英语教学

## 英语词汇的派生语境和层次

Derivation, Context and Levels of English Vocabulary



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#### 内容提要

本书的主要贡献在于将构词规律、语境分析和分层次学习进行科学、有效的整合。 在分析这三个方面的理论基础后,本书以前缀为切入点,提供了大量的真实语境给词汇 研究者和学习者使用, 语境实例来自大量的语料库数据分析。对于英语词汇的学习者 和研究者来说,对待词汇切勿纸上谈兵,切勿用母语的翻译当作唯一的检验标准,要注 重语境含义的理解,在文章中体会单词的多重语义。

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#### Derivation, Context and Levels of English Vocabulary

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## 前言

英语词汇中存在着大量的派生词,且随着科技、社会和文化的发展,派生词的数量会越来越多,研究和学习英语派生词的构词规律对英语词汇教学与学习都有着重要的意义。事实上,将英语作为第二语言的研究者、教师和学生们也都已开始给予英语派生词法更多的关注,教育部指定的大部分大学英语教材都已将派生构词法当作词汇学习的重要切入点。通过对派生构词规律的研究和学习,可以将很多表面上看似无关的单词联系在一起去研究和学习。与汉语相比较,英语派生构词规律就是研究英语单词的"偏旁部首"或"说文解字",英语单词的偏旁部首指的是词缀和词根,如"spect"这个词根就如同汉语中可以构成上百个汉字的"目"字旁,有目字旁的汉字大多与"看"或看到的"景象"有关,即便是一些笔画(笔划)较为复杂的汉字如"瞅""瞻""瞧"等也会帮助汉语学习者望字生义。学习英语词汇也是如此,在"respect""spectacle"等单词中也都包含 spect 这个词根,因此它们的含义也与"看"密切相关。通过派生法学习单词可以让学习者迅速且牢固地根据词形来理解单词的基本含义。

对于二语词汇学习,研究者、教师和学生常常忽视语境的重要性。从表面上,给二语词汇学习制造障碍的一个重要因素是目标语单词在含义上常常出现和母语形成一对多的情况,即一个英文单词可以对应多个、十几个或几十个汉语意思,给学习者造成了很大的认知困难,让他们觉得英语单词深不可测。但实际上,一个英文单词的多重汉语对应现象主要是由于这些单词被放置在了不同的语境中,构成不同的搭配,而多重的汉语意思实则是基本含义在不同语境中的引申,正如"deliver"的基本含义是"将……带到……",在"deliver a parcel"中是"运送"的含义,在"deliver a baby"中既可以表示孕妇"分娩",也可表示护士"接生",在"deliver a joke"中须译成"讲"笑话。

二语词汇学习的另一个误区是在认知的过程中将所有的词汇都采用同 等对待的方式。实际上, 从英语学者的学习阶段、学习目的和认知规律来 说,在学习二语词汇时,一定要分层次、分阶段来学习。中等语言学习者既不应该将宝贵的时间浪费在熟悉度较高的"低层次"单词上,也不要将有限的精力分配在暂时还属于较"高层次"的单词上,以避免因为单词难易程度分配不均匀而过早地产生挫败感。按层次来研究和学习单词的益处主要表现在两个方面:一是不同基础的语言学习者可以根据自己的实际情况科学地将时间分配到各个层次的单词上,从而把握好学习的节奏;二是在掌握了不同层次的单词后可以大量阅读相应难度的文章,既复习了所学词汇,又能逐步提高阅读能力,这符合循序渐进地认知英语词汇的规律。对于划分单词层次的主要依据,本书参考美国专家英语词频分析的数据和我国教育部指定的主流英语教材中单词层次的分布,以及参考数以万计的英美主流报刊文章的语料库分析结果。

阅读对单词的认知是至关重要的,也是检验词汇学习效果最有效的方法,文章中的单词和单词所处的语境会刺激大脑对单词进行反复分析和记忆。同时,我们可以在阅读中体会"多义单词"的常用含义和特殊语境含义,也可学习到很多新颖的表达方式,为翻译和写作技能的培养打下良好的基础。本书选了多篇题材适当和难易适中的文章,并在文中标注出了各个层级的英语词汇。该部分的设计一方面以词汇复习为目的;另一方面是为了培养语言学习者根据派生构词法和上下文的语境猜测词义的能力。

本书的主要贡献在于将构词规律、语境分析和分层次学习进行科学的整合。在分析这三个方面的理论基础后,本书以前缀为切入点,提供了大量的真实语境给词汇研究和学习者使用,语境实例来自于大量的语料库数据分析。对于英语词汇的学习者和研究者来说,对待词汇切勿纸上谈兵,切勿用母语的翻译当作唯一的检验标准,要注重语境含义的理解,在文章中体会单词的多重语义。

王 猛 2016年4月于北京

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### Chapter 1 Derivation of English vocabulary

Word – formation refers to the ways in which new words are made on the basis of other words or morphemes. Word – formation can denote either a state or a process, and it can be viewed either diachronically or synchronically. There are some common types of word – formation, including derivation, back – formation, blending, clipping, compounding and conversion.

#### 1.1 Word - formation

Rochelle Lieber (2005) notes that word – formation prospered in the 1960s, with influential treatises and books coming subsequently. The most lately consideration was given to two aspects (Alexander & Sascha, 2010), and one is structural approach to the formation of words, the other one being cognitive view. David (2003) notes that most English words are coined on the basis of old components, complete with affixes, roots and old words. "Almost any lexeme can be given an affix, change its word class, or help make a compound (David, 2003)." The roots, major ingredients of coining vocabulary, derive from Anglo – Saxon, Latin, Greek and other foreign sources.

Morphologically coined words are comprised of smaller elements (Ingo, 2003). For instance, unfaithfulness can be decomposed into prefix un –, noun faith and two suffixes – ful and – ness. Misunderstanding can be divided into prefix mis –, verb understand and suffix – ing. Consciousness is comprise of prefix con –, root sci and two suffixes – ous and – ness. Inclusiveness is made up of prefix in –, root clus and two suffixes – ive and – ness.

Spencer and Zwicky (1998) note that "morphological productivity may be defined informally as the extent to which a particular affix is likely to be used in the production of new words in the language". According to Bauer (2002), word – formation is trouble – causing due to various theories, approaches and

methods adopted in different phases of the vocabulary on account of diverse linguistic, social, cultural settings, alongside many other complex factors combined together and consequently there's been long debate over the productivity of word – productivity.

Karlsson and Karttunen (1997) and Sproat (2000) suspect that the role of inflection has long been exaggerated due to lack of adequate researching as convincing evidence. Chomsky and Halle (1968) conclude that affixation, attaching affix to an old word to coin a new one, is of "word boundary and formative boundary". Word boundary affixes turn out to be more productive (Aronoff, 1976), considering that English contains more words formed with word boundary affixes than with formative boundary affixes. Aronoff and Schvaneveldt (1978) find that adjectives ending with - ive are more productive to form nouns by adding - ness than by adding - ity. Besides, lexical access will be easier to be communicated and accepted if the initial part and stressed syllable of the base word remain unchanged. Fay & Cutler (1977) argue, from the angle of hearing and understanding a speaker's word, left - to - right phonological structure is a natural choice, which contributes to the comparative stability of the left part of a word. Uncertainty is also a common occurrence, being illustrated by numerous examples, such equity and equality are both acceptable, eternity and externality make same sense, etc.

Internal lexicon has been suggested by Bradley (1979), on the basis of evidence from response time to decide whether or not a derived word is indeed a word. Lexical stress rules and word – formation rules are transformational in nature (Aronoff, 1976). Failure to apply the Alternating Stress Rule (Chomsky & Halle, 1968) would indeed result in stress falling on a wrong syllable. Many experimental studies (Trammell, 1978) have found that subjects' pronunciations of unfamiliar words conform fairly well to the predictions and Nessly (1977) used similar data collection methods and arrived at some similar rules. Pesetsky (1979) noted the correlation between affix order and phonology brought out by level – ordering can be formally expressed by having the phonological rules themselves apply at their respective levels within the lexicon after each step in the morphological derivation of a word.

As for prefix, it is clear (Fay, 1977) that a certain proposal could account for suffix errors producing real words. Thus the lexical entry for a word family would be headed by the stem (Engdahl, 1978). Siegel (1974) brought in the notion of level – ordered morphology into generative grammar and showed that it reveals interesting generalizations in English. The property of applying (Kiparsky, 1982) in derived environments has been recognized as a characteristic of cyclic rules. Mohanan (1982) has argued persuasively that post – lexical rules admit no exceptions. This has far – reaching consequences, because it drives such rules as Velar Softening in English to be lexical, contrary to the beliefs of some other linguists (Kiparsky, 1982). Two major approaches to an account for the regular aspects of word formation have been frequently suggested: "word – syntax" (Selkirk, 1982), based on the arrangement, "lexical rules" (Chomsky, 1970), based on processes.

#### 1.2 Morpheme and morphology

Affixation is the process of adding a morpheme (or affix) to a word to create either a different form of that word (e. g. , book  $\rightarrow$  books), or a new word with a different meaning (book  $\rightarrow$  bookish). Affixation is the most common way of making new words in English. The two primary kinds of affixation are prefixation (the addition of a prefix) and suffixation (the addition of a suffix).

#### Morpheme

From the perspective whether morphemes can be used individually, morphemes could fall into two categories; free morphemes and bound morphemes. Free morphemes can be either used independently or combined with other morphemes. Bound morphemes appear only as parts of words in conjunction with a root and sometimes with other bound morphemes.

Bound morphemes can be further classified as inflectional or derivational. Inflectional morphemes modify a verb's tense or number, or a noun's or pronouns's. Derivational morphemes can be prefixes or suffixes. The study of morpheme is called morphology. Knowledge of derivational morphology helps readers in the analysis and acquisition of new vocabulary in lexical sense. Studies have focused on how morphologically complex words are stored in memory (Taft, 1979) and a few once gave consideration to the degree to which knowledge of suffixes is used in learning new words (Wysocki & Jenkins, 1985).

Derivational morphemes can change the grammatical category of a word (Remson, 2007). As for meanings in terms of derivational morphemes, derivational morphemes have clear semantic content (Fromkin, Rodman & Hyams, 2013). Unlike the inflectional affixes, which number only eight in English, the set of derivational affixes is open – ended; that is, there are a potentially infinite number of them (Parker & Riley, 1994). Some inflectional endings acquire characteristics of derivational morphemes. These include – ed, – en, – er, – ing and – ly (Zeki, 2011).

#### Morphology

Linguists have been exploring morphology for a very long time (Chomsky & Halle, 1968). Knowledge of morphology, the ability to gain information about the meaning, pronunciation, and part of speech of new words from their prefixes, roots, and suffixes is an important component of skilled reading (Mason, Herman, & Au, 1990). Baker (1989) assumes that the ability to decode the letters in a long word into meaningful morphemes would "facilitate the processing of new words". In addition, there has been shown to be a relationship between general verbal ability and the use of morphology in learning new words (Freyd & Baron, 1982) and in the comprehension of sentences containing suffixed words (Tyler & Nagy, 1990). The majority of new words in text are related to more familiar ones through prefixation, suffixation, or compounding (Nagy & Anderson, 1984). It is well known that word length is associated with text difficulty (Klare, 1984). However, it has been debated that word length is not a root of difficulty for all readers (Anderson & Davison, 1988). The trouble, which long words caused for readers (Nagy, Anderson & Herman, 1987), is that word length has a negative impact on learning for students. Just and Carpenter (1987) argued that if the trouble of analyzing a long word is too great, readers will not be able to bear the words in mind or achieve fine comprehension of the passage.

The advantages of teaching morphology are apparent (White, Power, & White, 1989). Nagy and Anderson (1984) observed that, "Knowledge of word – formation processes opens up vast amounts of vocabulary to the reader". Across the grand corpus of English words over 60% have been formed by morphological processes; within specific disciplines, this figure climbs to over 90% (Green, 2008). Lewis (1990) described that developing over time, understand-

ing morphology allows students to construct deeper comprehension as they read and write. The need for instruction is also clear (Freyd & Baron, 1982; Wysocki & Jenkins, 1987). Understanding combinatorial processes is the foundation for generative vocabulary knowledge (Templeton, 2012). Maryanne Wolf (2007) notes that "Morphological knowledge is a wonderful dimension of the student's uncovering of what's in a word" and "one of the least exploited aids to fluent comprehension". However, on the part of teachers themselves, the lack of deeper knowledge of how morphology works could be the main contributor that morphology wasn't as prosperous as expected (Moats & Smith, 1992).

The Hunger Games (2008) explores the etymology of the word origins and finds out that an efficient approach to learning vocabulary is to generalize words with same features, which could play an important part in denoting their meanings. Nagy and Anderson (1984) estimated that among 88,500 words in common text books, most have forms that could be analyzed in terms of morphemes that would provide clues of meanings. Nagy, Anderson, Schommer, Scott, and Stallman (1989) speculate that words are stored and activated in the mental lexicon through morphemic relationships. Dorfman (1998) found that morphemic chunks stored in the brain prompt recognition fairly more than do syllabic chunks. Reichle and Perfetti (2003) find that prompted by encoding morphemes of a word efficiently processed the word's pronunciation and meaning when it is connected to derivations related to the target word. Templeton (2010) argues that we are learning much about the selection, sequencing, and teaching of cognates, and are beginning to explore their generative potential for learning vocabulary in new languages. Students can be taught (Ebbers & Denton, 2008) to make the implications by combining information gained from the context clues and the morphemes in terms of word formation.

Readers who are more conscious of morphemes should more readily comprehend academic articles, because advanced texts contain an abundance of morphologically complex words (Nagy & Anderson, 1984). As Bill Nagy (2007) asserted, "vocabulary instruction needs to be more explicitly metalinguistic that is, word consciousness is an obligatory, not an optional, component". Deacon and Kirby (2004) demonstrated that awareness of inflectional suffixes measured in second grade predicted reading comprehension in fifth grade, despite differences in PA and reading comprehension in second grade.

Linguists have long been focusing on the roles played by analyzing morphemes in learning and understanding words in various levels of articles in terms of target learners of different language proficiency. Knowledge of Latin roots (Shepherd, 1974) is not strongly related to the knowledge of the meanings of words containing such roots, whereas knowledge of stems which themselves are English words is strongly related to knowledge of the meanings of related derived forms. Wysocki and Jenkins (1987) found that middle school students who were able to use both morphemic clues and context clues as separate strategies did not necessarily combine the two. Pica (1988) argued that studying affixes is beneficial to figuring out the process and progress of learning English as a second language. Tyler & Nagy (1989) compared students' ability to use the syntactic information in suffixes with two types of words. Nagy (1989) found that knowing just one word from a morphological family can help the adult reader infer the meaning of a related unknown word. Carlisle (1995) found that morphological production of compound words measured in first grade predicted word recognition and reading comprehension in second grade. Schmitt and Meara (1997) suggested that there are still important correlations between derivational suffix knowledge and vocabulary size although they are very weak. Mochizuki (1998) suggested that an established order would benefit teachers who wanted to teach affixes systematically. Tomesen and Aarnoutse (1998) found significant positive effects in the ability of the students to derive word meanings from morphemic clues in tandem with context clues and the lower performing readers in their sample benefited the most from this intervention. Mochizuki and Aizawa (2000) attempt to find out the accurate order of affix acquisition. Baumann (2002) found out that the students who received instruction in morphology, either combined with context or taught separately, outperformed the control group in vocabulary knowledge. Next year, Baumann (2003) found that students could be taught to successfully use morphemic analysis with context clues in the context of their social studies text. Nagy (2003) found that second graders virtually failed to comprehend novel compound words. According to the Longman Dictionary of Language Teaching & Applied Linguistics (2003), suffix is the letter or sound or group of letters or sounds which are added to the end of a word, and which change the meaning or function of the word.

Graves (2004) concluded that intermediate students can be effectively

taught to use their knowledge of prefixes to infer the meanings of unknown words. Carlisle and Stone (2005) demonstrated that students generally read words constructed of base and suffix more fluently than they read two – syllable words similar in spelling.

As for the ESL (English as a second language) students, developing the size of vocabulary is of great importance and one of effective strategies is to acquire New words from mastering of some derivational affixes. Linguists (Grabe, 1993) noted EFL (English as First Language) and ESL learners are both expected to master the strategies of independent study.

#### 1.3 Prefix development

According to the Longman Dictionary of Language Teaching & applied Linguistics (2003), prefixes are a letter or group of letters or sounds which are added to the beginning of a word, and which change the meaning of function of the word. Prefixes do not generally change the word – class of the base but only modify its meaning. Quirk (1985) classified derivational prefixes into ten types, they are negative prefixes, reversative or privative prefixes, pejorative prefixes, prefixes of degree or size, prefixes of orientation and attitude, locative prefixes, prefixes of time and order, number prefixes, miscellaneous prefixes and conversion prefixes—Hatch (2001) classified prefixes into five categories based on Quirk's classification, which is simpler and more operatable, they are "negative, attitude, size and degree, time and space, number". Some commonly used prefixes are listed in the following table.

| Prefixes   | Examples   |  |
|--|--|--|
| a -  | anonymous, alike   |  |
| ab - , abs -   | abnormal, abstract   |  |
| ad - ,ac - ,af - ,ag - ,al - ,<br>an - ,ap - ,ar - ,as - ,at - | accumulate, afford, aggress, allocate, announce, appoint, arrange, assure, attempt, attend |  |
| an - , ant -   | antibody, anticipate, ancestor, antique  |  |
| be -   | befriend, bewilder   |  |
| bi - , by - , di - , do -                                      | bicycle, dialogue, dilemma, double   |  |
| co - , com - , col - , col - , cor -                           | co - worker, combat, communicate, concentrate, colleague, correspond                       |  |



| Prefixes                           | Examples   |  |
|------------------------------------|--|--|
| contra - , counter -               | contradiction, counterpart   |  |
| de –                               | decline, deception, derail   |  |
| di – ,dis – ,dif –                 | divide, disapprove, distinguish, differ                              |  |
| e - , ex - , es - , ef - , extra - | enormous, exhausted, essay, extend, extraordinary, extroverted       |  |
| en - , em -                        | enlarge, enjoy, embody, empower                                      |  |
| fore -                             | forehead, foremost   |  |
| i - , im - , in - , il - , ir -    | island, isolate, impossible, imbalance, indirect, illegal, irregular |  |
| in - ,im - ,inter - ,intel -       | immigrant, input, interval, intelligent                              |  |
| mis -                              | mistake, mislead, mistreat   |  |
| multi –                            | multinational, multiply  |  |
| ob - , oc - , of - , op -          | object, occur, offend, oppose  |  |
| out -                              | outcome, output, outlive, outweigh                                   |  |
| over –                             | overhead, ad, overwork   |  |
| per                                | perfect,, perceive   |  |
| post –                             | postwar, postgraduate  |  |
| pre – , pro –                      | progress, precaution   |  |
| re –                               | reveal, recall   |  |
| se -                               | select, separate   |  |
| sub –                              | submarine, subway  |  |
| super - , hyper - , sur -          | supermarket, superstar, hypermarket, surpass, surround               |  |
| syl - , sym - , syn -              | synthetic, sympathy  |  |
| trans -                            | transport, transplant  |  |
| un –                               | unfair, uncover  |  |

#### Numeral prefixes

Numerals or quantifiers refer to words that have the sense of numbers or have something to do with numbers. These words account for a big proportion of the total English words. Most of these words are used in scientific fields, including physics, chemistry, biology, medicine and so on. Also, while being bound up with nouns, adjectives, adverbs and verbs, new words in great number are progressively coined. From the angle of etymology, these words borrowed most heav-

ily from French, Latin and Greek, while other languages, especially languages used in Europe, have also made contributions. On account of the numerical values of the numerals, the prefixes fall into the following categories:

- (1) "half, part"
- a) demi < = Latin, forming verb, nouns and adjectives, eg: demigod, demimilitarize, demimini.</li>
- b) hemi < = Greek forming adjectives, adverbs, nouns and verbs, eg: liemialgia, hemisphere, hemihedral, hemisect.
- c) semi < = Latin, forming adjectives, nouns and adverbs, eg: semiagricultural, semidiameter, semimonthly.
  - (2) "one, first"
  - a) hen(o) -, < = Greek, hen(-), eg: hendia, henotic, henotheism.
- b) prim -/prin , < = Latin primus, eg: primary, primitive, prince, princess, principle, principal.
- c) pro(t)(o) , < = Greek, eg: protocontinent, progenic, protolanguage, prototype.
- d) mon(o) , < = Greek, eg: monarch, monatomic, monoclonal, monologue, monogamy.
- e)un(i) -, < = Latin, forming adjectives, verbs, nouns and adverbs, eg: unique, unanimous, universal, unicorn, unify, uniform.
  - (3) "two"
- a) am (b/p) i , < = Latin, forming adjectives, nouns and adverbs, eg: ambiguous, ambisexual, ambivalence.
- b) bi(n) , < = Latin, bis (twice), forming adjectives. nouns and verbs, eg: bimonthly, biannual, bipartisan, bicycle, bilingual.
  - c) di , < = Greek dis , eg: dilemma, divorce, divide.
  - d) doub/p , < = Greek dipl(two), eg: double, duplicate, diploma.
  - e) twi , < = Old English, eg: twice, twins, twilight.
  - (4) "three"

tre - / ter - / tri - , < = Latin ter, eg: triangle, treble, tertiary, trilogy, trinity.

(5) "four"

 $\label{eq:quadrangle} quadr - / quadr - / quadru - , < = Latin quattuor, eg: quadrangle, quarter, quadrilingual.$ 

- (6) "five"
- a) pent(a) , < = Greek pente, eg: the Pentagon, Pentecost, pentathlon, pentatonic.
  - b) quint(u) -, < = Latin quintus, eg: quintessence, quintic, quintuple.
  - (7) "six"
- a) hex / hexa , < = Greek hex, eg: hexarchy, hexachord, hexade, clohexane.
- b) sex / sexi , < = Latin sex, eg: sexidecimal, sexdigital, sexpartite, sextant, sextette.
  - (8) "seven"
- a) hept (a) -, < = Greek hepta, eg: heptachori, heptahedron heptahydrate, heptode.
- b) sept (i) -, < = Latin, eg: septangle, September, septi lateral septum plicate, septi partite.
  - (9) "eight"
    - oct(a/o) -, < = Latin octo, eg: octagon, octane, October, octopus.
    - (10) "nine"
      - a) ennea , < = Greek ennea, eg: enneagon, enneahedron, enneastyle.
- b) non , < = Latin nus, eg: nonane, nonet, non illion, nonyle, nonuple.
  - c) novem , < = Latin novem, eg: November, novennial.
  - (11) "ten"
- a) dec , < = Greek deka, eg: decaie decanoic, Decameron, decathelete, decare.
  - b) deci , < = Latin decimus, eg: decibel, decimetre, decimal, decimate.
  - c) ty, < = Old English, eg: twenty, ninety.
  - (12) "a hundred, a hundredth"
- a)cent(i) , < = Latin centum, eg: cent, centimetre, centillion, centisecond, centipede, centuplicate.
  - b) hect(o) -, < = Greek, eg: hectaie, hectogramme.
  - (13) "a thousand"
  - a) kilo , < = Greek , eg: kilobyte , kilogram.
  - b) mill(i) -, < = Latin mille, eg: million, millimetre, millennium.