The Diachronic Contribution of Greek to the Development of the English Language

George Kanarakis

Interlanguage contact and its resulting influences are a fascinating and rewarding field for the scholar and the general reader. Among the benefits of studying this linguistic interaction is the assistance which it provides, especially with the planning and organising of foreign and second language teaching/learning. This paper focuses on the diachronic influence and the contribution of Greek to the development and enrichment of English throughout its history, examining English as the recipient and Greek as the donor of interlanguage influences. It concentrates on English because today it constitutes a global language spoken as mother tongue, official, second or foreign language in countries of all continents, and it is also the second in the world after Mandarin Chinese in number of native speakers. Simultaneously, it focuses on Greek because it is the oldest source of loans (direct and indirect) which English has borrowed, and second, because it occurs on more than one linguistic level, i.e. the graphemic, the morphological and the lexical.

Introduction

The contribution of the Greek language, particularly to the languages of Europe, and through them to the languages of the modern world, constitutes a phenomenon of special significance.

In reality, Greek, which since 1981 has been one of the official languages of the European Community, is the historically unifying language of Europe (Euro-Greek), with the oldest written and oral traditions uninterrupted for about 3,400 years (Chadwick, 1962:13, 15; Chadwick, 1987:8) and at least 4,000 years respectively. The Greek language is also distinguished by an ongoing historical continuity and cohesion without ever having lost its original character.

For these reasons, the Greek language has always been marked by a special quality which plays an extremely significant role in the enrichment of other European
languages, and through them of a variety of other languages, even in remote parts of the world. Other factors which contributed decisively have been its early and in depth development by internationally celebrated Greek intellectuals in philosophy, logic, rhetoric, poetry, science, etc., the Greeks’ word-making creativity, as well as the cultural and purely linguistic prestige that the Greek language acquired out of the geographic context where it was spoken as a native language.

In this way, the Greek language succeeded in rising to a level of diachronic value, and did not merely develop to a structurally flexible communication medium. Consequently it became a base of semantic expression, a steady point of reference and, therefore, a source of continuous direct and indirect lending to other languages without ever losing its vitality and its plasticity or even reaching the point of breaking down into daughter languages, as happened, for example, with Demotic Latin into the Romance languages.

So, the influx of the Greek language into Latin, as well as into more recent European languages, has been diachronic and multifaceted. In older times Greek words and word stems entered these languages mainly indirectly through Latin, French and other European languages, while in modern times through newly structured words, based on Greek word stems adopted in every day communication, as well as in scholarly and scientific expression. This is a process which has been going on for centuries now, especially since the Renaissance. This is why we are not surprised that the various languages, particularly the European ones, as well as European education and science in general, continue to utilise to the maximum both the linguistic and the cultural qualities of the Greek language. Among many other scholars, John Smock, the American lexicographer, observed that “the mastery of a relatively small number of Greek words infuses with significance tens of thousands of English words; and [...] these circumstances justify continued emphasis of the importance of the study of Greek in institutions of general culture” (Smock, 1931:xi). More recently, the French linguists Bouffartique and Delrieu, referring to their native language, point out that “the understanding of our language, the rediscovery of its essence — this is the usefulness of knowing the Greek word stems. The Greek stems give the French language its deepest support and, at the same time, they provide it with the highest ability for abstraction. Greece is a distant source of our civilisation, and is alive in the words we say. It shapes our language every day” (Bouffartique and Delrieu, 1993:9).

Greek influences on the English language

One of the European languages which, from its first appearance, bears clearly the influence of the Greek language, and through this all its national variations, that is the “Englishes” of various countries spread throughout the old and new worlds, is English (Kanarakis, 1995:182–191).

The levels of language analysis of the English language which carry eloquently the influence of the Greek language are the graphemic (system of writing and spelling),
the morphological (the part of grammar examining the nature and structure of the words) and, to a great extent and variety, the lexical (vocabulary).

**Graphemic level**

**Letters**

The English writing system, although it went through various stages of alternations and adjustments, basically is an Irish-modified form of the Latin alphabet introduced into Anglo-Saxon Britain by Christian missionaries at the end of the sixth century, whereas before their arrival the writing system in use was the so-called runic alphabet, the earliest Teutonic alphabet. So, the English writing system developed from a Greek alphabet of advanced form (known as the Western alphabet) brought into Southern Italy by the Chalciadeans about the eighth century BC, and through the Romans spread around to the non-Greek provinces of the empire (Babiniotis, 1985:82; Healey, 1990:39).

**Spelling**

In English spelling the Greek influence exists in several cases of vowel and consonant clusters of words borrowed (directly or indirectly) from Greek or of words formed from Greek lexical elements, although the pronunciation of these combinations usually follows the phonological rules of English, e.g.:

- **Vowel clusters**
  - **Diphthongs**
    - Greek ει > English ei καλειδοσκόπιο > kaleidoscope
    - Greek οι > English oe Οιδίπους > Oedipus (but οικονομία > economy)
    - Greek ου > English ou ούζο > ουζο (but μουσική > music)
  - **Non-diphthongs**
    - Greek οο > English oo μικροοργανισμός > microorganism
    - Greek υε > English ye Ερινύες > Erinyes
    - Greek εο > English eo θεολόγος > theologan
  - **Three-vowel clusters**
    - Greek οιε > English oie φλοιοφάγος > phloiofagous
    - Greek οια > English oia φαίακες > Phaeacians
    - Greek οιια > English oia ονοματοποιία > onomatopoeia

- **Consonant clusters**
  - **Word initial**
    - Greek πτ- > English pt- πτεροδάκτυλος > pterodactyl
    - Greek ψ- > English ps- ψαλμός > psalm
    - Greek σφ- > English sph- σφαίρα > sphere
Word medial

Greek -μν-  >  English -mn-  αμνηστία > amnesty
Greek -σθμ-  >  English -sthm-  ἀσθμα > asthma

Additionally, the English language has received a variety of digraphs with double consonants in Greek word medial position, such as:

Greek -σσ-  >  English -ss-  ναρκισσισμός > narc
Greek -λλ-  >  English -ll-  συλλαβή > syllable
Greek -ττ-  >  English -tt-  Αττική > Attica
Greek -νν-  >  English -nn-  τυραννία > tyranny

Morphological level

Noun endings

In these cases the tendency of English is to follow the rules of the Greek inflectional system, with some exceptions, e.g.:

- criterion > -a, cyclops > -es, stigma > -mata
- but compare, among others, some in -a (phobia > -s instead of *phobiae), or in -ma (dilemma > -s instead of *dilemmata) etc.

Nevertheless, quite a few English nouns have double plural endings, such as hippopotamus > -i and -uses, symposium > -a and -ums.

Verb endings

The only clearly borrowed one, of very frequent occurrence, is the Ancient Greek ending -ίζειν > -ize/-ise (civilize/-ise). It appears in direct loan words from Greek and in indirect ones through Latin (-izare), and then from Romance languages (Italian -izzare, of Spanish -izar, or French -iser > English -ize/-ise). It is even found in words of non-Greek origin (such as macadamize).

Lexical level

The lexical is the language level on which the Greek influence appears impressively vivid and diachronic. Of course, there is no doubt that the Latin lexical influence is more extended than the Greek, both in length of time and in breadth. However, the credit we must give to the Greek language is that in the humanities, as well as in many other specialised fields of knowledge (medicine, botany, zoology, etc.), the Greek language has offered to English not only the names of these fields but also the enormous number of terms used for their description and development, and therefore a larger number of loan words than Latin or any other language. So, to this direct Greek influence on English, “Greek Hellenism” according to F. E. Peters, we must also add the indirect one through Latin, “Latin Hellenism” according to the same linguist (Lazarou, 1984:23, fn. 15).
According to Smock (1931:xii) “of more than 150,000 zoological terms [of English], 4/5 [80%] contain some Greek element and many have a number of derivatives. Some 400,000 names of chemical substances contain at least one Greek element. Botany, medicine, archaeology, physics, the Church, philosophy, mineralogy, music and other special fields, although not so colossal in terminology, swell the total to upward of a million words”.

Similarly, the Greek lexicographer Aristeides Constantinides (2001:xxix–xxx), estimates that of a total of 166,724 English words, 50,747 (30.43%) are Greek — simple or compound with either the first or the second component Greek. Regarding scientific terms, out of 417,378 English words 234,866 (56.68%) are Greek or of Greek origin. Finally, according to the physician Edmund Andrew 75% of modern English medical terminology consists of Greek words or words of Greek origin (Antoniou, 1992:18).

**Pre Anglo-Saxon period (before AD 449)**

Before the settlement of Britain by Germanic phyla, the country was under Roman occupation for 367 years (AD 43–410), and, therefore, Latin was the official language of Britain in administration and was the language of the upper class. This period was the first one in which words of Greek origin were used by the Celtic Britons either through Latin since the Roman occupation or later through popular spoken Latin (Vulgata Latina) by the Roman British people (AD 450–650).

On the other hand, quite a number of words of Greek origin had entered the Germanic dialects already before AD 400, again basically through Latin. These latter loans which the Germanic invaders had brought with them to Britain from continental Europe before their christianisation when they “had doubtless plundered churches and come in contact with bishops before they came to England” (Baugh and Cable, 2002:86), were mainly ecclesiastical terms. Some of these earliest Greek loan words, which later became part of the Old English (O.E.) vocabulary, are:

\[
\begin{align*}
\text{O.E.} & \quad \text{c(i)rice/cyr(i)ce (Modern English} \quad \text{<} \quad \text{(Cf. Old High German [O.H.G.] kirihha/chirihha)} \quad \text{<} \quad \text{Medieval Greek kυρικόν} \quad \text{<} \quad \text{Greek (Gr.) κυριακόν} \\
& \quad [\text{Mod. E.} \text{ church}] \quad \text{<} \quad [\text{δώμα} “the Lord’s house} \quad \text{<} \quad \text{Κύριος “Master, Lord} \\
\text{O.E.} & \quad \text{bisceop/biscop (Mod. E. bishop)} \quad \text{<} \quad \text{Latin (L.) episcopus “inspector, supervisor” (in Ecclesiastical Latin} \\
& \quad \text{[Eccl. L.] “bishop”} \quad \text{<} \quad \text{Gr. επίσκοπος “observer, guard} \\
\text{O.E.} & \quad \text{deofol/deoful (Mod. E. devil)} \quad \text{<} \quad \text{Eccl. L. diabolus “Ecclesiastical}
\end{align*}
\]
GEORGE KANARAKIS

Greek (Eccl. Gr.) διάβολος < διαβάλλω “calumniate”

O.E. preost (Mod. E. priest) < Eccl. L. presbyter (from which the Old French [O. Fr.] prestre) < Gr. πρεσβύτερος “elder”

O.E. engel (Mod. E. angel) < (Cf. O.H.G. angil/engil) < Eccl. L. angelus < Gr. ἄγγελος < αγγέλλω “herald” (verb)

Old English period (AD 449–1100)

During this period the influence of Greek was basically indirect, mainly through Latin. This wave of Greek loan words appeared during the years of systematic christianisation of Britain after 597 with the arrival of Saint Augustine (from 601 first Archbishop of Canterbury) and his party of forty monks, and particularly after 669 with the Greek Theodore of Tarsus, also later Archbishop of Canterbury. Both Augustine and Theodore knew excellent Greek and Latin, and in the schools they founded Greek and Latin-language texts of the early church fathers, as well as the Greek and Latin languages, were taught. So, a number of Greek words and lexical elements (indirect and direct) entered the vocabulary of Old English from its beginning, a phenomenon which continued until the end of this period.

Old English borrowed not only ecclesiastical terms but also education, medical, poetic, musical and others of everyday life, e.g.:

(a)postol (Mod. E. apostle) < O. Fr. apostle/apostre < Eccl. L. apostolus < Gr. απόστολος < αποστέλλω “dispatch” (verb)

cleric, -oc (Mod. E. cleric) < Eccl. L. clericus < Eccl. Gr. κληρικός

ðeater (Mod. E. theatre) < Medieval French (Med. Fr.) théâtre < L. theatrum < Gr. θεάτρον

metre (Mod. E. metre) < O. Fr. mètre < L. metrum < Gr. μέτρον

minster/mynster (Mod. E. monastery) < Eccl. L. monasterium < Eccl. Gr. μοναστήριον

petersilie (Mod. E. parsley) < O. Fr. perresil < Late spoken L. petrosilium < L. petroselinum < Gr. πετροσέλινον

philosop (Mod. E. philosopher) < (O.) Fr. philosophe < L. philosophus


Archived at Flinders University: dspace.flinders.edu.au
THE DIACHRONIC CONTRIBUTION OF GREEK TO THE DEVELOPMENT OF THE ENGLISH LANGUAGE

pinian (Mod. E. punish)  <  Gr. φιλόσοφος < φίλος “friend” + σοφός “wise”

psealm/psalm (Mod. E. psalm)  <  Eccl. L. psalmus < Gr. ψαλμός

scol (Mod. E. school)  <  L. schola < Gr. σχολή “rest, free time”

Middle English period (AD 1100–1450)

During this period most borrowed Greek words entered the English language indirectly from Latin through French because from 1066 to 1362 the official language of the aristocracy, administration, the courts, many literary works, etc., was French, although Latin remained the ecclesiastical language. It was then that the deep influence of French on English began, and the route of most Greek loanwords was first through Latin and then through French, e.g.:

M.E. academie  <  O. Fr. académie  <  L. academia  <  Gr. Ακαδημία/Ακαδήμεια

M.E. logike  <  O. Fr. logique  <  L. logica  <  Gr. λογική (téchnη) “logic (art)”

M.E. tyrant  <  O. Fr. tiran  <  L. tyrannus  <  Gr. τύραννος

M.E. tragedie  <  O. Fr. tragédie  <  L. tragœdia  <  Gr. τραγωδία

This does not mean that the Greek influence exclusively through Latin stopped. The influence of Greek art, science and literature (the three main sources during the Middle English Period), through Latin without the intervention of French, offered a significant number of loan words, many of which finally have become part of everyday communication, e.g.:

M.E. abissus/abyssus  <  L. abyssus  <  Gr. ἄβυσσος

M.E. arterie  <  L. arteria  <  Gr. ἀρτηρία

M.E. chaos  <  L. chaos  <  Gr. χάος

M.E. thesis  <  L. thesis  <  Gr. θέσις

M.E. thorax  <  L. thorax  <  Gr. θώραξ

Modern English period (1450–Today)

Although in the previous period the main shaping power was a military conquest, that of French-speaking Normans, now by the mid-fifteenth century, a new power
had started to exercise an influence on English, the result of the Renaissance, marked by the rapid development of the sciences, the renewal of interest in classical studies, the rise of British nationalism, the invention of printing and the discovery of the New World. One far-reaching consequence was the desire for the formulation of a rich and flexible national language, capable of responding to the demands of the new learning and knowledge. That is why many writers of the sixteenth and the seventeenth centuries, realising the shortcomings of the English language, especially in the areas of politics, philosophy, medicine and science, demonstrated an increased tendency to turn to the linguistic richness of classical languages — of Greek, as well as of Latin. Many of these words became common in everyday English-language use.

For example, among other writers, Sir Thomas More (1478–1535) introduced the Greek words “monopoly”, “monosyllable” and “paradox”, William Shakespeare (1564–1616) the words “misanthrope”, “apostrophe” and many others, or, based on Greek lexical elements, they made new ones, like Sir Thomas Elyot (1490–1546) with the word “encyclopaedia”, and others.

Especially from the mid-fifteenth century until the end of the seventeenth century, the English language enriched its vocabulary not only with new words and word stems directly from Greek, but also indirectly mainly through Latin, as well as through French. Concurrently, it broadened significantly its semantic spectrum as well by borrowing, quite frequently, a Greek word more than once and each time attaching a new meaning, enriching its lexicon even more. For example, during the Old English period the Greek words ἐπίσκοπος and δίσκος were borrowed as bisceop/biscop (> bishop) and dish “plate”. Later, in the Renaissance, the English language re-borrowed them with the meaning of “episcopal” (adjective) and as disk/disc with the meaning of “tray” and in general any circular and flat object. Chaucer used the Greek word ημισφαίριο “hemisphere” first with an astronomical meaning, with its meaning today due to re-borrowing in the sixteenth century.

On the whole, in the sixteenth and seventeenth centuries the need for enrichment of the English language with loans from Greek and Latin was considered so imperative that the seventeenth century poet Edward Waller who, writing shortly after the Restoration, declared in his poem “Of English Verse” (Baugh and Cable, 2002:262):

Poets who lasting marbles seek  
Must carve in Latin or in Greek;  
We write in Sand...

The debt of English to the classical languages, Greek and Latin, does not end with the borrowing of words and word stems or even with the new meanings acquired. The debt is often apparent even in the structure of English sentences, especially in texts of the sixteenth century, as in the complex organisation of sentences which reminds of the ancient Greek rhetorical style, or in the wide use of subordinate sentences.
In his article “English as a Classical Language”, the renowned linguist David Crystal declares that “two thirds of English words are Classical in origin [...] What is so fascinating is to see how we still rely on Latin and Greek to talk about entities and events which are at the heart of modern life [...] The use of Classical sources, whether people are conscious of it or not, continues to be the leading factor in the ongoing growth of English vocabulary” (Crystal, [2001]:1).

In the eighteenth century the Greek language continued to lend (directly and indirectly) to English learned words, in the field of literature, but especially in science, including many terms which have become of common use, such as aroma, aura, bathos, ganglion, mimesis, neuroses, peplos, phlox.

In the nineteenth and twentieth centuries, because of the tremendous political, cultural and social changes which occurred, the English vocabulary was enriched by a huge number of Greek words and word stems. These items reflected the multidimensional and rapid progress of preventative and therapeutic medicine and its auxiliary sciences (bacteriology, biochemistry, etc.), of physics, chemistry, engineering, aeronautics, space science, genetics, information and so many other theoretical and applied sciences. This did not mean that the English language stopped borrowing Greek terms in literature, anthropology, archaeology, fine arts, etc. either directly from Greek or indirectly through Latin and French, e.g.:

- Nineteenth century: agnostic, agoraphobia, diaspora, epos, helicopter, hubris, koine, ostracon, pylon, telephone.

- Twentieth century: astronaut, bionics, cosmonaut, cybernetics, kore, kouros, nanotechnology, schizophrenia, therapeutic cloning.

In these two centuries recent terms of Greek origin are used in every day communication in an abbreviated form, such as zoo (zoological garden), phone (telephone), and gym (gymnasium), suggesting that these loanwords have been assimilated into English.

Additionally, the English language has not borrowed words only from ancient Greek antiquity and from the Byzantine period, but also from Modern Greek times, although these loans are not numerically comparable. Such loans include: romaic “Modern Greek language” (early 19th c.), Phanar (early 19th c.), evzone (late 19th c.), ouzo (late 19th c.), bouzouki (mid-20th c.), souvlaki (mid-20th c.), sirtaki (late 20th c.), and others.

**Lexical influences through derivational morphology**

Beyond the historical approach used above, the lexical influence of Greek on English can also be viewed from the purely linguistic standpoint, as well. Apart from the previously mentioned inflectional influences of Greek on English, there have also
been corresponding influences in the making of new English words through the use of derivational morphology (prefixation, suffixation) and synthesis, or even through other processes. For example:

**Derivational morphology:**

**Prefixation**

- Gr. αντι- > Mod. E. anti- anticlockwise
- Gr. νπέρ- > Mod. E. hyper- hyperactive
- Gr. α- > Mod. E. a- amoral

**Suffixation**

- Gr. -ικός > Mod. E. -ic ferric
- Gr. -ισμός > Mod. E. -ism truism

**Synthesis:**

**Combination of Greek elements**

- Gr. αστρο- + Gr. ναώτ(ης) > Mod. E. astronaut
- Gr. έξω- + Gr. σφαίρα > Mod. E. exosphere

**Combination of a Greek with a non-Greek element**

- Gr. μονο- + Mod. E. rail > Mod. E. monorail
- Gr. αυτο- + L. mobilis > Mod. E. automobile

**Phrase formations of:**

a) two Greek words

- περιπατητικός + φιλόσοφος > peripatetic philosopher

b) two foreign terms of Greek origin borrowed into the Greek language

- πανοραμικός + φωτογραφία > panoramic photograph

c) the combination of a Greek word and a word of Greek origin, or vice versa

- αιμολυτικός + αναιμία > haemolytic anaemia

**Loan translations:**

- Gr. Αχίλλειος πτέρνα > Mod. E. Achilles' heel
- Gr. κοινός τόπος > Mod. E. commonplace
- Gr. σωκρατική ειρωνεία > Mod. E. Socratic irony

**Conclusion**

This analysis has focused on the fundamental role the Greek language has played, with its verbal plasticity, semantic accuracy and multidimensional cultural charge, in the diachronic development and enrichment of English. The influence of Greek on
English is an age-old phenomenon which started in Greek antiquity, extended to the Byzantine period and continues on in our time. It has contributed, on the one hand, to the formation of the common European vocabulary and, on the other, to what it is no exaggeration to call the common global vocabulary.

Bibliography

Antoniou, 1992

Babiniotis, 1985
Γεώργιος Μπαμπινιώτης, Συνοπτική ιστορία της ελληνικής γλώσσας. Athens.

Baugh and Cable, 2002

Bouffartigue and Delrieu, 1993

Chadwick, 1967

Chadwick, 1987

Constantinides, 2001
Αριστείδης Κωνσταντινίδης, Η οικουμενική διάσταση της ελληνικής γλώσσας. Thessaloniki: Εκδόσεις Μ. Κωνσταντινίδη.

Crystal, 2001
David Crystal, “English as a Classical Language”.

Healey, 1990

Kanarakis, 1995

Kanarakis, 2008
Γιώργος Καναράκης, Διαγλωσσικές επιδράσεις στην Αγγλική και η συμβολή της ελληνικής γλώσσας. Athens: Εκδόσεις Ιρηγόρη.
Klein, 1971


Lazarou, 1984


Smock, 1931