ENGLISH EXAMPLE	SOURCE/COGNATES
GN gnarl	Germ; G knarren, D knorren, N knurre
gnash	ME gna(i)sten; Icel gnastan, gnīsta
gnat	AS gnāet
gnaw	ME gnawen < AS gnagan; D knagen, G nagen, N gnage
gneiss	G gneiss
gnome	F gnome < LL gnomus (fabled diminutive being inhabiting inner earth) < Gk gnome (aphorism)
gnostic	Gk gnosticos (gook at knowing, sagacious)
gnu	Kaffir nqu (q i sign for a click)
PH phallic	Gk phallos (penis)
phantom	Gk phantasma (apparition, mental image)
pharaoh	Gk pharao < Heb par'oh < Egy per-'o (great house)
pharmacy	Gk pharmakon (medicine)
phase	Gk phasis < phainein (make to appear)
pheasant	Gk phasianos (Phasian bird, pheasant) < phasi + ornis (bird)
phenomenon	Gk phainomenon < phainesthai (appear), phainein (show)
phil-	Gk philos (loving, fond of)
philosophy	Gk philos + sophos (wise)
philanthropist	Gk philos + anthropos (man)
-phile	Gk philos (loving)
bibliophile	Gk biblios (book) + philos
phlegm	Gk phlegma (flame, inflammation, mucus)
phobia	Gk phobos (fear, dislike)
claustrophobia	L claustrum (bar, bolt) + phobos
phon-	Gk phone (sound, voice)
phonograph	Gk phone + grapho (write)
headphone	E head + Gk phone
phonetic	Gk phonetos (be spoken) < phonein (produce a sound)
phosphate	Gk phosphoros (light bringer) < phos (light) + pherein (bring)
phosphorous	Gk (see phosphate)
photo-	Gk phos, photos (light)
photograph	Gk photos + grapho (write)
telephoto	Gk tele (far) + photos
phrase	Gk phrasis < phrazein (speak)
physician	Gk physikos (natural) < physis (nature)
physics	Gk (see physician)

Source: Webster's New International Dictionary, vols. 1 & 2.

APPENDIX U: -XC-, -CQ-, -CC- AND EX- WORD LIST WITH SOURCES

AC-C WORD	SOURCE
accede	L accedere < ad(to) + cedere(move, yield)
accelerate	L accelerare < ad + celerare(hasten)
acceleration	
accelerator	
accent	L accentus < ad + cantus(singing)
accentuate	
accept	L acceptare < ad + capere(take)
acceptable	
acceptance	
access	L accedere < ad + cedere(move, yield)
accessible	
accession	
accessory	
accident	L accidens <accidere(happen) <ad + cadere(fall)
accidental	
acclaim	L acclamare < ad + clamare(shout, cry out)
acclamation	
acclimate	L ad + climat(climate)
acclimatize	
accommodate	L accommodare < ad + commodare(make fit, help) < con(with) + modus(measure, proportion)
accommodation	
accommodating	
accompany	OF acompaignier < ad + LL compania(company)
accompaniment	
accompanist	
accomplice	L complex, complicitis < ad + complicare(fold together) < con + plicare(fold)
accomplish	L complere < ad + complere(fill up, complete)
accomplished	
accomplishment	
accord	LL accordare < ad + cor, cordis(heart)
accordance	
according to	
accordingly	
accordion	
accost	LL accostare(bring side by side) < ad + costa (rib, side)
account	OF acouter < L computare < ad + computare(count)
accountable	
accountant	
accounting	
accredit	F accréditer<L ad + credere(trust, loan, believe)
accredited	
accreditation	

APPENDIX U: -XC-, -CQ-, -CC- AND EX- WORD LIST WITH SOURCES

AC-C WORD	SOURCE
accrue	OF acreue < L ad + crescere(increase)
acculturation	L cultura < ad + cultura(culture)
accumulate	L accumulare < ad + cumulare(heap)
accumulation	
accumulative	
accuracy	L accurare < ad + curare(take care)
accurate	
accursed	AS acursian<a + cursien(curse-uncertain origin)
accuse	L accusare < ad + causa(cause, lawsuit)
accusation	
accusatory	
accusative	
accuser	
accustom	OF acustumer < L consuetudo < ad + con + suere (to be accustomed)
accustomed to	

AC-Q	SOURCE
acquaint	LL adcoignitare < L ad + cognoscere(know)
acquaintance	
acquainted	
acquiesce	L acquiescere < ad + quiescere(be quiet)
acquiescence	
acquire	L acquirere < ad + quaerere(seek, look for)
acquisition	
acquit	OF aquiter < L ad + quietare(calm, quiet)
acquittal	

APPENDIX U: -XC-, -CQ-, -CC- AND EX- WORD LIST

EX-C WORD	SOURCE
excavate	L excavare < ex(out, out of) + cavare(make hollow)
excavation	
exceed	L excedere < ex + cedere(go, pass)
exceedingly	
excel	L excellere < ex + celsus(pushes upward) < culmen(top, ridge)
excellence	
excellent	
except	L excipere < ex + capere(take)
exception	
exceptional	
excerpt	L excerpere < ex + carpere(pick, gather)
excess	L excedere < ex + cedere(go, pass)
excessive	
excise	DF assis(tax) < L excidere, ex + cidere(cut)
excite	L excitare < ex + citare(rouse, move rapidly)
excitable	
excitement	
exciting	
excommunicate	L excommunicare < ex + communicare(communicate) < communis(common)
excommunication	
excursion	L excurrere < ex + currere(run)
excuse	L excusare < ex + causa(cause, lawsuit)
excusable	

Below is a list of EX- words with no C because the roots do not begin with C.

EX + VOWEL	SOURCE
exacerbate	L exacerbare < ex(intens) + acerbare(irritate)
exact	L exactus < exigere < ex + agere(drive)
exactly	
exacting	
exaggerate	L exaggerare < ex + aggerare(heap up) < ad + gerere(bear, carry)
exaggeration	
exalt	L exaltare < ex(intens) + altus(high)
exalted	
exaltation	
examine	L examinare < exigere(weigh accurately) < ex + agere(drive)
exam(ination)	
examiner	
example	L exemplum < eximere < ex + emere(buy, take)
exemplary	
exemplify	

APPENDIX U: -XC-, CQ-, -CC- AND EX- WORD LIST

EX + VOWEL	SOURCE
execute	L executus < L exsequi < ex + sequi(follow)
executive	
execution	
exempt	L eximere < ex + emere(buy, take)
exemption	
exercise	L exercere(keep busy, drive out of an enclosure) < ex + arcere(shut up, enclose)
exert	L exserere(thrust out) < ex + serere(join, bind together)
exertion	
exhale	L exhalare < ex + halare(breathe)
exhalation	
exhaust	L exhaurire < ex + haurire(draw, esp. water)
exhaustion	
exhausted	
exhibit	L exhibere < ex + habere(have, hold)
exhibition	
exhilarate	L exhilarare < ex + hilarare(make merry)
exhilarated	
exhilaration	
exhortation	L exhortare < ex + hortare(incite, encourage)
exigency	L exigere < ex + agere(drive)
exile	L exsilium < ex + salire(leap, spring)
exist	L exsistere < ex + sistere(place, cause to stand)
existence	
existential	
exit	L exire < ex + ire(go)
exodus	Gk exodos < ex + odus(way, road)
exonerate	L exonerare < ex(from) + onerare(load)
exorbitant	L exorbitare < ex + orbita(track)
exorcist	Gk exorkizein < ex + orkizein(bind by oath)
exuberant	L exuberare < ex + uberare(be fruitful)
exuberance	
exude	L exsudare < ex + sudare(sweat)
exult	L exsultare(intens) < exsalire < ex + salire(leap)
exultant	
exultation	
eccentric	Gk ekkentros < ek + kentron(center)
eccentricity	

Source: Webster's New International Dictionary, vols. 1 & 2.

APPENDIX V: -EI- WORDS WITH SOURCES AND COGNATES

-EI- words pronounced /ey/.

ModEng	Old/MidEng	Latin/other	German/French	Norw/Ital	Dutch/Span
freight	ME fra(u)ght	---	G Fracht	N frakt	D vracht
eight	OE eahta	L octo	G acht	N åtte	D acht
neighbor	OE néahgebūr	---	G Nachbar	N nabo	D buur
neigh	OE hnaegan ME neien	Sw gnägga	---	N knegge	---
sleigh	ME (slede)	Ice (sledī)	G (Schlitten)	N (slede)	D slee
weight	OE gewiht ME weght	Ice vaett	G Gewicht	N vekt	D gewigt
weigh	OE vegan ME veien, veghen	---	G vägen	N veie	D wegen
reindeer	---	Ice hrein- dýri	G Renntier	N rein(sdyr)	---
their	OE þaera	Ice þeirra	---	N deres	---
rein	ME reyn, rene	---	F rêne OF regne, resne	---	---
reign	ME reyn, regne	L regnum	F règne	It regno	Sp reinado
deign	ME dei(g)nen	L dignari	OF re(i)gne F daignier OF deignier	---	---
feign	ME feinen	L fingere	F feignant	---	---
feint	ME feinen	L fingere	F feinte	---	---
vein	ME veine	L vena	F veine	It vena	Sp vena
veil	ME veile	L velum	F voile OF veile	It velo	Sp velo
surveillance	---	L vigilare	F surveiller	---	---
inveigh	---	L invehere, invectum	F invectiver	---	---
inveigle	---	LL abocolus	F aveugler	---	---
heir	ME heir, eir	L heres	F hoir heir, eir	It erede	Sp heredero
skein	ME skeyne	Ir sgainne	F écagne OF escaigne	---	---
heinous	ME heýnous	---	F haineux OF haýnos	---	---

-EI- words with irregular pronunciation.

Mod Eng	Old/MidEng	Latin/other	German/French	Norw/Ital	Dutch
seize	ME seisen	L sacire	F saisir OF seisir	---	---
leisure	ME leiser(e)	L licere	F loisir OF leisir	---	---
forfeit	ME forfet	LL foris- factum	F forfait	---	---
counterfeit	---	---	F contrefait	It contra- fatto	---

APPENDIX V: -EI- WORDS WITH COGNATES

either	OE $\bar{a}eg$ (vae) $\acute{d}er$ ---		G $entv\ddot{e}der$	N $enten$	---
	ME $either, aither$				
neither	OE $n\ddot{o}hva\ddot{e}der, n\ddot{o}w\ddot{d}er$		G $v\ddot{e}der$	N $hverken$	---
	ME $neither, no(u)ther$				
height	OE $h\ddot{i}eh\ddot{u}, h\acute{e}(a)h\ddot{u}$		G $H\ddot{o}he$	N $h\ddot{o}yde$	D $hoogte$
	ME $heght, height(h)e$				
sleight	ME $sleighte, Ice slaegd$		---	---	---
	$slegh\ddot{e}$				
weird	OE $wyrd$ Ice $ur\ddot{d}r$		G $(v\ddot{e}rden)$	N $(v\ddot{a}ere)$	D $(v\ddot{orden})$
	ME $wirde, werde$				
seismic	---	Gk $seism\acute{o}s$	---	---	---

APPENDIX W: ANNOTATED LIST OF SOME ETYMOLOGICAL DICTIONARIES

This list of dictionaries was compiled by visiting several public high schools and reviewing the dictionaries on hand. This method was used in order to provide references typically available and easily obtainable.

American Heritage Dictionary of the English Language.

Boston: Houghton Mifflin Company, 1976.

Provides a clear and complete breakdown of words following the definitions.

Etymological Dictionary of Modern English. 2 vols. New York: Dover Publications, Inc., 1967.

A good resource specifically for etymologies, as more expanded word backgrounds are provided; Greek sources are in Greek script.

Funk and Wagnalls Standard Dictionary of the English Language with Britannica World Language Dictionary. 3 vols. New York: Funk and Wagnalls Company, 1958.

Good, clear etymological listings following the definitions.

Oxford Dictionary of English Etymology. New York: Oxford University Press, 1974.

A technical and thorough resource, although the words are not always broken down completely and explained.

Random House Dictionary of the English Language: School Edition.

New York: Random House, 1973.

Very limited etymological references following some words.

Scott, Foresman Intermediate Dictionary: Doubleday Edition.

Garden City: Doubleday and Co., 1979.

Some limited etymology given, also "word history" and "word family" charts in an easy-to-read format.

Thorndike-Barnhart High School Dictionary. Chicago: Scott, Foresman and Co., 1957.

An oldy but goody with consistent etymological listings, words broken down and parts explained following the definitions.

Webster's Intermediate Dictionary. Springfield: G. and C. Merriam Co., 1972.

Etymology only on recently borrowed words (e.g. ensemble, rendezvous).

Webster's Ninth New Collegiate Dictionary. Springfield: Merriam-Webster Inc., 1984.

Consistent listings provide word breakdown and meanings.

GLOSSARY

Adapted from: Peters, Linguistic History of English and Webster's New International Dictionary, vols. 1 and 2.

AFFIX a part of speech attached to the beginning or end of a word, giving it an additional meaning or color.

ALPHABET a system of letters which represent the sounds of a language more or less closely, depending on the language.

ASSIMILATION change of a sound or letter (usually a consonant) to agree with a neighboring sound or letter.

COGNATE from Latin con + natus, meaning "born together". A word having the same root, i.e. the same historical source, as one in another language. A cognate occurs within a language family, and may or may not have developed a new and distinct meaning from its relatives over time.

CONSONANT a sound produced by either narrowing or stopping the breath before it passes out of the mouth (compare **VOWEL**).

DERIVATION origin or history of a word.

DERIVATIVE a word coming from another, or older form of a language.

DIALECT a regional or class variety of a language which differs linguistically in some measure from other varieties of the language.

DIPHTHONG from Greek di(twice) + phthong(voice, sound), i.e. two sounds. A joining of two vowels, forming a compound sound pronounced in one syllable.

DOUBLET two related words having the same original source but which entered the language via different paths, e.g. at different times, from different dialects, or directly vs. indirectly.

ETYMOLOGY from Greek etymon(true, literal sense of a word according to its derivation) + logos(description, discourse), i.e. the formal history of a word; analysis of a word's origin and derivation.

ETYMON the earliest known form of a word.

GLOSSARY

FIRST GERMANIC CONSONANT SHIFT systematic sound changes affecting the consonants of Proto-Germanic as it evolved from Proto-Indo-European and became differentiated from other Indo-European languages.

GERMANIC the designation for (a) the branch of Indo-European languages consisting of: English, Dutch, Flemish, German, Frisian, Norwegian, Swedish, Danish, Icelandic, Faroese, extinct Gothic, and their historic counterparts, or (b) the people or tribes speaking these languages. In some texts the alternate term Teutonic is used to refer to the same. Proto-Germanic denotes the hypothetical parent language of all the Germanic languages.

GRAMMAR the sound system (phonology), word forms (morphology), and sentence structure (syntax) of a language, or a description thereof.

GREAT VOWEL SHIFT use of length as a means of differentiation among vowels in Middle English was lost in the Early Modern English Period; the effects were not uniformly felt and led to the variety of pronunciation for each vowel that exists today.

INDO-EUROPEAN name for the largest single family of languages, spoken by 50% of the world's population. Proto-Indo-European is the hypothetical parent language of the Indo-European family.

INFLECTION a change of form in a word (e.g. endings, vowel change) which signals a change in the word's meaning or function.

LANGUAGE COMPARISON the viewing of relationships existing between two or more languages today and/or through history.

LANGUAGE FAMILY a group of languages sharing and evolving from a common linguistic parent, e.g. the Indo-European, Uralic, Sino-Tibetan, etc., families of languages.

LANGUAGE HISTORY the origins and development of a language.

NORMAN CONQUEST reference to the 1066 takeover of England by the Normans, which had lasting linguistic, political and social effects on English life. The Normans (from Old English nordmann- "Northman") were Scandinavians who occupied the northwestern coast of France in the tenth century and adopted the French language.

GLOSSARY

- ORTHOEPY** from Greek orthos (right, correct) + epos (word), i.e. the art of correct pronunciation. An outdated term now replaced by phonology.
- ORTHOGRAPHY** from Greek orthos (right, correct) + graphein (write), i.e. the art of correct spelling.
- PREFIX** a word attachment preceding a root.
- ROOT** the simplest or historical form of a word, e.g. legality (root leg); contain (root tenere); solar (root sol).
- SECOND GERMANIC CONSONANT SHIFT** systematic sound changes affecting certain consonants of Old High German as it evolved from Proto-Germanic and became differentiated from other Germanic languages.
- STRONG VERB** a feature of Indo-European languages; verbs which form their past tense by an internal vowel change, also called vocalic verbs (compare WEAK VERB).
- SUFFIX** a word attachment following a root.
- SYLLABLE** a sound, or combination of sounds uttered together, in a single effort.
- VOWEL** a sound produced by letting air pass freely out of the mouth (compare CONSONANT).
- WEAK VERB** a distinguishing feature of Germanic languages; verbs which form their past tense by adding the suffix -d or -t, also called consonantal verbs (compare STRONG VERB).

ANNOTATED BIBLIOGRAPHY

- Algeo, John. Problems in the Origins and Development of the English Language, 2nd ed. New York: Harcourt, Brace, Jovanovich, 1972. 292 p.
A workbook designed to accompany Thomas Pyle's The Origins and Development of the English Language (New York: Harcourt, Brace, Jovanovich, 1971), with questions and exercises on all aspects of the development of English. Well-organized, many examples, possible to select corresponding chapters for in-depth coverage of topics discussed in this paper, plus many others.
- American Philosophical Society. Report of the Committee appointed by the American Philosophical Society to assist the Commission on amended orthography. Philadelphia: MacCalla and Company, 1889. 25 p.
Brief treatise strongly favoring and detailing the necessity of spelling reform in the English language.
- Balmuth, Miriam. The Roots of Phonics: A Historical Introduction. New York: McGraw-Hill Book Company, 1982. 251 p.
Provides a broad and very readable history of English, giving attention to writing systems, punctuation, pronunciation, spelling, views on spelling reform, and English developments in America.
- Barnett, Lincoln. The Treasure of Our Tongue. New York: Alfred A. Knopf, 1964. 304 p.
A very readable "story" about the English language, looking at its widespread use in all parts of the world today, the nature and origin of all human language generally, as well as the English language specifically.
- Bell, Hill M. An Orthoepy and Orthography. Chicago: Ainsworth and Company, 1914.
Although old, this book contains numerous useful lessons with rules for spelling, definitions of vocabulary pertaining to linguistics and etymology, lists of prefixes, suffixes, roots, abbreviations, and words for spelling contests.

ANNOTATED BIBLIOGRAPHY

- Bodmer, Frederick. The Loom of Language. New York: W.W. Norton and Company, Inc., 1944. 692 p.
Despite being of somewhat early date, this volume is a marvelous reference for information on all aspects of language, including sections on learning the various Teutonic (Germanic) and Romance languages. It is delightful reading as well, providing copious examples, charts and even a "Language Museum"- extensive lists of English vocabulary with their Swedish, Danish, Dutch, German, French, Spanish, Portuguese and Italian counterparts; also a compilation of Greek roots in common use.
- Ellis, Willis A. Word Ancestry. New York: American Classical League, 1938. 63 p.
An introductory glance at the origins and travels of some English words from their Latin or Greek beginnings. Entertaining and interesting explanations.
- Frith, Uta, ed. Cognitive Processes in Spelling. London: Academic Press, 1980. 560 p.
A more technical compilation of ideas and experiments by many contributors in the various fields of spelling as they relate to instruction and reforms, language, word recognition, strategies for learning, errors, development, language disorders and dyslexia.
- Hanna, Paul R. et alia. Spelling: Structure and Strategies. Boston: Houghton Mifflin Company, 1971.
A well-written and informative text that is broken into two main parts: "Theoretical Foundations of Spelling", including concise treatises on the history and development of writing systems, the English language, American orthography, spelling as a school subject, and the psychology of spelling. Part two, "Strategies for a Spelling Program", makes step-by-step suggestions on setting up spelling programs, with sections devoted to each level of kindergarten through eighth grade.
- Haugen, Einar. The Scandinavian Languages: An Introduction to their History. London: Faber and Faber Ltd., 1976. 507 p.
A very complete look at the development and present state of these languages, which is at the same time clear and enjoyable to read.

ANNOTATED BIBLIOGRAPHY

- Katzner, Kenneth. The Languages of the World. New York: Funk and Wagnalls, 1975. 374 p.
Short paragraphs on the language families of the world, each followed by examples of and comments on ca. 200 individual languages, with examples of the text/script.
- Konig, Werner. Atlas zur deutschen Sprache: Tafeln und Texte. Munich: Deutscher Taschenbuch Verlag, 1978. 247 p.
A compact and informative text giving an overview of the history and structure of the German language and its dialectal variations. A multitude of colorful explanatory and descriptive charts accompany the text.
- Lee, Donald W., ed. English language Reader: Introductory Essays and Exercises. New York: Dodd, Mead and Company, 1963.
A collection of articles on a wide range of language-related topics, including history and spread of English, etymology, word analysis and word borrowing. The articles are concise and thus provide good overviews of specific areas.
- Lewis, Norman. 20 Days to Better Spelling. New York: Harper and Row, 1953. 244 p.
A well-organized self-study spelling program that tackles the most common dilemmas in English spelling by use of rules, word grouping and mnemonics.
- Mersand, Joseph. Spelling Your Way to Success. Woodbury, N.Y.: Barron's Educational Series, Inc., 1959. 173 p.
A broad overview of common spelling difficulties and ways to tackle them, including punctuation, rules, capitalization, homonyms, affixes. Also contains useful lists of most commonly misspelled words, abbreviations, prefixes and suffixes.
- Peters, Robert A. A Linguistic History of English. Boston: Houghton Mifflin Company, 1968. 352 p.
A text which presents both the historical and linguistic developments of English and language in general in a clear and readable format, with ample helpful examples, explanations and chapter summaries.

ANNOTATED BIBLIOGRAPHY

- Schaeffer, Rudolf F. Greek-English Derivative Dictionary. New York: American Classical League, 1963. 42 p.
A handy guide to discovering the sources and relationships of Greek-derived words most likely to be encountered by English speakers. Convenient format lists Greek roots followed by their English derivatives.
- Latin-English Derivative Dictionary. New York: American Classical League, 1960. 48 p.
See the description for Greek-English Derivative Dictionary.
- Sherwin, J. Stephen. Four Problems in Teaching English: A Critique of Research. Scranton, PA: International Textbook Company, 1969. 209 p.
Presents differing views based on experiments conducted in the areas of Latin as an aid in English, Increasing Skill in Writing, Diagrams as Visual Aids, and Methods of Spelling Instruction. Good overview (up to 1969 only) of studies done in these fields.
- Smelt, Elsie D. Speak, Spell and Read English. Melbourne: Longman Australia Pty Ltd, 1976.
The author's purpose corresponds closely to that of this thesis, i.e. to "introduce English to the learner as a substantially orderly and regular language". She gears her lessons towards elementary age children. These lessons discuss most of the sounds in the English language according to their historical origins and provide accompanying exercises and lists. An excellent guide for providing information on more specific spelling features than this thesis encompasses.
- Stevick, Robert D. English and Its History: The Evolution of a Language. Boston: Allyn and Bacon, Inc., 1968. 339 p.
A thorough presentation of English language development. Uses a fair amount of linguistic terminology, provides charts and examples to supplement the text.
- Venezky, Richard L. The Structure of English Orthography. The Hague: Mouton, 1970. 162 p.
A very helpful compendium of 20 000 most common words in English, organized to provide a "complete tabulation of the spelling-to-sound correlations, based on the position of consonant and vowel clusters". Also includes discussion on attitudes toward the nature of English orthography, and aims to show the patterning which exists therein.