



Academic writing

The influence of Greek & Latin

WHY IS ACADEMIC LANGUAGE DIFFICULT?

Academic language is difficult for several reasons, but one of the contributing factors to the complex nature of academic language is that many of the words used are **technical** ones. Consider this example from a medical physics reference book:

For the treatment of deep-seated tumors, high-energy x-rays with penetrating characteristics are required. The medical *linear accelerator* (linac) is currently the most popular device for this application. To ensure a full understanding of linac beam properties it is important to review first the mechanism of x-ray beam production by these types of devices. (Metcalf et al, 1997, p 1)

Technical words include *tumour*, *x-ray*, and *linear accelerator*. If we look at the etymology, or origins, of some of the words, we can see that their origins are in the Greek and Latin languages. Needless to say, many Latin words have their origins in Greek words. These explanations are not intended as a precise etymological account rather as an indication of the extent of the influence of Greek and Latin on academic vocabulary.

tumours	Latin <i>tumor</i> , <i>tumere</i> to swell
linear	Latin <i>linea</i>
accelerator	Latin <i>acceleratio</i>
ray	Latin <i>radius</i>

However, it is not only the obvious technical words which have their origins in the Greek and Latin languages. This paragraph also includes a number of words which are more likely to be used in written language than in spoken language. For example:

written language	spoken language equivalent
treatment	<i>helping someone get better</i>
penetrating	<i>gets through, strong</i>
characteristics	<i>things about it, features</i>
device	<i>thing</i>
mechanism	<i>workings of</i>

We will refer to such words as semi-technical. In this paragraph many of the semi-technical terms likewise have their origins in the Greek and Latin languages. For example:

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treatment	Latin <i>tractatus</i>
penetrating	Latin <i>penetrare</i>
characteristics	Greek <i>kharakteristikos</i>
mechanism	Latin <i>mechanismus</i>

WHY IS ACADEMIC VOCABULARY INFLUENCED BY GREEK AND LATIN?

Academic discourse is rich in words of Latin and Greek origin for several reasons. A major reason is an **historical** one: after about 1500 English began to be used by scholars in the English speaking world where Latin had been used before. Scholars borrowed words from Latin and Greek, and as a result, many Latin and Greek words were introduced into English. Fromkin *et al*, suggest that the Renaissance and the introduction of the printing press in England by William Caxton in 1476 were important factors in introducing learned words from Latin and Greek (Fromkin et al, 2013). Examples of words from Greek which are typically used in an academic or learned context are: *drama, comedy, tragedy, scene, botany, physics, zoology, and atomic* (p 358).

Another reason for the influence of Latin and Greek is a **language** one. Fromkin writes that the Greek language is well suited to supply disciplines such as science with precise, technical terms. This is because it is possible to form many compound words, and to use suffixes to form precise meanings. Greek roots have also provided English with a means of coining new words, particularly technical terms such as *thermometer* from *thermos* ‘hot’, plus *metron* ‘measure’ (p 352). Other examples of new words of Greek origin include: *anaesthesia, photography, lithography, ophthalmoscope, telephone*. Such terms coined in this way are mostly of international currency; that is to say, if a useful term of this kind is introduced in one country, it is quickly adopted into the languages of the rest (Bradley, 1968, p 67).

Latin, like Greek, has also provided prefixes and suffixes that are used with native and non-native words: for example, the Latin prefix *ex* in *ex-husband, ex-wife*; while the Latin suffix *-able/ible*, borrowed via French, can be attached to most English verbs, as in: *writable, readable, answerable, movable*. (Fromkin et al, 2013, p 352). Here is a list of Latin prefixes which are commonly used in English:

Prefix	Meaning	Word	Other forms
ab-	from, away	abstract	a-, abs-
com-	with, together	complicated, confuse, contain	co-, col-, con-, cor-
de-	down	describe	
de-	away	deduct	
dis-	not	dislike	
dis-	apart, away	distance	di-, dif-
in-	not	inconsistent	ig-, il-, im-, ir-
in-	in (to)	instruct	il-, im-, ir-
inter-	between, among	intermittent	
non-	not	nonviolent	
ob-	against	oppose	o-, oc-, of-, op-
pre-	before	predict	
pro-	forward	prospect	pur-
re-	back	reduce	
re-	again	reorganize	
trans-	across, beyond	transfer	tra-, tran-
un-	not	unable	

(adapted from Nation. I, 1990, p 170)



Finally, in Latin and Greek, like English, it is possible to transform verbs and adjectives into nouns, and in doing so to create abstract things from initial observable processes (for example, *move* to *motion*). Also, it is possible to expand the nominal group with prepositional phrases to specify exactly what is meant. For example:

the square on the hypotenuse of a right-angled triangle

Here the focus of the nominal group is **square** which is followed by postmodifying elements. In *Writing Science* Halliday and Martin argue that structures such as these were exploited by the Greek scholars, particularly mathematicians, to specify complex equations with exactitude, and to eliminate ambiguities (Halliday and Martin, 2015). As Latin also has the potential for expanding the nominal group, these complex nominal group structures appeared in Latin as the parts of the Greek terms were systemically translated into Latin. In this way, such structures were transmitted from Greek to Latin, to English (ibid).

If you are interested in becoming more familiar with words used in academic English which are influenced by Greek and Latin, see the tasks below.

TASK 1 IDENTIFYING WORDS WITH LATIN PREFIXES

Study the table of Latin prefixes below, then add as many words as you can which include the Latin prefix. For example, *ab-*, *absent*.

Prefix	Meaning	Word	Add words
ab-	from, away	abstract	<i>absent</i>
com-	with, together	complicated, confuse, contain	
de-	down	describe	
de-	away	deduct	
dis-	not	dislike	
dis-	apart, away	distance	
in-	not	inconsistent	
in-	in (to)	instruct	
inter-	between, among	intermittent	
mis-	wrong(ly)	misinform	
non-	not	nonviolent	
ob-	against	oppose	
pre-	before	predict	
pro-	forward	prospect	
re-	back	reduce	
re-	again	reorganise	
trans-	across, beyond	transfer	
un-	not	unable	

For suggested answers, see the Key at the end

(adapted from Nation, I, 1990, p 170)



TASK 2 IDENTIFYING COMMON MEANINGS IN WORDS WITH A LATIN OR GREEK BACKGROUND

Identify the common element for each group of words. Next, consider the common meaning of this element. **Once you have finished reading all the material in this section complete the final column.**

Word groups	Common element	Common meaning	Common meaning (on completion of unit)
1. clarinet, clarify, declarative sentence			
2. cordial, concordance, cardiac,			
3. corpulent, corporation, chromosome			
4. cubicle, cubit, incubus, incumbent, succumb			
5. culprit, culpable, exculpate, culpability			
6. decapod, decathlon, dime, Decapolis, dean			

The common element refers to identical elements as well as similarities. In some cases you may only be able to identify a common element for some of the words. This may be due to some words sharing a Latin element, whereas others include the Greek cognate.

This material and that which follows is a selection from Danner H G & Noël, R, (1990) *An Introduction to an Academic Vocabulary: Word Clusters from Latin, Greek, and German* (2nd edn), University Press of America, Lanham, pp 39-60. This book provides a fascinating overview of the influence of Greek, Latin and German on academic language, and is recommended for further reading. This adaption of Danner's work was first prepared for the English Language Studies major, University of Wollongong.



READING

clar-

The Latin element *clarus* means **bright, clear**. This gives us words such as *declare, declarative, clarinet, clarify*. Here are their meanings:

declare	with the prefix <i>de-</i> , to clear down or away . Synonyms include <i>announce, assert, aver, proclaim</i>
declarative	describing that which <i>clarifies</i> or <i>asserts</i> , as a <i>declarative</i> sentence; the other functional types of sentences being <i>interrogative, imperative, and exclamatory</i> .
clarinet	from <i>clarion</i> , a trumpet, or musical instrument with a clear tone
clarify	to make clear (difficult subject, obscure statement) (<i>OED</i>)

cord-

Words with the common element *cord* include *discord, cordial, accordance, concordance*. The base is the Latin *cord*, which means **heart**. The Greek cognate, that is, of the same linguistic family, is *kardia*, but it refers to the physical heart, whereas the Latin is more figurative. Some medical terms including the Greek root are *cardiac, cardiologist, electrocardiogram*. Below are examples with the Latin element and their meaning.

cordial	that which warms the heart , eg. a friendship
concord	with <i>con-</i> , a variation of <i>com-</i> , same, mutually , thus, of the same mind (or heart); from <i>concord</i> are derived <i>concordant, harmonious, agreeing; concordance</i> , a state of agreement. A <i>concordance</i> is also an alphabetical index of all the words in a text or corpus of texts, showing every contextual occurrence of a word, for example, a concordance of the bible.
<i>cri de couer</i>	The correct French expression is <i>cri du couer</i> ; cry from the heart , an outrage, or a passionate appeal or protest.

corp-

Word clusters with the common element base *corpus*, are *corpulent, corporal, corpuscle, corporative, incorporate, corporation, corpse*. The common element base is Latin *corpus*, meaning **body**. The Greek root is *soma* as in *chromosome, psychosomatic*. Below are further examples and their meaning.

corps	pronounced <i>core</i> , the word is singular; the plural is spelled the same but is pronounced <i>cores</i> . In the military, a separate branch or department of the armed forces having a specialized function; it is also a tactical unit of ground combat forces between a division and an army; commanded by a lieutenant general, a corps is comprised of two or more divisions and auxiliary service troops.
<i>esprit de corps</i>	literally, spirit of the body ; group, spirit, unity. Although a body of people, such as a military unit, may be heterogeneous, dedication to a common cause fosters homogeneity, or <i>esprit de corps</i> .
chromosome	with <i>chroma</i> , colour + <i>soma</i> , body , literally, coloured body ; the microscopic bodies which carry the genes. <i>Chromosomes</i> colour, or stain, deeply with basic dyes and are especially conspicuous during mitosis.
psychosomatic	pertaining to phenomena that are both psychological and physiological; both psychic and somatic (pertaining to the body); having bodily symptoms of a psychic, emotional, or mental origin.



cum/cub-

Latin *cubare*, meaning **to lie (down)**; words containing this root are *cubicle*, *incubate*, *cubic*, *cupism*, *incumbent*, *recumbent*, *succumb*.

incumbent	as an adjective, lying , leaning, or resting upon something else; imposed as an obligation or duty; required; obligatory; as a noun, holding a specified office.
recumbent	literally, lying down ; when one is <i>recumbent</i> , he or she is wholly or partly lying down .

cul-

Latin base is *culpa*, meaning **guilt, fault, blame**; also misbehaviour. Examples and their meanings are below:

culprit	short for <i>culpable</i> , <i>prit a averer nostre bille</i> , literally, "Guilty, ready to prove our case"; opening words spoken by prosecution in Roman court. Also, the <i>person</i> accused of a crime or offense, as in court; an offender.
exculpate	with <i>ex-</i> , out, to free from blame ; declare or prove guiltless.
inculpate	with <i>in-</i> , to blame or to impute blame ; charge, or incriminate.
mea culpa	literally, I am guilty ; it is my fault.

dec-

Latin and Greek meaning **ten, tenth**. Words containing this root are December, decurion, decade, decimate, decibel.

December:	the tenth month before January and February were added.
decimate:	from <i>decimus</i> , tenth ; originally, to kill a tenth of the people; now usually the obliteration of almost everyone.
decibel:	abbreviated to db; a unit that expresses the relative difference in power between two different acoustic or electric signal levels; usually equal to ten times the common logarithm of the ration of the two levels.
dean:	from <i>decanus</i> , a person who was head of a group of ten men—probably first soldiers; then, monks; and later, university students.

Now go back to 2 and try to complete the final column! Note there is no key for this task.



KEY: THE INFLUENCE OF GREEK AND LATIN ON ACADEMIC VOCABULARY

Prefix	Meaning	Words
ab-	from, away	abstract, <i>absent</i> , <i>abstain</i> , <i>abdicate</i> , <i>absolve</i>
com-	with, together	complicated, confuse, contain, <i>communicate</i>
de-	down	describe, <i>descend</i>
de-	away	deduct, <i>depart</i> , <i>deport</i> , <i>departure</i>
dis-	not	dislike, <i>disappear</i> , <i>disagree</i> , <i>disallow</i> , <i>disinherit</i>
dis-	apart, away	distance, <i>dissolve</i> , <i>dismiss</i>
in-	not	inconsistent, <i>incoherent</i> , <i>inadequate</i> , <i>insincere</i>
in-	in (to)	instruct, <i>investigate</i> , <i>initiate</i>
inter-	between, among	intermittent, <i>interview</i> , <i>intermittent</i> , <i>internal</i>
mis-	wrong(ly)	misinform, <i>mistake</i> , <i>misnomer</i> , <i>misadventure</i>
non-	not	nonviolent, <i>nonracist</i> , <i>nonsexist</i>
ob-	against	oppose, <i>opposition</i> , <i>opposite</i> , <i>opponent</i> , <i>obstruct</i> , <i>object</i>
pre-	before	predict, <i>prenatal</i> , <i>preempt</i> , <i>premature</i> , <i>premonition</i>
pro-	forward	prospect, <i>promote</i> , <i>progress</i>
re-	back	reduce, <i>reverse</i> , <i>reply</i>
re-	again	reorganise, <i>resubmit</i> , <i>review</i> , <i>redo</i> , <i>remake</i>
trans-	across, beyond	transfer, <i>transmit</i>
un-	not	unable, <i>unimaginable</i> , <i>unmanageable</i> , <i>unlikable</i> , <i>unhealthy</i> , <i>unwell</i> , <i>unusable</i> , <i>unanswered</i>

(adapted from Nation, I, 1990, p 170)

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