Impact of Greek Lexicon on English Vocabulary

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Abstract

Mainly, four languages influenced the vocabulary of the English Language during the Old English Period. They were Celtic, Latin, Greek and Scandinavian languages. Of them, the Greek Language played a prominent and outstanding role in contributing to the expansion of the vocabulary of the English Language. It is also estimated that around 6% of English vocabulary has derived from Greek. What are the fields of the English Vocabulary that are highly influenced by the Greek words and what kinds of Greek affixes contributed to the formation of English words is the research problem of the present study. The objective of the present study is to explore and investigate how the Greek Language influenced to expand the English vocabulary. This has happened regarding all the other languages as well in the history. However, the present study is extremely limited only to the vocabulary of the relevant language. The entire research is based on the secondary data or library survey. The required and relevant information was collected through the subject related books, research journals, magazines, newspapers and web sites. The present study is entirely based on the English Vocabulary, which is influenced by the Greek Lexicon. It seems that many fields of the English Vocabulary have been influenced by the Greek words. They are the fields of religion, education, medicine, occupations, language, meals and so on. Moreover, it is also obvious that Greek prefixes and suffixes have immensely contributed to the formation of English words as pointed out earlier. The prominent fact is that the Greek Lexicon has added a large number of words to the field of Medicine and Science.

Keywords: Greek Language, English Vocabulary, Expansion

Introduction

During the Old English or Anglo-Saxon Period (400.AD-1100.AD), mainly four languages influenced the vocabulary of the English Language. They were Celtic, Latin, Greek and Scandinavian languages. Of them, the Greek Language played a prominent and outstanding role in contributing to the expansion of the vocabulary of the English Language. Greek Language is an Indo-European Language, which was primarily spoken, in Greece. It has been found that Greek Language had been in existence for approximately 3400 years. It was also proved to be the longest of any other Indo-European languages. It is confirmed the fact that the relevant information is available about the origin of the Greek Language (Dawkins, R.M:1916). It is also reported that Greek originated with a migration of proto-Greek speakers into the Greek peninsula. Moreover, it was found that for many centuries Greek was the lingua franca² of the eastern half of the Roman Empire. It is also estimated that around 6%³ of English vocabulary has derived from Greek. These words specifically include technical and scientific terms and in addition to that, it seems that a lot of English words have been borrowed from Greek. And also, the Greek alphabet⁴ was the most considerable asset Old English had ever inherited from Greek. It is also found that many letters in English have been

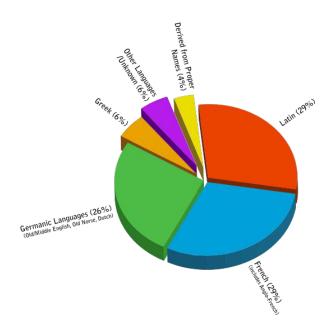
¹ Professor of Ancient Greek Linguistics, University of Amsterdam, 1969–95. Author of Études sur la grammaire et le vocabulaire du grec mycénien.

² A language, that is adopted as a common language between speakers whose native languages are different

³ https://en.wikipedia.org/wiki/Foreign language influences in English

⁴ http://en.wikipedia.org/wiki/Greek alphabet-04.10.2013.

borrowed from ancient Greek, for instance, the English letters "a" and "b" are variations on the Greek letters "alpha" and "beta."



Research Problem

What are the fields of the English Vocabulary that are highly influenced by the Greek words and what kinds of Greek affixes contributed to the formation of English words is the Research Problem of the present study. For instance, both Latin and French Languages mostly expanded the English Vocabulary in the fields of law and education. In the same way, Greek also influenced the different fields of English Vocabulary.

Objective of the Study

The objective of the present study is to explore and investigate how the Greek Language influenced to expand the English vocabulary. As mentioned earlier, it is obvious that the English vocabulary consists of 06% of Greek words. When compared to the influence of the other languages such as Latin and French, this is really minute or much less. However, it seems that the

Greek Language also highly influenced the various fields of the English Language as Latin and French Languages have done.

Limitations

When a particular language influences another language, it usually borrows various linguistic aspects from the other language such as vocabulary, spelling, pronunciation, grammar and so on. This has happened regarding all the other languages as well in the history. However, the present study is extremely limited only to the vocabulary of the relevant language. It has been found that there is a considerable number of Greek words in the English vocabulary. The researcher is, therefore, absolutely determined to focus light only on the Greek words found in the English vocabulary.

Research Methodology

The entire research is based on the secondary data or library survey. The required and relevant information was collected through the subject related books, research journals, magazines, newspapers and web sites. Moreover, the researcher listened to the lectures delivered by subject experts and thus collected secondary data. It was also found that there are many latest web sites and videos, which are closely associated with the Greek Language, its origin and evolution. They were also used for obtaining the secondary data.

Literature Review

Martha Peraki and Catherine Vougiouklaki (2015), who are British Council teachers in Greece, through their research article, *How has Greek influenced the English language?* point out why English owes so much to the Greek language. They further confirm the fact that there are thousands of common Greek words such as antique, idol, dialogue, geography, grammar, architect, economy, encyclopedia, telephone, and

microscope found in the English Language today. Thus, it is apparent that the Greek Language has had a vital influence on the English Language.

A very brief history of the Greek language

Greek is one of the oldest Indo-European languages and is usually divided into Ancient Greek (often thought of as a dead language) and Modern Greek. Modern Greek is derived from *Koine*,⁵ a common dialect of Ancient Greek that was understood throughout the Greek-speaking world at that time. In the 19th century, Modern Greek became the official language of the Kingdom of Greece.

According to **Peter T. Daniels**, the Ancient Greeks were the first to use a 'true' alphabet, that is, one representing both vowels and consonants. Indeed, the word 'alphabet' is formed of the first two letters of the Greek alphabet, 'alpha' and 'beta'.

What English owes to the Greek Language?

The Oxford Companion to the English Language⁷ states that the 'influence of classical Greek on English has been largely indirect, through Latin and French, and largely lexical and conceptual. According to one estimate, more than 150,000 words of English are derived from Greek words. These include technical and scientific terms, but also more common words like those above. Words that starts with 'ph-' are usually of Greek origin, for example: philosophy, physical, photo, phrase, philanthropy. Many English words are formed of parts of words (morphemes) that originate from the Greek language, including the following examples:

⁵ Koine Greek – Wikipedia: en.wikipedia.org > wiki > Koine_Greek

⁶ He was a lecturer at University of Wisconsin-Milwaukee and Chicago State University.

⁷ Concise Oxford Companion to the English Language Edited by Tom McArthur

- phobia (fear of), as in *arachnophobia* the fear of spiders
- micro (small), as in *microscopic* so small it's hard to see
- demos (people) as in *democracy* government by the people

A great example of the influence of the Greek Language are the two speeches written in English, but actually consisting of only Greek words (with the exception of articles and prepositions) by the former Prime Minister **Prof. Xenophon Zolotas**, who was also an economist.

English Words of Greek Origin

The <u>Greek language</u> has contributed to the <u>English</u> vocabulary in five main ways:⁸

- 1. <u>Vernacular borrowings</u>, transmitted orally through <u>Vulgar Latin</u> directly into <u>Old English</u>, *e.g.*, 'butter' (*butere*, from Latin *butyrum* < βούτυρον), or through French, *e.g.*, 'ochre'.
- learned borrowings from classical Greek texts, often via Latin, e.g.,
 'physics' (< Latin physica < τὰ φυσικά);
- 3. a few borrowings transmitted through other languages, notably Arabic scientific and philosophical writing, *e.g.*, 'alchemy' (< χημεία);
- 4. <u>coinages</u> in <u>post-classical Latin</u> or modern languages using classical Greek roots, e.g., 'telephone' (< τῆλε + φωνή) or a mixture of Greek and other roots, e.g., 'television' (< Greek τῆλε + English vision < Latin visio); these are often shared among the modern European languages, including Modern Greek;</p>
- 5. Direct borrowings from Modern Greek, e.g., ouzo.

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⁸ https://en.wikipedia.org/wiki/English_words of Greek origin:22.12.2020

Direct and Indirect Borrowings

Since the living <u>Greek</u> and <u>English</u> languages were not in direct contact until modern times, borrowings were necessarily indirect, coming either through <u>Latin</u> (through texts or various <u>vernaculars</u>), or from <u>Ancient</u> Greek texts, not the living spoken language.⁹

• Vernacular Borrowings via Romance Languages

Some Greek words were borrowed into Latin and its descendants, the Romance languages. English often received these words from French. Some have remained very close to the Greek original, e.g. lamp (Latin lampas; Greek λαμπάς). In others, the phonetic and orthographic form has changed considerably. For instance, place was borrowed both by Old English and by French from Latin platea, itself borrowed from $\pi\lambda\alpha\tau\epsilon i\alpha$ ($\delta\delta\delta\varsigma$), 'broad (street)'; the Italian piazza and Spanish plaza have the same origin, and have been borrowed into English in parallel.

The word <u>olive</u> comes through the <u>Romance</u> from the Latin olīva, which in turn comes from the Greek elaíwā (ἐλαίϝā). ¹⁰ A later Greek word, boútȳron (βούτυρον), ¹¹ becomes Latin butyrum and eventually English butter. A large group of early borrowings, again transmitted first through Latin, then through various vernaculars, comes from Christian vocabulary:

chair << καθέδρα (cf. 'cathedra');

⁹ Ayers, Donald M. 1986. English Words from Latin and Greek Elements. (2nd ed.). p. 158.

¹⁰ This must have been an early borrowing, since the Latin ν reflects a still-pronounced digamma; the earliest attested form of it is the Mycenaean Greek

¹¹ Carl Darling Buck, A Dictionary of Selected Synonyms in the Principal Indo-European Languages

- bishop << epískopos (ἐπίσκοπος 'overseer');
- priest << presbýteros (πρεσβύτερος 'elder'); and
- church < Old English cirice, circe < probably kȳriakē [oikía]
 (κυριακή [οἰκία] 'lord's [house]').

Learned borrowings

Many more words were borrowed by scholars writing in Medieval and Renaissance Latin. Some words were borrowed in essentially their original meaning, often transmitted through Classical Latin: topic, type, physics, iambic, eta, necromancy, cosmopolite. A few result from scribal errors: encyclopedia < ἐγκύκλιος παιδεία 'the circle of learning' (not a compound in Greek); acne < ἀκνή (erroneous) < ἀκμή 'high point, acme'. Some kept their Latin form, e.g., podium < πόδιον.

Others were borrowed unchanged as technical terms, but with specific, novel meanings:

- <u>telescope</u> < τηλεσκόπος 'far-seeing', refers to an <u>optical instrument</u>
 <u>for seeing far away</u> rather than a person who can see far into the distance;
- <u>phlogiston</u> < φλογιστόν 'burnt thing', is a supposed <u>fire-making</u>
 <u>potential</u> rather than something which has been burned, or can be burned;
 and
- Bacterium < βακτήριον 'stick (<u>diminutive</u>)', is <u>a kind of</u>
 microorganism rather than a small stick or staff.

This also applies to <u>combining forms</u> used in <u>neologisms</u>:

-cyte or cyto- < κύτος 'container', means biological cells, not arbitrary containers.

• <u>-oma</u> < -ωμα, a generic <u>morpheme</u> forming <u>deverbal nouns</u>, such as <u>diploma</u> ('a folded thing') and <u>glaucoma</u> ('greyness'), comes to have the very narrow meaning of 'tumor' or 'swelling', on the model of words like <u>carcinoma</u> < καρκίνωμα. For example, <u>melanoma</u> does not come from μελάνωμα 'blackness', but rather from the modern combining forms <u>melano</u>- ('dark' [in biology]) + -oma ('tumor').

• Usage in Neologisms (New word or New Expression)

By far the largest, Greek contribution to English vocabulary is the huge number of scientific, medical, and technical <u>neologisms</u>¹² that have been coined by <u>compounding Greek roots and affixes</u> to produce novel words which never existed in the Greek language:

- <u>utopia</u> (1516; οὐ 'not' + τόπος 'place')
- <u>zoology</u> (1669; ζῷον + λογία)
- *hydrodynamics* (1738; ὕδωρ + δυναμικός)
- *photography* (1834; φῶς + γραφικός)

So, it is really the combining forms of Greek roots and affixes that are borrowed, not the words. Such terms are coined in all the European languages, and spread to the others freely—including to Modern Greek as reborrowings. Traditionally, these coinages were constructed using only Greek morphemes, e.g., meta-mathematics, but increasingly, Greek, Latin, and other morphemes are combined.

Many Greek <u>affixes</u> such as anti- and -ic have become <u>productive</u> in English, combining with arbitrary English words: antichoice, Fascistic. Some <u>portmanteau</u> words in English have been <u>reanalyzed</u> as a base plus

¹² a new word or expression or a new meaning of a word

suffix, leading to suffixes based on Greek words, but which are not suffixes in Greek, e.g., -athon or -a-thon (walkathon, from walk + (mar)athon); or which have taken a different meaning: -nomics (Reaganomics, from Reagan + (eco)nomics).

Some Greek words have given rise to <u>etymological doublets</u>, being borrowed both through a later learned, direct route, and earlier through an organic, indirect route:¹³

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¹³ Walter William Skeat, A Concise Etymological Dictionary of the English Language, "List of Doublets", p. 599 Edward A. Allen, "English Doublets", Publications of the Modern Language Association of America

- ἀμυγδάλη amygdala, almond;
- ἀντίφωνα antiphon, anthem;
- ἀσφόδελος asphodel, daffodil;
- αὐθεντικός authentic, effendi (αὐθέντης
 via Turkish);
- βάλσαμον balsam (probably itself a borrowing from Semitic), balm;
- βάσις basis, base, bass (voice);
- βλάσφημος blasphemy, blame;
- βούτυρον butyr(ic), butter;
- διάβολος diabol(ic), devil;
- δραχμή drachma, dram, also <u>dirhem</u> via Arabic;
- έλαιον elaeo-, oil, olive, oleum, latke via Russian
 and Yiddish;
- ἐλεημοσύνη eleemosynary, alms;
- ἐπίσκοπος episcop(al), bishop;
- ζῆλος zeal, jealous;
- καθέδρα cathedra(l), chair, chaise;
- κέρας/κέρατ- 'horn' keratin, carat via Arabic;
- γραμματική grammatic(al): grammar, glamor, gri moire;
- δίσκος discus: disc, dish, dais, and desk;
- κιθάρα cither: guitar, cithren, zither, gittern, citter n, etc.;
- κρύπτη crypt: grotto, (under)croft;
- παραβολή parabola: parable;parol, and parole;
- phantasy: fantasy; fancy in

- κόλπος 'lap, womb, hollow,
 bay' colp(itis), gulf
- κυβερνᾶν cybernetics, govern
- πάπυρος papyrus, paper;
- πόδιον podium, pew;
- πρεσβύτερος presbyter, priest;
- πυξίς pyx(is), box;
- σκάνδαλον scandal, slander;
- τρίπους/τρίποδ- tripod, tripos (both learned);
- τύμπανον 'drum' tympanum 'eardrum'
 , timbre,
- φρενετικός frenetic, frantic;
 - χειρουργός chirurgical, surgeon;
- χορός chorus, choir;
- χρῖσμα chrism, cream;

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- χρῖστιᾶνός Christian, christen, cretin
 - ὄρα horo(scope), hour.

Though many English words derived from Greek through the literary route drop the inflectional endings (*tripod*, *zoology*, *pentagon*) or use Latin endings (*papyrus*, *mausoleum*), some preserve the Greek endings:

- -ov: phenomenon, criterion, neuron, lexicon;
- -μα: plasma (-Ø; cf. protoplasm), drama, dilemma, trauma;
- -oς: chaos, ethos, asbestos, pathos, cosmos;
- - ς : climax ($\xi x = k + s$), helix, larynx, eros, pancreas, atlas;
- -η: catastrophe, agape, psyche;
- -ις: analysis, basis, crisis, emphasis;
- ης: diabetes, herpes, isosceles.

A few dozen English verbs have derived from the corresponding Greek verbs; examples are *baptize*, *blame* and *blaspheme*, *stigmatize*, *ostracize*, and *cauterize*. In addition, the Greek verbal suffix *-ize* is productive in Latin, the Romance languages, and English: words like *metabolize*, though composed of a Greek root and a Greek suffix, are modern compounds. A few of these also existed in Ancient Greek, such as *crystallize*, *characterize*, and *democratize*, but were probably coined independently in modern languages. This is particularly clear in cases like *allegorize* and *synergize*, where the Greek verbs ἀλληγορεῖν and συνεργεῖν do not end in *-ize* at all. Some English verbs with ultimate Greek etymologies, like *pause* and *cycle*, were formed as denominal verbs in English, even though there are corresponding Greek verbs, παῦειν/παυσ- and κυκλεῖν.

Medical Terms

Medicine is an area where Greek words are especially abundant. Examples are anatomy, antigen, artery, bacteria, cholesterol, dermatology, diarrhoea, gene, larynx, microscope, neurosis, oesophagus, parasite, pathology,

physiology, rhesus, sclerosis, syndrome, syringe, thermometer and thrombosis.

The *-osis* ending (sometimes spelt *-asis*) means "present and troublesome" and is used to describe a wide range of illnesses (*thrombosis* for example is the presence of a troublesome blood clot). *-osis* can even be combined with a non-Greek root, as in *tubercul-osis*.

Results and Discussion

The researcher has collected more secondary data from various books, research journals and relevant webpages. Martha Peraki and Catherine Vougiouklaki (2015), through their research article, *How has Greek influenced the English language?* emphasize that the **English Language has borrowed many common Greek words from the Greek Language.** Antique, idol, dialogue, geography, grammar, architect, economy, encyclopedia, telephone, and microscope are some prominent words found in the English Language today. Thus, it is apparent that the Greek Language has had a great influence on the English vocabulary during the Old English Period. When the above words are considered, it is obvious that they come under different areas as shown in the following table.

Language	Occupation	Subjects	Equipment
Grammar	Architect	Geography	Telephone
Encyclopedia	Surgeon	Gynecology	Microscope
		Physics	Television
		Zoology	Lamp
		Hydrodynamics	
		Photography	

Domestic	Scientific	Religion	Meals
Equipment	Terms		
Chair	Bacterium	Priest	Butter
	Cells	Bishop	
	Tumor	Church	

Many Greek <u>affixes</u> such as 'anti-' and '-ic' have become <u>productive</u> in English, combining with arbitrary English words: Anti-choice, Fascistic. 'Anti' is a prefix whereas 'ic' is a suffix.

Anti-choice Fascistic

Anti-government Pessimistic
 Anti-Malaria Campaign Optimistic

• Anti-Virus Climatic

Anti-social Enthusiastic

The following suffixes have also been borrowed from the Greek Language.

+ (mar)athon) -nomics (<u>Reaganomics</u>, from Reagan + (eco)nomics).

• Marathon Economics

The following words also originated from the Greek Language according to Walter William Skeat (A Concise Etymological Dictionary of the English Language).

almondwomb

anthemgovern

daffodil • paper

authenticpodium

balm • priest

basis/ base • box

blasphemy/ blame

• Scandal/ slander

butter • tripod

diabolic/devil • drum/eardrum

dram • frantic

oil/ olive • surgeon

alms • choir

bishop • cream

jealous • Christian/ christen

- cathedra(1)/chair/chaise;
- horn

• hour

- Grammar/glamor
- Discus/ disc/ dish/ dais/desk
- Cither/guitar

- crypt/ grotto/croft
- Parabola/ parable/parole
- Phantasy/ fantasy/ fancy

According to 'The Oxford Companion to the English Language'¹⁴ more than 150,000 words of English have derived from Greek words, which include both technical and scientific terms. Words that start with 'ph-' are usually of Greek origin, for example: *philosophy*, *physical*, *photo*, *phrase*, *philanthropy* are some of them. Many English words are formed from the Greek morphemes that originate from the Greek language, including the following examples:

- **phobia** (fear of), as in *arachnophobia* the fear of spiders
- **micro** (small), as in *microscopic* so small it's hard to see
- **demos** (people) as in *democracy* government by the people

It is also found that some letters in English have been borrowed from ancient Greek, for instance, the English letters "a" and "b" are variations on the Greek letters "alpha" and "beta." (**Koine**). It is also found that the words, which

¹⁴ Concise Oxford Companion to the English Language (1-ed)

start with 'ph...' are usually of Greek origin. Philosophy, physical, photo, phrase and philanthropy come under that category.

Greek Inflectional Endings

It was found through the secondary data that the following words end in the inflection, '-on', '-ma', '-os', '-ax','-ix', '-nx', '-as', '-phe', '-pe', '-che', '-is', and '-es'. All these different inflections derived from Greek.

- phenomenon, criterion, neuron, lexicon;
- Plasma, drama, dilemma, trauma;
- chaos, ethos, asbestos, pathos, cosmos;
- climax, helix, larynx, pancreas, atlas;
- catastrophe, agape, psyche;
- analysis, basis, crisis, emphasis;
- Diabetes

Greek Verbs

In Modern English vocabulary, the following Greek verbs are found, which end in '-ze'. They are known as Greek verbal suffix '-ize'. They are as follows:

- Baptize
- Stigmatize
- Ostracize
- Cauterize
- Metabolize
- Crystallize
- Characterize
- Democratize
- Aallegorize

• Synergize

Medical Terms in Greek

It was also found that there are many Greek medical terms in the field of Medicine. Some such words are given below.

- anatomy
- antigen
- artery
- bacteria
- cholesterol
- dermatology
- diarrhoea
- gene
- larynx
- microscope
- neurosis
- oesophagus
- parasite
- pathology
- physiology
- rhesus
- sclerosis
- syndrome
- syringe
- thermometer
- thrombosis
- tuberculosis

Conclusion

The present study is entirely based on the English Vocabulary, which is influenced by the Greek Lexicon. It seems that many fields of the English Vocabulary have been influenced by the Greek words. They are the fields of religion, education, medicine, occupations, language, meals and so on. Moreover, it is also obvious that Greek prefixes and suffixes have immensely

contributed to the formation of English words as pointed out earlier. The prominent fact is that the Greek Lexicon has added a large number of words to the field of Medicine and Science. And the other distinguished feature is that the Greek language has maintained its genuine identity.

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